

TECOGEN INC.  
Form S-4/A  
March 27, 2017  
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As filed with the Securities and Exchange Commission on March 24, 2017  
Registration No. 333-215231

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U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

Amendment No. 2 to

Form S-4

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Tecogen Inc.

(Exact name of registrant as specified in its charter)

Delaware

3585

04-3536131

(State or other jurisdiction of (Primary Standard Industrial  
incorporation or organization) Classification Code Number) (I.R.S. Employer Identification No.)

45 First Avenue

Waltham, MA 02451

(781) 466-6400

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John N. Hatsopoulos

Co-Chief Executive Officer

Tecogen Inc.

45 First Avenue

Waltham, MA 02451

(781) 466-6400

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of communications to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective and all other conditions to the transactions contemplated by the Agreement and Plan of Merger described in the included proxy statement/prospectus have been satisfied or waived.

If the securities being registered on this form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company  
 If applicable, place an x in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third Party Tender Offer)

Title of each class

of securities to be registered	Amount to be registered <sup>(1)</sup>	Proposed maximum offering price per unit <sup>(1)</sup>	Proposed maximum aggregate offering price <sup>(2)</sup>	Amount of registration fee <sup>(3)</sup>
Common Stock	5,098,950 shares	Not applicable	\$20,880,200	\$2,420.02

<sup>(1)</sup> Represents the estimated maximum number of shares of common stock of the registrant issuable to holders of common stock, options to purchase common stock, and warrants to purchase common stock of American DG Energy Inc. pursuant to the Merger Agreement described herein and assumes no adjustment to the exchange ratio described in the Merger Agreement. Pursuant to Rule 416, this registration statement also covers an indeterminate number of shares of common stock as may become issuable as a result of stock splits, stock dividends or similar transactions.

<sup>(2)</sup> Estimated solely for the purposes of calculating the registration fee pursuant to Rule 457(f) of the Securities Act of 1933. The proposed maximum aggregate offering price calculated pursuant to Rule 457(f) of the Securities Act represents the product of (a) the sum of (i) 50,684,095 issued and outstanding shares of American DG Energy Inc. ("ADGE") common stock as of March 21, 2017, (ii) an aggregate of 1,797,000 shares issuable in respect of outstanding ADGE stock options to purchase common stock; and (iii) an aggregate of 2,942,270 shares issuable upon exercise of outstanding ADGE common stock purchase warrants, and (b) 0.092 (which is the exchange ratio) and (c) \$4.095 (which is the average of the high and low trading prices for shares of the registrant's common stock, as reported on the Nasdaq Capital Market on December 19, 2016).

<sup>(3)</sup> The registrant previously paid \$2,325.16 of the filing fee.

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The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary joint proxy statement/prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary joint proxy statement/prospectus is not an offer to sell these securities nor should it be considered a solicitation of an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. Subject to completion, dated [\*]

JOINT PROXY STATEMENT/PROSPECTUS

To: The Stockholders of Tecogen Inc. and American DG Energy Inc.

Tecogen Inc., or Tecogen, American DG Energy Inc., or ADGE, and Tecogen.ADGE Acquisition Corp., a Delaware corporation and a wholly-owned subsidiary of Tecogen formed for the purpose of effecting the merger described herein, or Merger Sub, have entered into an Agreement and Plan of Merger dated as of November 1, 2016, as amended on March 23, 2017 by Amendment No. 1 to the Agreement and Plan of Merger, or the Merger Agreement, pursuant to which Merger Sub will merge with and into ADGE, or the Merger. Following the Merger, ADGE will be the surviving entity in its Merger with Merger Sub and will become a wholly-owned subsidiary of Tecogen. The Tecogen Board of Directors and the ADGE Board of Directors have unanimously approved the Merger Agreement and the transactions contemplated by the Merger Agreement. A copy of the Merger Agreement is attached as Annex A to this joint proxy statement/prospectus.

This document is a prospectus relating to the proposed issuance by Tecogen of shares of its common stock to ADGE stockholders pursuant to the Merger Agreement. If the Merger is completed, each share of ADGE common stock issued and outstanding immediately prior to the merger effective time will be exchanged for the right to receive 0.092 of a share, or the Exchange Ratio, of Tecogen common stock. The Exchange Ratio is fixed and will not be adjusted to reflect stock price changes prior to the closing of the Merger. No fractional shares will be issued in the Merger, and cash will be paid in lieu thereof. Tecogen common stock is listed and traded on the Nasdaq Capital Market under the ticker symbol "TGEN" and ADGE common stock is listed and traded on the NYSE MKT under the ticker symbol "ADGE." Based on the closing price of Tecogen common stock on the Nasdaq Capital Market on November 1, 2016 of \$4.03, the last trading day before public announcement of the Merger, the Exchange Ratio represented approximately \$0.37 in Tecogen common stock for each share of ADGE common stock. Tecogen stockholders will continue to own their existing Tecogen shares of common stock following the consummation of the Merger. Based on the closing price of Tecogen common stock on the Nasdaq Capital Market of \$3.85 on March 17, 2017, the last practicable date before the date of this joint proxy statement/prospectus, the Exchange Ratio represented approximately \$0.35 in Tecogen common stock for each share of ADGE common stock. We urge you to obtain current market quotations for Tecogen common stock and ADGE common stock.

Based on the number of shares of ADGE common stock outstanding on the record date for the stockholder meetings related to the Merger, Tecogen expects to issue approximately 5,098,950 shares of Tecogen common stock to ADGE stockholders in the Merger, and expects to reserve approximately 165,324 additional shares of Tecogen common stock for issuance in connection with outstanding ADGE equity awards, restricted stock grants and warrants to purchase common stock that Tecogen will assume in connection with the Merger. Upon completion of the Merger, Tecogen estimates that current Tecogen stockholders will own approximately 81% of Tecogen's issued and outstanding common stock and former ADGE stockholders will own approximately 19% of Tecogen's issued and outstanding common stock.

This document is also a joint proxy statement of Tecogen and ADGE for soliciting proxies for their respective special meetings of stockholders. At Tecogen's special meeting of stockholders, Tecogen common stockholders will be asked to consider and vote on a proposal to approve the issuance of Tecogen common stock pursuant to the Merger Agreement, or the Tecogen Share Issuance Proposal.

The Tecogen special meeting of stockholders will be held on [\*], at [\*], local time, at Tecogen's principal executive offices at 45 First Avenue, Waltham, MA 02451.

The Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote "FOR" the Tecogen Share Issuance Proposal.

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The ADGE special meeting of stockholders will be held on [\*], at [\*], local time, at ADGE's principal executive offices at 45 First Avenue, Waltham, MA 02451. At ADGE's special meeting of stockholders, ADGE common stockholders will be asked to consider and vote on a proposal to adopt the Merger Agreement and approve the Merger, or the ADGE Merger Approval Proposal.

The ADGE Board of Directors unanimously recommends that ADGE common stockholders vote "FOR" the ADGE Merger Approval Proposal.

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This joint proxy statement/prospectus contains important information about Tecogen, ADGE, the Merger, the Merger Agreement and the matters to be considered and voted upon by Tecogen stockholders and by ADGE stockholders as part of the special meetings. We encourage you to read this joint proxy statement/prospectus carefully before voting, including the section entitled “Risk Factors” beginning on page 27.

**YOUR VOTE IS IMPORTANT.** We cannot complete the Merger and the merger consideration will not be issued to ADGE stockholders unless (i) Tecogen's stockholders approve the stock issuance and (ii) ADGE's stockholders adopt the Merger Agreement and approve the Merger. Adoption of the Merger Agreement requires the affirmative vote of holders of at least a majority of the outstanding shares of ADGE common stock entitled to vote thereon. Whether or not you plan to attend Tecogen's special meeting or ADGE's special meeting, as applicable, please authorize a proxy to vote your shares as promptly as possible. To authorize a proxy, please complete, sign, date and mail your proxy in the pre-addressed postage-paid envelope provided or authorize your proxy by one of the other methods specified in this joint proxy statement/prospectus or the accompanying notices. If your shares of common stock are held in “street name” by your broker or other nominee, only your broker or other nominee can vote your shares and the vote cannot be cast unless you provide instructions to your broker or other nominee on how to vote or you obtain a legal proxy from your broker or other nominee. You should follow the directions provided by your broker or other nominee regarding how to instruct your broker or other nominee to vote your shares. You may revoke your proxy at any time before it is voted. Please review this joint proxy statement/prospectus for more complete information regarding the merger and the special meetings.

We look forward to the successful combination of Tecogen and ADGE.

Sincerely,

Sincerely,

John N. Hatsopoulos            Benjamin Locke  
Co-Chief Executive Officer    Co-Chief Executive Officer  
American DG Energy Inc.    Tecogen Inc.

Neither the Securities and Exchange Commission nor any state securities regulatory authority has approved or disapproved of the merger or the securities to be issued under this joint proxy statement/prospectus or has passed upon the adequacy or accuracy of the disclosure in this joint proxy statement/prospectus. Any representation to the contrary is a criminal offense.

This joint proxy statement/prospectus is dated [\*], and is first being mailed to the Tecogen and ADGE common stockholders on or about [\*].

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TECOGEN INC.

45 First Avenue

Waltham, Massachusetts 02451

(781) 466-6400

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

TO BE HELD ON [\*]

To the Stockholders of Tecogen Inc.:

We are pleased to invite you to attend a special meeting of the stockholders of Tecogen Inc., or Tecogen, a Delaware corporation, which will be held at our corporate headquarters at 45 First Avenue, Waltham, Massachusetts on [\*], commencing at [\*] a.m., local time, or such other date, time and place to which such meeting may be adjourned or postponed. The special meeting of stockholders has been called in connection with the Agreement and Plan of Merger dated as of November 1, 2016, as amended on March 23, 2017 by Amendment No. 1 to the Agreement and Plan of Merger, or the Merger Agreement, by and among Tecogen, American DG Energy Inc., a Delaware corporation, or ADGE, and Tecogen.ADGE Acquisition Corp., a Delaware corporation formed for the purpose of effecting the merger and a wholly-owned subsidiary of Tecogen, or the Merger Sub, pursuant to which Merger Sub will merge with and into ADGE, or the Merger, with ADGE continuing as the surviving entity. Tecogen stockholders are being asked to consider and vote on the following:

- 1) to approve the issuance of the shares of common stock, par value \$.001 per share, of Tecogen in the Merger contemplated by the Merger Agreement. This proposal is referred to as the Tecogen Share Issuance Proposal; and
- 2) to transact any other business as may properly be brought before the Tecogen special meeting or any adjournments or postponements thereof.

This joint proxy statement/prospectus contains important information about the proposal to be voted on at the Tecogen special meeting. We encourage you to read this joint proxy statement/prospectus carefully before voting, including the section entitled “Risk Factors” beginning on page 27.

The Tecogen Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, including the issuance of the shares of Tecogen common stock pursuant to the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of Tecogen, and (iii) directed that the Tecogen Share Issuance Proposal be submitted for consideration at the Tecogen special meeting. The Tecogen Board of Directors unanimously recommends that the Tecogen stockholders vote “FOR” the Tecogen Share Issuance Proposal. The Merger cannot be completed without the approval by the Tecogen stockholders of the Tecogen Share Issuance Proposal.

The Tecogen Board of Directors has fixed the close of business on [\*], as the record date for determination of Tecogen common stockholders entitled to receive notice of, and to vote at, Tecogen’s special meeting and any postponements or adjournments of the special meeting.

The Tecogen Share Issuance Proposal requires the affirmative vote of a majority of the votes cast by the holders of all of the shares of Tecogen common stock present in person or represented by proxy at the special meeting at which a quorum is present. This means the number of shares voted “FOR” the Tecogen Share Issuance Proposal must exceed the number of shares voted “AGAINST” the Tecogen Share Issuance Proposal. Abstentions and broker non-votes are not considered votes cast for the foregoing purpose, and will have no effect on the vote for this proposal.

A complete list of Tecogen stockholders of record entitled to vote at the Tecogen special meeting will be available for ten days before the Tecogen special meeting at the principal executive offices of Tecogen for inspection by stockholders during ordinary business hours for any purpose germane to the Tecogen special meeting.

**YOUR VOTE IS IMPORTANT**

Whether or not you plan to attend the special meeting, please authorize a proxy to vote your shares as promptly as possible. To authorize a proxy, complete, sign, date and mail your proxy card in the pre-addressed postage-paid envelope provided or, if the option is available to you, call the toll free telephone number listed on your proxy card or use the Internet as described in the instructions on the enclosed proxy card to authorize your proxy. Authorizing a

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proxy will assure that your vote is counted at the special meeting if you do not attend in person. If your shares of Tecogen common stock are held in “street name” by your broker or other nominee, only your broker or other nominee can vote your shares of Tecogen common stock and the vote cannot be cast unless you provide instructions to your broker or other nominee on how to vote or obtain a legal proxy from your broker or other nominee. You should follow the directions provided by your broker or other nominee regarding how to instruct your broker or other nominee to vote your shares of Tecogen common stock. You may revoke your proxy at any time before it is voted.

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Please review the joint proxy statement/prospectus accompanying this notice for more complete information regarding the Merger, the Tecogen Share Issuance Proposal and Tecogen's special meeting.

By Order of the Board of Directors,

Benjamin Locke

Co-Chief Executive Officer

IF YOU RETURN A SIGNED PROXY CARD WITHOUT AN INDICATION OF HOW YOU WISH TO VOTE,  
YOUR SHARES WILL BE VOTED IN FAVOR OF THE PROPOSAL.

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AMERICAN DG ENERGY INC.

45 First Avenue  
Waltham, Massachusetts 02451  
(781) 522-6000

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS  
TO BE HELD ON [\*]

To the Stockholders of American DG Energy Inc.:

We are pleased to invite you to attend a special meeting of the stockholders of American DG Energy Inc., or ADGE, a Delaware corporation, which will be held at our corporate headquarters at 45 First Avenue, Waltham, Massachusetts, on [\*], commencing at [\*] a.m., local time, or such other date, time and place to which such meeting may be adjourned or postponed, to consider and vote upon the following:

- 1) to adopt the Agreement and Plan of Merger dated as of November 1, 2016, as amended on March 23, 2017 by Amendment No. 1 to the Agreement and Plan of Merger, or the Merger Agreement, by and among ADGE, Tecogen Inc., a Delaware corporation, or Tecogen, and Tecogen.ADGE Acquisition Corp., a Delaware corporation formed for the purpose of effecting the merger and a wholly-owned subsidiary of Tecogen, or the Merger Sub, pursuant to which Merger Sub will merge with and into ADGE, or the Merger, with ADGE continuing as the surviving entity, and approve the Merger. This proposal is referred to as the ADGE Merger Approval Proposal; and
- 2) to transact any other business as may properly be brought before the ADGE special meeting or any adjournments or postponements thereof.

This joint proxy statement/prospectus contains important information about the matters to be voted upon at the ADGE special meeting. We encourage you to read this joint proxy statement/prospectus carefully before voting, including the section entitled "Risk Factors" beginning on page 31.

The ADGE Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of ADGE, and (iii) directed that the foregoing proposal be submitted for consideration at the ADGE special meeting. The ADGE Board of Directors unanimously recommends that the ADGE stockholders vote "FOR" the ADGE Merger Approval Proposal. The Merger cannot be completed without the approval by ADGE stockholders of the ADGE Merger Approval Proposal.

The ADGE Board of Directors has fixed the close of business on [\*] as the record date for the determination of ADGE common stockholders entitled to receive notice of, and to vote at, ADGE's special meeting and any postponements or adjournments of the special meeting.

The ADGE Merger Approval Proposal requires the affirmative vote of a majority of the outstanding shares of ADGE common stock entitled to vote on the proposal, assuming that a quorum is present at the special meeting.

A complete list of ADGE stockholders of record entitled to vote at the ADGE special meeting will be available for ten days before the ADGE special meeting at the principal executive offices of ADGE for inspection by stockholders during ordinary business hours for any purpose germane to the ADGE special meeting.

**YOUR VOTE IS IMPORTANT**

Whether or not you plan to attend the special meeting, please authorize a proxy to vote your shares as promptly as possible. To authorize a proxy, complete, sign, date and mail your proxy card in the pre-addressed postage-paid envelope provided or, if the option is available to you, call the toll free telephone number listed on your proxy card or use the Internet as described in the instructions on the enclosed proxy card to authorize your proxy. If your shares of ADGE common stock are held in "street name" by your broker or other nominee, only your broker or other nominee can vote your shares of ADGE common stock and the vote cannot be cast unless you provide instructions to your broker or other nominee on how to vote or obtain a legal proxy from your broker or other nominee. You should follow the directions provided by your broker or other nominee regarding how to instruct your broker or other nominee to vote your shares of ADGE common stock. You may revoke your proxy at any time before it is voted. Please review the joint proxy statement/prospectus accompanying this notice for more complete information regarding the Merger, the

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Merger Agreement, the ADGE Merger Approval Proposal and ADGE's special meeting.

By Order of the Board of Directors

John N. Hatsopoulos

Co-Chief Executive Officer

IF YOU RETURN A SIGNED PROXY CARD WITHOUT AN INDICATION OF HOW YOU WISH TO VOTE,  
YOUR SHARES WILL BE VOTED IN FAVOR OF THE PROPOSAL.

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**ABOUT THIS JOINT PROXY STATEMENT/PROSPECTUS**

This joint proxy statement/prospectus, which forms part of a registration statement on Form S-4 (Registration No. 333-215231) filed with the SEC by Tecogen, constitutes a prospectus of Tecogen under the Securities Act of 1933, as amended, or the Securities Act, with respect to the shares of Tecogen common stock to be issued to ADGE stockholders pursuant to the Merger Agreement. This joint proxy statement/prospectus also constitutes a proxy statement under the Securities Exchange Act of 1934, as amended, or the Exchange Act, with respect to the Tecogen special meeting and the ADGE special meeting. It also includes a notice of meeting with respect to each of the Tecogen and the ADGE special meetings.

You should rely only on the information contained in this joint proxy statement/prospectus. No one has been authorized to provide you with information that is different from that contained in this joint proxy statement/prospectus. This joint proxy statement/prospectus is dated [\*]. You should not assume that the information contained in this joint proxy statement/prospectus is accurate as of any date other than the date of this document. Neither our mailing of this joint proxy statement/prospectus to Tecogen stockholders or ADGE stockholders nor the issuance by Tecogen of common stock in connection with the Merger will create any implication to the contrary. This joint proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction in which or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction. Information contained in this joint proxy statement/prospectus regarding Tecogen has been provided by Tecogen, and information contained in this joint proxy statement/prospectus regarding ADGE has been provided by ADGE.

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QUESTIONS AND ANSWERS ABOUT THE MERGER AND THE SPECIAL MEETINGS

The following questions and answers are intended to briefly address some commonly asked questions regarding the Merger, the Merger Agreement and the Tecogen and ADGE special meetings of stockholders including the proposals to be considered at each meeting. Please refer to the section entitled "Summary" in this joint proxy statement/prospectus and the more detailed information contained elsewhere in this joint proxy statement/prospectus, including the Annexes, financial statements and the other documents to which this joint proxy statement/prospectus refers which you should read carefully and in their entirety because the information in this section does not provide all the information that might be important to you.

Questions and Answers about the Merger

Q: What is the proposed transaction?

A: On November 1, 2016, Tecogen, Inc., a Delaware corporation, or Tecogen, and Tecogen.ADGE Acquisition Corp., a Delaware corporation and wholly-owned subsidiary of Tecogen formed for the purpose of effecting the merger, or Merger Sub, and American DG Energy, Inc., a Delaware corporation, or ADGE, entered into an Agreement and Plan of Merger and, as of March 23, 2017, entered into Amendment No. 1 to the Agreement and Plan of Merger, or the Merger Agreement. Pursuant to the Merger Agreement, Merger Sub will be merged with and into ADGE, or the Merger, with ADGE continuing as the surviving company in the Merger. Following the Merger, ADGE will be a wholly-owned subsidiary of Tecogen. The Merger Agreement sets forth the terms and conditions of Tecogen's proposed acquisition of ADGE. See "The Merger" and "The Merger Agreement." In this joint proxy statement/prospectus, references to the Merger Agreement relating to the period prior to its amendment are to the original Agreement and Plan of Merger, and references to the Merger Agreement relating to the period from and after its amendment are to the Agreement and Plan of Merger as amended by Amendment No. 1.

Q: Why is Tecogen proposing the Merger?

A: The Tecogen Board of Directors believes that the Merger will create value for the existing Tecogen stockholders. It believes that the Merger is important for competitive reasons and will also enhance Tecogen's financial stability and growth prospects, as described more fully in "The Merger - Tecogen's Reasons for the Merger: Recommendation by the Tecogen Board of Directors."

Q: Why is ADGE proposing the Merger?

A: ADGE believes that the shares of Tecogen common stock to be received by ADGE stockholders will enhance the value of the equity interest of ADGE stockholders by participation in the growth of Tecogen. In addition to competitive, financial and investment advantages of the Merger, the ADGE Board of Directors also believes the Merger will eliminate inefficient organizational complexities as described more fully in "The Merger - ADGE's Reasons for the Merger: Recommendation by the ADGE Board of Directors."

Q: If I am an ADGE stockholder, what will I receive in the proposed transaction?

A: If the Merger is completed, each share of ADGE common stock issued and outstanding immediately prior to the effective time of the Merger will be exchanged for the right to receive 0.092 of a share of Tecogen common stock, or the Exchange Ratio, as set forth in the Merger Agreement. No fractional shares of Tecogen common stock will be issued in the Merger. Instead, ADGE stockholders will be paid cash (without interest) in lieu of any fractional share interest to which they would otherwise be entitled. See "The Merger Agreement - Consideration to be Received in the Merger."

Q: What happens if the market price of Tecogen common stock or ADGE common stock changes before the closing of the Merger?

A: No change will be made to the Exchange Ratio due to a change in the market price of Tecogen common stock or ADGE common stock before the Merger. Because the Exchange Ratio is fixed, the value of the consideration to be received by ADGE stockholders in the Merger will not depend on the market price of shares of Tecogen common stock at the time of the Merger. See "The Merger Agreement - Consideration to be Received in the Merger Agreement."

Q: If I am a Tecogen stockholder, how will I be affected by the Merger and the issuance of shares of Tecogen common stock to ADGE stockholders in the Merger?

A: After the Merger, each Tecogen stockholder will continue to own the shares of Tecogen common stock that the stockholder held immediately prior to the Merger effective time. As a result, each Tecogen stockholder will own shares of common stock in a larger company with more assets. Because Tecogen will be issuing new shares of Tecogen common stock to ADGE stockholders in the Merger, each outstanding share of Tecogen common stock immediately prior to the Merger effective time will represent a smaller percentage of the aggregate number of shares of the combined company outstanding after the Merger. Upon completion of the Merger, Tecogen estimates that Tecogen stockholders will own approximately 81% of the issued and outstanding shares of Tecogen common stock and former ADGE stockholders will own approximately 19% of the issued and outstanding shares of Tecogen common stock after giving effect to various assumptions regarding share issuances by Tecogen prior to the Merger effective time. See “Risk Factors - Risks Relating to the Merger.”

Q: Who will be the Board of Directors and management of Tecogen if the Merger is completed?

A: It is not anticipated that the Board of Directors of Tecogen will change.

Concurrent with the closing, Tecogen’s Chief Financial Officer will be replaced with ADGE’s Chief Financial Officer. None of the other executive officers of Tecogen are expected to change.

Q: Do stockholders have appraisal rights in connection with the Merger?

A: No. Under the Delaware General Corporation Law, or the DGCL, neither Tecogen nor ADGE stockholders are entitled to exercise the right of objecting stockholders to receive payment of the fair value of their shares. See “The Merger - No Appraisal Rights.”

Q: What conditions must be satisfied to complete the Merger?

A: The Merger Agreement contains a number of closing conditions, including the approval by Tecogen stockholders of the issuance of the shares of Tecogen common stock pursuant to the Merger Agreement; the adoption of the Merger Agreement and approval of the Merger by ADGE stockholders; the absence of any law or order prohibiting, restraining, enjoining, or making illegal the consummation of the Merger or the other transactions contemplated by the Merger Agreement; the Tecogen registration statement of which this joint proxy statement/prospectus is a part shall have become effective and no stop order suspending the effectiveness of the registration statement shall have been issued; and the shares of Tecogen common stock to be issued in connection with the Merger shall have been approved for listing on the Nasdaq Capital Market, subject only to official notice of issuance. For further information about the conditions that must be satisfied or waived prior to completion of the Merger, see “The Merger Agreement - Conditions to Completion of the Merger.”

Q: What are the anticipated material United States federal income tax consequences of the proposed Merger?

A: The Merger is intended to qualify as a reorganization, within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Internal Revenue Code. Assuming the Merger qualifies as a reorganization, a U.S. holder of ADGE common stock generally will not recognize any gain or loss upon receipt of Tecogen common stock in exchange for ADGE common stock in the Merger.

Tax matters are very complicated and the tax consequences of the Merger to each ADGE stockholder may depend on such stockholder’s particular facts and circumstances. ADGE stockholders are urged to consult their tax advisors to understand fully the tax consequences of the Merger. See “Material U.S. Federal Income Tax Consequences of the Merger.”

Q: When is the proposed transaction expected to close?

A: The closing of the Merger will take place after both ADGE and Tecogen stockholder meetings have taken place, assuming that the requisite stockholder approvals have been obtained and the other conditions to closing have been satisfied or waived or such other date as agreed to by ADGE and Tecogen in writing. See “The Merger Agreement - Conditions to Completion of the Merger.”

Q: Are there risks associated with the Merger that I should consider in deciding how to vote?

A: Yes. You should read and carefully consider the risk factors set forth in the section hereof entitled “Risk Factors.”

Q: What happens if the Merger is not completed?

A: If the Tecogen Share Issuance Proposal or the ADGE Merger Approval Proposal is not approved by the respective Tecogen and ADGE stockholders or if the Merger is not completed for any other reason, ADGE stockholders will not receive the Merger consideration for their shares of ADGE common stock.

Q: May the Merger Agreement be terminated?

A: Yes. Prior to the approval of the Tecogen Share Issuance Proposal and the ADGE Merger Approval Proposal by stockholders of Tecogen and ADGE, respectively, the Merger Agreement and Merger may be abandoned by either ADGE or Tecogen pursuant to a resolution of the respective board of directors of such company to withdraw or fail to make when required under the Merger Agreement or fail to include in this joint proxy statement/prospectus for the Merger, a recommendation that the stockholders of such company approve the proposals discussed herein. The Merger Agreement does not provide for the payment by one party to the other of a breakup or termination fee in the event of such a termination.

Also, ADGE may terminate the Merger Agreement, prior to the approval of the Tecogen Share Issuance Proposal and the ADGE Merger Approval Proposal by the stockholders of Tecogen and ADGE, respectively, in the event the ADGE board approves, recommends or declares advisable, or proposes publicly to approve, recommend or declare advisable a competing proposal or offer by a third party to purchase 20% or more of the assets or outstanding capital stock, other equity securities, or voting power, of ADGE, or any merger, business combination, consolidation, share exchange, recapitalization or similar transaction as a result of which the holders of ADGE's common stock immediately prior to the transaction do not thereafter own at least 80% of the outstanding voting power of the surviving or resulting entity.

Further, the Merger Agreement provides that at any time before the closing of the Merger, either ADGE's or Tecogen's board of directors may terminate the Merger Agreement if such board (or a committee of such board) has determined in good faith, after consultation with its financial advisors and legal counsel, that there is a reasonable probability the failure to take such action would cause the board of ADGE or Tecogen, as the case may be, to violate its fiduciary duties to its stockholders under applicable law.

See “The Merger Agreement - Termination of the Merger Agreement by Either Tecogen or ADGE.”

Q: How will I receive the Merger consideration to which I am entitled?

A: ADGE stockholders holding physical share certificates of ADGE common stock, promptly after the Merger effective time, will receive from the exchange agent a letter of transmittal and instructions for effecting the surrender of the certificates representing such shares. See “The Merger Agreement -- Consideration to be Received in the Merger.”

Q: Will my rights as a stockholder of Tecogen or ADGE change as a result of the Merger?

A: The rights of Tecogen stockholders will be unchanged as a result of the Merger. Because the governing documents of Tecogen and ADGE are substantially the same, the rights of ADGE stockholders will not be changed in any material respect as a result of the Merger. At the Merger effective time, the existing charter and bylaws of Tecogen will remain unchanged. For more information regarding stockholder rights, see “Comparison of Rights of Tecogen Stockholders and ADGE Stockholders.”

Q: Where will my shares of Tecogen common stock be listed?

A: The shares of Tecogen common stock are currently listed on the Nasdaq Capital Market under the symbol “TGEN.” Tecogen will apply to have the new shares of Tecogen common stock issued as consideration in the Merger listed on the Nasdaq Capital Market prior to the Merger effective time, subject to official notice of issuance.

Q: If I am an ADGE stockholder that holds certificated shares of ADGE common stock, do I need to do anything now with my common stock certificates?

A: No, not at the present time.

Q: If I am a Tecogen stockholder, do I need to do anything with respect to my common stock certificates or book-entry shares?

A: No, you are not required to take any action with respect to your Tecogen shares.

#### Questions and Answers About the Special Meetings

Q: What am I being asked to vote on at the special meeting?

A: ADGE stockholders are being asked to consider and vote to adopt the Merger Agreement and approve the Merger, or the ADGE Merger Approval Proposal, and Tecogen stockholders are being asked to consider and vote to approve the issuance of shares of common stock of Tecogen upon closing of the Merger, or the Tecogen Share Issuance Proposal.

Tecogen and ADGE will hold separate special meetings to obtain the approval of the foregoing proposals. This joint proxy statement/prospectus contains important information about the proposals and the special meetings, which you should read carefully. The enclosed voting materials allow you to vote your shares without attending your respective meeting.

Your vote is important. Please authorize a proxy to vote your shares as promptly as possible.

Q: When and where will the Tecogen special meeting be held?

A: The Tecogen special meeting will be held on [\*], beginning at [\*], local time, at Tecogen's principal executive offices at 45 First Avenue, Waltham, MA 02451, or such other date, time and place to which such meeting may be adjourned or postponed. See "[The Tecogen Special Meeting - Date, Time, Place and Purpose of Tecogen's Special Meeting.](#)"

Q: When and where will the ADGE special meeting be held?

A: The ADGE special meeting will be held on [\*], beginning at [\*], local time, at ADGE's principal executive offices at 45 First Avenue, Waltham, MA 02451, or such other date, time and place to which such meeting may be adjourned or postponed. See "[The ADGE Special Meeting - Date, Time, Place and Purpose of ADGE's Special Meeting.](#)"

Q: Who can vote at the Tecogen special meeting?

A: All holders of record of Tecogen common stock as of the close of business on [\*], the record date for determining Tecogen stockholders entitled to notice of and to vote at the Tecogen special meeting, are entitled to receive notice of and to vote at the Tecogen special meeting.

As of the record date, there were [\*] shares of Tecogen common stock issued and outstanding and entitled to vote at the Tecogen special meeting, held by approximately [\*] holders of record. Each share of Tecogen common stock is entitled to one vote on each proposal presented at the Tecogen special meeting. See "[The Tecogen Special Meeting - Record Date; Who Can Vote at Tecogen's Special Meeting.](#)"

Q: Who can vote at the ADGE special meeting?

A: All holders of record of ADGE common stock as of the close of business on [\*], the record date for determining ADGE stockholders entitled to notice of and to vote at the ADGE special meeting, are entitled to receive notice of and to vote at the ADGE special meeting.

As of the record date, there were [\*] shares of ADGE common stock issued and outstanding and entitled to vote at the ADGE special meeting, held by approximately [\*] holders of record. Each share of ADGE common stock is entitled to one vote on each proposal presented at the ADGE special meeting. See "[The ADGE Special Meeting - Record Date; Who Can Vote at ADGE's Special Meeting.](#)"

Q: What constitutes a quorum for the Tecogen special meeting?

A: At the Tecogen special meeting, the presence of holders of a majority in voting power of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at the meeting, present in person, or represented by proxy, shall constitute a quorum for the transaction of business. Abstentions will be counted in determining whether a quorum is present at the Tecogen special meeting. Failures to vote, which include failure to provide instructions to your broker or other nominee if your shares are held in "street name," will not be counted in determining whether a quorum is present. See "[The Tecogen Special Meeting - Vote Required for Approval; Quorum.](#)"

Q: What constitutes a quorum for the ADGE special meeting?

A: At the ADGE special meeting, the presence of the holders of a majority in voting power of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at the meeting, present in person, or represented by proxy, shall constitute a quorum for the transaction of business. Abstentions will be counted in determining whether a quorum is present at the ADGE special meeting. Failures to vote, which include failure to provide instructions to your broker or other nominee if your shares are held in "street name," will not be counted in determining whether a quorum is present. See "[The ADGE Special Meeting - Vote Required for Approval; Quorum.](#)"

Q: What vote is required to approve each proposal at the Tecogen special meeting?

A: The Tecogen Share Issuance Proposal requires the affirmative vote of a majority of the votes cast by the holders of all of the shares of Tecogen common stock present in person or represented by proxy at the special meeting at which a quorum is present. This means the number of shares voted "FOR" the Tecogen Share Issuance Proposal must exceed the number of shares voted "AGAINST" the Tecogen Share Issuance Proposal. Abstentions and failures to vote are not considered votes cast for the foregoing purpose, and will have no effect on the vote for this proposal. See "[The Tecogen special meeting - Vote Required for Approval; Quorum.](#)"

Q: What vote is required to approve each proposal at the ADGE special meeting?

A: The ADGE Merger Approval Proposal requires the affirmative vote of a majority of the outstanding shares of ADGE common stock entitled to vote on such proposal, assuming that a quorum is present at the ADGE special meeting. Abstentions and failures to vote will have the same effect as a vote against the ADGE Merger Approval

Proposal. See “The ADGE special meeting - Vote Required for Approval: Quorum.”

Q: How do I vote?

A: If you are a stockholder of record of Tecogen as of the record date for the Tecogen special meeting or a stockholder of record of ADGE as of the record date for the ADGE special meeting, you may vote in person by attending your special meeting or, to ensure your shares are represented at the meeting, you may authorize a proxy by:

- accessing the Internet website specified on your proxy card;
- calling the toll-free number specified on your proxy card; or
- signing and returning the enclosed proxy card in the postage-paid envelope provided.

If you hold shares of common stock of Tecogen or ADGE in the name of a broker, bank or nominee, please follow the voting instructions provided by your broker, bank or nominee to ensure that your shares are represented at the applicable special meeting. If you are a Tecogen stockholder, see “The Tecogen Special Meeting - Manner of Voting.” If you are an ADGE stockholder, see “The ADGE Special Meeting - Manner of Voting.”

Q: If my shares of Tecogen common stock are held in “street name” by my broker or other nominee, will my broker or other nominee vote my shares of Tecogen common stock for me? What happens if I abstain or my broker does not vote my shares?

A: Your shares will NOT be voted unless you instruct your broker or other nominee how to vote your shares of Tecogen common stock held in street name. In accordance with the rules of the New York Stock Exchange, banks, brokerage firms and other nominees who hold shares of common stock in street name for their customers are precluded from exercising their voting discretion with respect to non-routine matters, such as the Tecogen Share Issuance Proposal. If you hold your shares in a stock brokerage account or if your shares are held by a bank or other nominee (that is, in street name), you must provide your broker or other nominee with instructions on how to vote your shares in accordance with the information and procedures provided to you by your broker, bank or nominee. If you do not provide instructions with your proxy, your bank, broker or other nominee, your broker will not vote your shares which will not have an effect on the Tecogen Share Issuance Proposal. You should instruct your broker to vote your shares in accordance with directions you provide.

You may not vote shares of Tecogen common stock held in street name by returning a proxy card directly to Tecogen or by voting in person at the Tecogen special meeting unless you provide a “legal proxy,” which you must obtain from your broker or other nominee.

See “The Tecogen Special Meeting - Vote Required for Approval: Quorum.”

Q: If my shares of ADGE common stock are held in “street name” by my broker or other nominee, will my broker or other nominee vote my shares of ADGE common stock for me? What happens if I abstain or my broker does not vote my shares?

A: Your shares will NOT be voted unless you instruct your broker or other nominee how to vote your shares of ADGE common stock held in street name. In accordance with the rules of the New York Stock Exchange, banks, brokerage firms and other nominees who hold shares of common stock in street name for their customers are precluded from exercising their voting discretion with respect to non-routine matters, such as the ADGE Merger Approval Proposal. If you hold your shares in a stock brokerage account or if your shares are held by a bank or other nominee (that is, in street name), you must provide your broker or other nominee with instructions on how to vote your shares in accordance with the information and procedures provided to you by your broker, bank or nominee. If you do not provide instructions with your proxy, your bank, broker or other nominee, your broker will not vote your shares which will have the effect of a vote “against” the proposal. You should instruct your broker to vote your shares in accordance with directions you provide.

You may not vote shares of ADGE common stock held in street name by returning a proxy card directly to ADGE or by voting in person at the ADGE special meeting unless you provide a “legal proxy,” which you must obtain from your broker or other nominee.

See “The ADGE Special Meeting - Vote Required for Approval: Quorum.”

Q: How does the Tecogen Board of Directors recommend that Tecogen stockholders vote on the Tecogen Share Issuance Proposal?

A: The Tecogen Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously approved the Merger Agreement and the transactions contemplated by the Merger Agreement, including the issuance of the shares of Tecogen common stock in the Merger.



The Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote “FOR” the Tecogen Share Issuance Proposal. The Merger cannot be completed without the approval by the Tecogen stockholders of the Tecogen Share Issuance Proposal. See “The Tecogen Special Meeting - Recommendation of the Tecogen Board.”

Q: How does the ADGE Board of Directors recommend that ADGE stockholders vote on the ADGE Merger Approval Proposal?

A: The ADGE Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of ADGE, and (iii) directed that the ADGE Merger Approval Proposal be submitted for consideration at the ADGE special meeting.

The ADGE Board of Directors unanimously recommends that ADGE stockholders vote “FOR” the ADGE Merger Approval Proposal. The Merger cannot be completed without the approval by ADGE stockholders of the ADGE Merger Approval Proposal. See “The ADGE Special Meeting - Recommendation of the ADGE Board.”

Q: What do I need to do now?

A: After you have carefully read this joint proxy statement/prospectus, please complete, sign and date your proxy card or voting instruction form and return it in the enclosed pre-addressed postage-paid envelope or, by authorizing your proxy by one of the other methods specified in your proxy card or voting instruction form as promptly as possible so that your shares of Tecogen common stock or ADGE common stock will be represented and voted at the Tecogen special meeting or the ADGE special meeting, as applicable.

Please refer to your proxy card, which is included with this joint proxy statement/prospectus, or the voting instruction form forwarded by your broker or other nominee to see which voting options are available to you.

The method by which you authorize your proxy will in no way limit your right to vote at the Tecogen special meeting or the ADGE special meeting if you later decide to attend the meeting in person. However, if your shares of Tecogen common stock or ADGE common stock are held in the name of a broker or other nominee, you must obtain a “legal proxy,” executed in your favor, from your broker or other nominee, to be able to vote in person at the Tecogen special meeting or the ADGE special meeting, as applicable. Obtaining a legal proxy may take several days.

Q: How will my proxy be voted?

A: All shares of Tecogen common stock entitled to vote and which are represented by properly completed proxies received prior to the Tecogen special meeting, which are not revoked, will be voted at the Tecogen special meeting as instructed on the proxies. If you properly submit a proxy card, but do not indicate how your shares of Tecogen common stock should be voted on a matter, the shares of Tecogen common stock represented by your proxy card will be voted as the Tecogen Board of Directors unanimously recommends and therefore “FOR” the Tecogen Share Issuance Proposal. Failures to vote, which include failures to provide instructions to your broker or other nominee if your shares are held in “street name,” your shares of Tecogen common stock will NOT be voted at the Tecogen special meeting and will not have an effect on the Tecogen Share Issuance Proposal. See “The Tecogen Special Meeting - Manner of Voting.”

All shares of ADGE common stock entitled to vote and which are represented by properly completed proxies received prior to the ADGE special meeting, which are not revoked, will be voted at the ADGE special meeting as instructed on the proxies. If you properly submit a proxy card, but do not indicate how your shares of ADGE common stock should be voted on a matter, the shares of ADGE common stock represented by your proxy card will be voted as the ADGE Board of Directors unanimously recommends and therefore “FOR” the ADGE Merger Approval Proposal.

Failures to vote, which include failures to provide instructions to your broker or other nominee if your shares are held in “street name,” your shares of ADGE common stock will NOT be voted at the ADGE special meeting and will have the same effect as a vote “AGAINST” the ADGE Merger Approval Proposal. See “The ADGE Special Meeting - Manner of Voting.”

Q: Can I change my vote after I have returned a proxy or voting instruction card?

A: Yes. You may revoke your proxy or change your vote at any time before your proxy is voted at the Tecogen special meeting or the ADGE special meeting, as applicable. If you are a holder of record, you can do this in any of the three following ways:

by sending a written notice to the Secretary of Tecogen or the Secretary of ADGE, as applicable, at the applicable address set forth below, in time to be received before the Tecogen special meeting or the ADGE special meeting, as

applicable, stating that you would like to revoke your proxy;  
by completing, signing and dating another proxy card and returning it by mail in time to be received before the Tecogen special meeting or the ADGE special meeting, as applicable, or by completing a later dated proxy over the Internet or by telephone, in which case your later dated proxy will be recorded and your earlier proxy revoked; or if you are a holder of record, you can attend the Tecogen special meeting or the ADGE special meeting, as applicable, and vote in person, which will automatically cancel any proxy previously given, or you may revoke your proxy in person, but your attendance alone at the special meeting will not revoke any proxy that you have previously given. If you choose either of the first two methods, you must submit your notice of revocation or your new proxy to the Corporate Secretary of Tecogen or the Corporate Secretary of ADGE, as appropriate, no later than the beginning of the applicable special meeting. If your shares are held in street name by your broker or nominee, you should contact them to change your vote. If you are a Tecogen stockholder see “The Tecogen Special Meeting - Revocation of Proxies or Voting Instructions.” If you are an ADGE stockholder see “The ADGE Special Meeting - Revocation of Proxies or Voting Instructions.”

Q: What should I do if I receive more than one set of voting materials for Tecogen’s special meeting and/or ADGE’s special meeting?

A: You may receive more than one set of voting materials for Tecogen’s special meeting and/or ADGE’s special meeting, including multiple copies of this joint proxy statement/prospectus and multiple proxy cards or voting instruction cards. For example, if you hold your shares of Tecogen common stock and/or ADGE common stock in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold shares of Tecogen common stock and/or ADGE common stock. If you are a holder of record and your shares of Tecogen common stock or ADGE common stock are registered in more than one name, you may receive more than one proxy card. Please complete, sign, date and return each proxy card and voting instruction card that you receive or, please authorize your proxy by telephone, or over the Internet.

Q: What happens if I am a stockholder of both Tecogen and ADGE?

A: You will receive separate proxy cards for each of Tecogen and ADGE and you must complete, sign and date each proxy card and return each proxy card in the appropriate pre-addressed postage-paid envelope or, by authorizing a proxy by one of the other methods specified in your proxy card or voting instruction card for each of Tecogen and ADGE.

Q: Do I need identification to attend Tecogen or the ADGE special meeting in person?

A: Yes. Please bring proper identification, together with proof that you are a record owner of Tecogen or ADGE common stock, as the case may be. If your shares are held in street name, please bring acceptable proof of ownership, such as a letter from your broker or an account statement showing that you beneficially owned shares of Tecogen or ADGE common stock, as applicable, on the applicable record date.

Q: Who can help answer my questions?

A: If you have questions about the Merger or the other matters to be voted on at the special meetings or desire additional copies of this joint proxy statement/prospectus or additional proxy or voting instruction cards, please contact:

Tecogen common stockholders: ADGE common stockholders:

Tecogen Inc.	American DG Energy Inc.
Attention: Investor Relations	Attention: Investor Relations
45 First Avenue	45 First Avenue
Waltham, MA 02451	Waltham, MA 02451
(781) 466-6413	(781) 522-6000
www.tecogen.com	www.americandg.com

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SUMMARY

The following summary highlights some of the information contained elsewhere in this joint proxy statement/prospectus and may not contain all the information that is important to you. For a more complete description of the Merger Agreement and the transactions contemplated by the Merger Agreement, Tecogen and ADGE encourage you to carefully read this entire joint proxy statement/prospectus, including the attached Annexes. We also encourage you to read the information incorporated by reference into this joint proxy statement/prospectus, which includes important business and financial information filed with the SEC regarding Tecogen and ADGE. You may obtain the information incorporated by reference into this joint proxy statement/prospectus without charge by following the instructions described under “Where You Can Find More Information.”

The Companies

Tecogen Inc.

Tecogen designs, manufactures, sells, and services systems that produce electricity, hot water, and air conditioning for commercial installations and buildings and industrial processes. Tecogen’s systems, powered by natural gas engines, drive electricity generators or compressors, which reduce the amount of electricity purchased from local utilities. Because Tecogen’s systems are designed to capture waste engine heat, they tend to be more energy efficient since otherwise-wasted energy can be used for water heating, space heating and/or air conditioning. The relative costs of natural gas and electricity at a proposed system site determine whether a system is economically efficient as well as energy efficient. This type of cogeneration technology is referred to as combined heat and power, or CHP.

Tecogen manufactures three types of CHP products:

- Cogeneration units that supply electricity and hot water;
- Chillers that provide air-conditioning and hot water; and
- High-efficiency water heaters.

All of Tecogen’s products are standardized, modular, small-scale CHP products that reduce energy costs, carbon emissions, and dependence on the electric grid. Market drivers include the price of natural gas, local electricity costs, and governmental energy policies, as well as customers’ desire to become more socially responsible. Traditional customers for our cogeneration and chiller systems include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations; however, the economic feasibility of using our systems is not limited to these customer types. Tecogen has shipped approximately 2,500 units, some of which have been operating for almost 25 years. As of December 31, 2016, Tecogen employed 83 full-time employees and three part-time employees, including seven sales and marketing personnel and 35 service personnel.

Tecogen was incorporated in the State of Delaware on September 15, 2000. Its offices are located at 45 First Avenue, Waltham, Massachusetts 02451, and its telephone number is 781-466-6400. Tecogen's Internet address is [www.tecogen.com](http://www.tecogen.com). That website address is a textual reference only and the information on the website is not incorporated by reference herein.

American DG Energy Inc.

ADGE distributes, owns and operates clean, on-site energy systems that produce electricity, hot water, heat and cooling. ADGE’s business model is to own the equipment that it installs at customers' facilities and to sell the energy produced by these systems to the customer on a long-term contractual basis. ADGE calls this business the ADGE “On-Site Utility”. ADGE installs, owns, operates and maintains complete distributed generation, or DG systems or energy systems, and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. As of December 31, 2016, ADGE had 92 installed energy systems, representing an aggregate of approximately 5,445 kilowatts, or kW, 41.6 million British thermal units, or MMBtu's, of heat and hot water and 4,500 tons of cooling, kW is a measure of electricity generated, MMBtu is a measure of heat generated and a ton is a measure of cooling generated.

ADGE offers natural gas powered cogeneration systems that are highly reliable and energy efficient. Its cogeneration systems produce electricity from an internal combustion engine driving a generator, and the heat from the engine and exhaust is recovered and typically used to produce heat and hot water for use at the site. ADGE also distributes and operates water chiller systems for building cooling applications that operate in a similar manner, except that the engine's power drives a large air-conditioning compressor while recovering heat for hot water. Cogeneration systems reduce the amount of electricity that the customer must purchase from the local utility and produce valuable heat and hot water for the site to use as required. By simultaneously providing electricity, hot water and heat, cogeneration systems also have a significant, positive impact on the environment by reducing the carbon, or CO<sub>2</sub>, produced by offsetting the traditional energy supplied by the electric grid and conventional hot water boilers.

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Distributed Generation of electricity, or DG, often referred to as cogeneration systems, or combined heat and power systems, or CHP, is an attractive option for reducing energy costs and increasing the reliability of available energy. DG has been successfully implemented by others in large industrial installations over 10 Megawatts, or MW, where the market has been growing for several years, and is increasingly being accepted in smaller size units because of technology improvements, increased energy costs and better economics. ADGE believes that its target market (users of up to 1 MW) has been barely penetrated and that the reduced reliability of the utility grid, increasing cost pressures experienced by energy users, advances in new, low cost technologies and DG-favorable legislation and regulation at the state and federal level will drive our near-term growth and penetration into our target market. ADGE maintains a website at [www.americandg.com](http://www.americandg.com), but that website address is a textual reference only and the information on the website is not incorporated by reference herein.

ADGE was incorporated as a Delaware corporation on July 24, 2001. Its offices are located at 45 First Avenue4, Waltham, Massachusetts 02451 and its telephone number is (781) 522-6000. ADGE's internet address is [www.americandg.com](http://www.americandg.com). That website address is a textual reference only and the information on the website is not incorporated by reference herein.

Tecogen.ADGE Acquisition Corp.

Tecogen.ADGE Acquisition Corp., or Merger Sub, is a recently organized Delaware corporation formed for the purpose of effecting the Merger. Upon completion of the Merger, Merger Sub will be merged with and into ADGE with ADGE surviving the Merger as a wholly-owned subsidiary of Tecogen. Merger Sub has not conducted any activities other than those incidental to its formation and the matters contemplated by the Merger Agreement.

The Merger and the Merger Agreement

Subject to the terms and conditions of the Merger Agreement, at the Merger effective time, Merger Sub will merge with and into ADGE. ADGE will be the surviving entity in the Merger and, following completion of the Merger, ADGE will become a wholly-owned subsidiary of Tecogen.

Upon completion of the Merger, each share of ADGE common stock issued and outstanding immediately prior to the Merger effective time will be exchanged for the right to receive 0.092 of a share of Tecogen common stock, or the Exchange Ratio. The Exchange Ratio is fixed and will not be adjusted to reflect stock price changes prior to the closing of the Merger. No fractional shares will be issued in the Merger, and cash will be paid in lieu thereof. See "The Merger Agreement - Consideration to be Received in the Merger ." Tecogen common stock is listed and traded on the Nasdaq Capital Market, and ADGE common stock is listed and traded on the NYSE MKT under the ticker symbols "TGEN" and "ADGE," respectively. Based on the closing price of Tecogen common stock on the Nasdaq National Market of \$4.03 on November 1, 2016, the last trading day before public announcement of the Merger, the Exchange Ratio represented approximately \$0.37 in Tecogen common stock for each share of ADGE common stock. Based on the closing price of Tecogen common stock on the Nasdaq Capital Market of \$3.85 on March 17, 2017, the last practicable date before the date of this joint proxy statement/prospectus, the Exchange Ratio represented approximately \$0.35 in Tecogen common stock for each share of ADGE common stock. Tecogen stockholders will continue to own their existing Tecogen shares of common stock following the consummation of the Merger. See "Comparative Tecogen and ADGE Market Price and Distribution Information" below. The value of the Merger consideration will fluctuate with changes in the market price of Tecogen and ADGE common stock. We urge you to obtain current market quotations of Tecogen common stock and ADGE common stock.

Each option to acquire shares of ADGE common stock, and each restricted stock award relating to ADGE common stock, granted before the Merger closing date under ADGE's equity plans to an employee or a non-employee director, or a participant, will remain in effect and will be exercisable for or relate to shares of Tecogen common stock based on the Exchange Ratio (with similar adjustment to the exercise price per share of each stock option). All restricted stock awards and all stock options will become 100% vested.

For a description of the treatment of all outstanding ADGE equity awards, see "The Merger Agreement - Consideration to be Received in the Merger - Treatment of Stock Options and Restricted Stock Awards."

A copy of the Merger Agreement is attached as Annex A to this joint proxy statement/prospectus and is incorporated herein by reference. We encourage you to carefully read the Merger Agreement in its entirety as it is the principal

document governing the Merger.

Directors Following the Merger

The Board of Directors of Tecogen is not expected to change as a result of the Merger.

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Recommendation of the Tecogen Board of Directors

The Tecogen Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, and (ii) directed that the Tecogen Share Issuance Proposal be submitted for consideration at the Tecogen special meeting.

The Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote "FOR" the Tecogen Share Issuance Proposal. The Merger cannot be completed without the approval by Tecogen stockholders of the Tecogen Share Issuance Proposal.

Recommendation of ADGE Board of Directors

The ADGE Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of ADGE, and (iii) directed that the ADGE Merger Approval Proposal be submitted for consideration at the ADGE special meeting.

The ADGE Board of Directors unanimously recommends that ADGE stockholders vote "FOR" the ADGE Merger Approval Proposal. The Merger cannot be completed without the approval by ADGE stockholders of the ADGE Merger Approval Proposal.

Summary of the Risk Factors Related to the Merger

You should consider carefully all of the risk factors and other information included or otherwise incorporated by reference in this joint proxy statement/prospectus before deciding how to vote. Certain of the risks related to the Merger and the related transactions are described under "Risk Factors." The principal risks relating to the Merger include the following:

Completion of the Merger is subject to conditions to closing and if these conditions are not satisfied or waived, the Merger will not be completed. Failure to complete the Merger could have material adverse effects on Tecogen and ADGE.

The Exchange Ratio is fixed and will not be adjusted in the event of any change in either Tecogen's or ADGE's stock price.

Failure to complete the Merger could negatively impact the stock prices and future business and financial results of Tecogen and ADGE.

The pendency of the Merger could adversely affect the business and operations of Tecogen and ADGE.

The ownership percentage of Tecogen and ADGE common stockholders will be diluted by the Merger.

Certain of Tecogen's and ADGE's respective directors and executive officers have interests in the transactions contemplated by the Merger Agreement that are different from, or in addition to, the interests of Tecogen's and ADGE's stockholders generally.

If the Merger is approved, the date on which ADGE common stockholders will receive the Merger consideration is uncertain.

See "Risk Factors," "The Merger - Interests of Tecogen's Directors and Executive Officers in the Merger," "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger" and "The Merger Agreement - Conditions to Completion of the Merger."

The Special Meetings

Tecogen

Holders of shares of Tecogen common stock at the close of business on [\*], or the Tecogen record date, are entitled to notice of, and to vote at, the Tecogen special meeting. On the Tecogen record date, there were [\*] shares of Tecogen common stock outstanding and entitled to vote at the Tecogen special meeting, held by approximately [\*] holders of record. Each share of Tecogen common stock is entitled to one vote.

At the Tecogen special meeting, holders of a majority in voting power of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at the meeting, present in person, or represented by proxy, shall constitute a quorum for the transaction of business. Abstentions will be counted in determining whether a quorum is present at the Tecogen special meeting.

At the Tecogen special meeting, Tecogen stockholders will be asked to consider and vote on the Tecogen Share Issuance Proposal. The Tecogen Share Issuance Proposal requires the affirmative vote of a majority of the votes cast by the holders of the shares of Tecogen common stock present in person or represented by proxy at the special meeting, assuming a quorum is present at the special meeting.

Your vote is very important. You are encouraged to authorize your proxy to vote your shares as promptly as possible. If you are a stockholder of record and you properly sign, date and return a proxy card, but do not indicate how your shares of Tecogen stock should be voted on a matter, the shares of Tecogen stock represented by your proxy cannot be voted. If you are a “street name” holder and you do not provide voting instructions to your broker or other nominee, your shares of Tecogen stock will NOT be voted at the Tecogen special meeting and will have no effect on the Tecogen Share Issuance Proposal.



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ADGE

Holders of shares of ADGE common stock at the close of business on [\*], or the ADGE record date, are entitled to notice of, and to vote at, the ADGE special meeting. On the ADGE record date, there were [\*] shares of ADGE common stock outstanding and entitled to vote at the ADGE special meeting, held by approximately [\*] holders of record. Each share of ADGE common stock is entitled to one vote on each proposal to be voted on at the ADGE special meeting.

At the ADGE special meeting, holders of a majority in voting power of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at the meeting, present in person, or represented by proxy, shall constitute a quorum for the transaction of business. Abstentions will be counted in determining whether a quorum is present at the ADGE special meeting.

At the ADGE special meeting, ADGE stockholders will be asked to consider and vote on the ADGE Merger Approval Proposal. The ADGE Merger Approval Proposal requires the affirmative vote of a majority of the outstanding shares of ADGE common stock entitled to vote on such proposal, assuming a quorum is present at the special meeting. Your vote is very important. You are encouraged to authorize your proxy to vote your shares as promptly as possible. If you are a stockholder of record and you properly sign, date and return a proxy card, but do not indicate how your shares of ADGE stock should be voted on a matter, the shares of ADGE stock represented by your proxy cannot be voted. If you are a “street name” holder and you do not provide voting instructions to your broker or other nominee, your shares of ADGE stock will NOT be voted at the ADGE special meeting and will have the same effect as a vote “AGAINST” the ADGE Merger Approval Proposal.

Opinion of Tecogen’s Financial Advisor Regarding the Merger

In connection with the Merger, at the meeting of the Tecogen Board of Directors on November 1, 2016, Tecogen’s financial advisor, Scarsdale Equities LLC, or Scarsdale, delivered to the Tecogen Board of Directors its oral opinion, later confirmed by delivery of a written opinion dated November 10, 2016, that, based upon and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations on the scope of review undertaken by Scarsdale as set forth in its written opinion, the Exchange Ratio of 0.092 of a share of Tecogen common stock for each share of ADGE common stock pursuant to the Merger Agreement was fair, from a financial point of view, to Tecogen.

The full text of the written opinion of Scarsdale is attached to this proxy statement/prospectus as Annex B and is incorporated herein by reference. The summary of the opinion of Scarsdale in this proxy statement/prospectus is qualified in its entirety by reference to the full text of the opinion and you should read the opinion in its entirety for a discussion of the assumptions made, procedures followed, matters considered and qualifications and limitations upon the review undertaken by Scarsdale in rendering its opinion. Scarsdale’s opinion addresses only the fairness from a financial point of view of the exchange ratio pursuant to the Merger Agreement to Tecogen as of the date of such opinion and does not address any other aspect of the Merger. The opinion did not in any manner address the prices at which Tecogen common stock will trade following consummation of the Merger or at any time. Scarsdale’s opinion does not constitute a recommendation to any holder of Tecogen common stock or ADGE common stock as to how to vote at the special meetings to be held in connection with the Merger or whether to take any other action with respect to the Merger. See “The Merger - Opinion of Tecogen’s Financial Advisor.”

Opinion of Financial Advisor to the ADGE Special Committee

At the meeting of the ADGE Special Committee on October 31, 2016, the financial advisor to the ADGE Special Committee, Cassel Salpeter & Co., LLC, or Cassel Salpeter, delivered its oral opinion to the ADGE Special Committee, which was later confirmed by delivery of a written opinion dated October 31, 2016, that, as of such date, and based upon and subject to the factors, assumptions and limitations set forth therein, the Exchange Ratio of 0.092 of a share of Tecogen common for each share of ADGE common stock in the Merger pursuant to the Merger Agreement was fair from a financial point of view to the holders ADGE common stock other than John Hatsopoulos, George Hatsopoulos and their respective affiliates (the “Unaffiliated Holders”).

The full text of the written opinion of Cassel Salpeter, dated October 31, 2016, which sets forth assumptions made, procedures followed, matters considered and limitations on the review undertaken in connection with the opinion, is

attached to this proxy statement as Annex C. The summary of the Cassel Salpeter opinion provided in this proxy statement is qualified in its entirety by reference to the full text of the written opinion. Cassel Salpeter provided its opinion for the information and assistance of the ADGE Special Committee and, with the consent of the ADGE Special Committee, ADGE's Board of Directors in connection with the ADGE Special Committee's and, as applicable, the ADGE Board of Directors' consideration of the Merger. The Cassel Salpeter opinion is not a recommendation as to how any holder of ADGE's common stock should vote with respect to the transaction contemplated by the Merger Agreement or any other matter. See "The Merger - Opinion of Financial Advisor to the ADGE Special Committee."

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Stock Ownership of Directors and Executive Officers of Tecogen

At the close of business on Tecogen's record date, Tecogen's directors and executive officers held and were entitled to vote 3,604,558 shares of Tecogen common stock, collectively representing 17.98% of the shares of Tecogen common stock issued and outstanding and entitled to vote on that date. John N. Hatsopoulos, Co-CEO and a director of Tecogen, owns 3,252,395 shares or 16.28% of the issued and outstanding shares of Tecogen common stock. The Tecogen Share Issuance Proposal requires the affirmative vote of a majority of the votes cast by the holders of all of the shares of Tecogen common stock present in person or represented by proxy at the special meeting at which a quorum is present. Tecogen's directors and executive officers have indicated that they expect to vote "FOR" the Tecogen Share Issuance Proposal. See "The Tecogen Special Meeting - Vote Required for Approval; Quorum."

Tecogen is not aware of any agreement between any shareholders of the company to vote their stock as a group.

For a discussion of the interests of Tecogen's directors and executive officers in the Merger, see "The Merger - Interests of Tecogen's Directors and Executive Officers in the Merger."

Stock Ownership of Directors and Executive Officers of ADGE

At the close of business on the ADGE record date, ADGE's directors and executive officers held and were entitled to vote 4,468,413 shares of ADGE common stock, collectively representing 8.82% of the shares of ADGE common stock issued and outstanding and entitled to vote on that date. John N. Hatsopoulos, co-CEO and a director of ADGE, beneficially owns 514,546 shares or 1.02% of the issued and outstanding shares of ADGE common stock. The ADGE Merger Approval Proposal requires the affirmative vote of a majority of the issued and outstanding shares of common stock of ADGE to be approved. ADGE's directors and executive officers have indicated that they expect to vote "FOR" the ADGE Merger Approval Proposal. See "The ADGE Special Meeting - Vote Required for Approval; Quorum."

For a discussion of the interests of ADGE's directors and executive officers in the Merger, see "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger."

Interests of Tecogen's Directors and Executive Officers in the Merger

In considering the recommendation of Tecogen's Board of Directors to approve the Tecogen Share Issuance Proposal, Tecogen's stockholders should be aware that Tecogen's directors and executive officers have interests in the Merger that are different from, or in addition to, the interests of Tecogen stockholders generally as summarized below.

Board and Executive Officers

The following Tecogen directors and executive officers also serve as directors and/or officers of ADGE:

John Hatsopoulos serves as Tecogen's and ADGE's co-chief executive officer and director;

Benjamin Locke serves as Tecogen's and ADGE's co-chief executive officer and director; and

Charles Maxwell serves as a director of Tecogen and ADGE.

Following the Merger, the directors and executive officers of ADGE are expected to resign. The directors and executive officers of Tecogen are expected to remain the same except that it is expected that Bonnie Brown, the current Chief Financial Officer of ADGE, will also serve as the Principal Accounting Officer of Tecogen in place of the current Tecogen Chief Financial Officer. The current Tecogen CFO, David Garrison, will resign from Tecogen.

See "Directors and Executive Officers of Tecogen", "Directors and Executive Officers of ADGE," Executive Compensation of Tecogen" and "Executive Compensation of ADGE."

Stock Ownership

The following directors and executive officers of Tecogen own shares of ADGE common stock pre-Merger which are convertible, in accordance with the Exchange Ratio, upon consummation of the Merger into shares of Tecogen common stock (without giving effect to the exercise of outstanding options to acquire common stock) as follows:

John Hatsopoulos owns 514,546 shares of ADGE common stock convertible to 47,338 shares of Tecogen common stock;

Benjamin Locke owns 15,418 shares of ADGE common stock convertible to 1,418 shares of Tecogen common stock; and

Charles Maxwell owns 1,275,232 shares of ADGE common stock convertible to 117,321 shares of Tecogen common stock.



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## Stock Options

The following table indicates as of March 17, 2017, the directors and executive officers of Tecogen who own stock options to purchase ADGE common stock pre-Merger which will become, upon consummation of the Merger, vested options to acquire shares of Tecogen common stock, with adjustments to the number of shares to reflect the Exchange Ratio, as follows:

Name	Vested/unvested Options to Acquire ADGE common stock pre-Merger	Vested Options to Acquire Tecogen common stock post-Merger
Charles Maxwell	200,000/0	18,400
Benjamin Locke	287,500/262,500	50,600

See "[The Merger - Interests of ADGE's Directors and Executive Officers in the Merger](#)" for further information, including information with respect to the adjustment of the exercise prices of the options.

## Indemnification

Each of the current directors and executive officers of Tecogen and ADGE will be entitled pursuant to the Merger Agreement to continued indemnification by Tecogen and the purchase of a "tail" or "runoff" insurance policy of directors' and officers' liability insurance after the Merger.

The Tecogen Board of Directors was aware of and considered these interests, among other matters, in evaluating and negotiating the Merger Agreement and the Merger, approving the Merger Agreement, and recommending that Tecogen stockholders approve the Tecogen Share Issuance Proposal.

## Interests of ADGE's Directors and Executive Officers in the Merger

In considering the recommendation of ADGE's Board of Directors to approve the ADGE Merger Approval Proposal, ADGE's stockholders should be aware that ADGE's directors and executive officers have financial interests in the Merger that are different from, or in addition to, the interests of ADGE stockholders generally as set forth below.

## Board and Executive Officers

The following ADGE directors and executive officers also serve as directors and/or officers of Tecogen:

John Hatsopoulos serves as ADGE's and Tecogen's co-chief executive officer and director;

Benjamin Locke serves as ADGE's and Tecogen's co-chief executive officer and director; and

Charles Maxwell serves as a director of ADGE and Tecogen.

Following the Merger, the directors and executive officers of ADGE are expected to resign. The directors and executive officers of Tecogen are expected to remain the same except that it is expected that Bonnie Brown, the current Chief Financial Officer of ADGE, will also serve as the Principal Accounting Officer of Tecogen in place of the current Tecogen Chief Financial Officer. See "Directors and Executive Officers of ADGE", "Directors and Executive Officers of Tecogen," "Executive Compensation of ADGE," "Executive Compensation of Tecogen," "Executive Compensation of Tecogen" and "Executive Compensation of ADGE."

## Stock Options

The following table indicates as of March 17, 2017, the ADGE director and/or executive officer who owns vested and unvested options to acquire ADGE common stock pre-Merger which will become, upon consummation of the Merger, vested options to acquire shares of Tecogen common stock, with adjustments to the number of shares to reflect the Exchange Ratio, as follows:

Name	Vested/unvested Options to Acquire ADGE common stock pre-Merger	Vested Options to Acquire Tecogen common stock post-Merger
Bonnie Brown	25,000/75,000	9,200
Christine Klaskin	0/100,000	9,200
Benjamin Locke	287,500/262,500	50,600
	200,000/0	18,400

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Charles Maxwell		
Deanna Petersen	0/100,000	9,200
John Rowe	70,000/30,000	9,200
Elias Samaras	0/100,000	9,200

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See "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger - Treatment of Outstanding Equity Awards" for further information, including information with respect to the adjustment of the exercise prices of the options.

Indemnification

In addition, the Merger Agreement provides for the continued indemnification of current directors and executive officers of ADGE and Tecogen and the purchase of a "tail" or "runoff" insurance policy of directors' and officers' liability insurance after the Merger. See "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger." The ADGE Board of Directors was aware of and considered these interests, among other matters, in evaluating and negotiating the Merger Agreement and the Merger, approving the Merger Agreement and recommending that ADGE stockholders approve the ADGE Merger Approval Proposal.

Listing of Tecogen Common Shares

Approval of the listing on the Nasdaq Capital Market of the shares of Tecogen common stock to be issued as consideration for the Merger, subject to official notice of issuance, is a condition precedent to each party's obligation to complete the Merger. Tecogen has agreed to use its reasonable best efforts to cause such shares of Tecogen common stock to be approved for listing on the Nasdaq Capital Market prior to the Merger effective time, subject to official notice of issuance. See "The Merger - Listing of Tecogen Common Stock."

No Appraisal Rights

No appraisal, dissenters or similar rights will be available in connection with the Merger or other transactions contemplated by the Merger Agreement. See "The Merger - No Appraisal Rights."

Expected Timing of the Merger

Tecogen and ADGE currently expect to complete the Merger as soon as practicable following the special meetings of Tecogen and ADGE stockholders, subject to receipt of required stockholder approvals and the satisfaction or waiver of other closing conditions.

Conditions to Completion of the Merger

As more fully described elsewhere in this joint proxy statement/prospectus and in the Merger Agreement, the completion of the Merger depends on a number of conditions being satisfied or, where legally permissible, waived. These conditions include, among others:

- adoption of the Merger Agreement and approval of the Merger by ADGE common stockholders;
- approval of the issuance of the shares of common stock of Tecogen in the Merger contemplated by the Merger Agreement by Tecogen common stockholders;
- the absence of any law or order by any governmental entity prohibiting, restraining, enjoining or making illegal the consummation of the Merger or the other transactions contemplated by the Merger Agreement;
- the Form S-4 of which this joint proxy statement/prospectus is a part shall have been declared effective and no stop order suspending the effectiveness of the Form S-4 shall have been issued by the SEC and shall remain in effect and no proceeding to that effect shall have been commenced; and
- the shares of Tecogen common stock to be issued in connection with the Merger shall have been approved for listing on the Nasdaq Capital Market, subject only to official notice of issuance.

Neither Tecogen nor ADGE can give any assurance as to when or if all of the conditions to the completion of the Merger will be satisfied or waived, or that the Merger will occur. See "The Merger Agreement - Conditions to Completion of the Merger."

Regulatory Approvals Required for the Merger

Neither Tecogen nor ADGE is aware of any regulatory approvals that are expected to prevent the consummation of the Merger other than approval of the listing on Nasdaq of the Tecogen shares to be issued in the Merger. See "The Merger Agreement - Other Covenants and Agreements."

No Deal Protection Devices; Termination of the Merger Agreement

The Merger Agreement does not contain any so-called "deal protection devices" such as a no-shop provision or a termination fee. Prior to obtaining ADGE stockholder approval, ADGE may withdraw or modify its recommendation to ADGE stockholders with respect to the Merger, terminate the Merger Agreement and enter into an agreement with

respect to a competing acquisition proposal with a third party. In addition, Tecogen and ADGE may mutually agree to terminate the Merger Agreement at any time prior to the Merger effective date, regardless of whether Tecogen or ADGE stockholder approval has been obtained. See “The Merger Agreement - Termination of the Merger Agreement by Either Tecogen or ADGE.”

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Expenses; No Termination Fees

Generally, all fees and expenses incurred in connection with the Merger and the transactions contemplated by the Merger Agreement will be paid by the party incurring those expenses. See “The Merger Agreement - Termination of the Merger Agreement by Either Tecogen or ADGE.”

Certain United States Federal Income Tax Consequences of the Merger

The Merger is intended to qualify as a reorganization, within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, which we refer to as the Internal Revenue Code. Assuming the Merger qualifies as a reorganization, a U.S. holder of ADGE common stock generally will not recognize any gain or loss upon receipt of Tecogen common stock in exchange for ADGE common stock in the Merger.

Tax matters are very complicated and the tax consequences of the Merger to each ADGE stockholder may depend on such stockholder’s particular facts and circumstances. ADGE stockholders are urged to consult their tax advisors to understand fully the tax consequences of the Merger. For more information see “Material U.S. Federal Income Tax Consequences of the Merger.”

Accounting Treatment of the Merger

In accordance with U.S. generally accepted accounting principles, or GAAP, Tecogen will account for the Merger as a business combination with Tecogen treated as the acquirer of ADGE for accounting purposes. Under business combination accounting rules, the assets acquired and liabilities assumed will be recorded as of the Merger effective time at their respective fair values, which may be more or less than the book value, and added to those of Tecogen. Any excess of purchase price over the fair values will be recorded as goodwill. Tecogen’s consolidated financial statements issued after the Merger will include ADGE assets acquired and retained by Tecogen in the Merger from the Merger effective time, but not for periods prior to the completion of the Merger. See “The Merger - Accounting Treatment.”

Litigation Relating to the Merger

Massachusetts Superior Court Action

On or about February 6, 2017, ADGE, John Hatsopoulos, George N. Hatsopoulos, Charles T. Maxwell, Deanna M. Petersen, Christine Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen, and ADGE.Acquisition Corp., were served with a Verified Complaint by William C. May, individually and on behalf of the other shareholders of ADGE as a class. The action was commenced in the Business Litigation Section of the Superior Court of the Commonwealth of Massachusetts, Civil Action No. 17-0390. The complaint alleges the proposed Merger is subject to certain conflicts of interest; that ADGE's board failed to protect our stockholders by failing to conduct an auction or market check; that the Exchange Ratio undervalues ADGE's outstanding shares; that ADGE's directors breached their fiduciary duties in approving the Merger proposal; that Tecogen’s registration statement on Form S-4 contained material omissions; that Tecogen aided and abetted ADGE's board’s breaches of its fiduciary duties; and other claims. The plaintiff is seeking preliminary and permanent injunctions related to the Merger, rescissory damages, compensatory damages, accounting, and other relief.

United States District Court Action

On or about February 15, 2017, a lawsuit was filed in the United States District Court for the District of Massachusetts by Lee Vardakas (“Vardakas”), individually and on behalf of other shareholders of ADGE, naming ADGE, John N. Hatsopoulos, George N. Hatsopoulos, Benjamin Locke, Charles T. Maxwell, Deanne M. Petersen, Christine M. Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen Inc., Tecogen.ADGE Acquisition Corp., and Cassel Salpeter & Co., LLC, as defendants. Among other things, the complaint alleges that (1) the merger is the result of a flawed and conflicted sales process and that the Exchange Ratio undervalues ADGE’s outstanding shares and (2) the registration statement on Form S-4 contains materially incomplete and misleading information concerning: (a) the financial analyses performed by ADGE’s financial advisor, (b) financial projections for ADGE and Tecogen, and (c) conflicts of interest in the sales process. The complaint asserts that defendants violated Section 14(a)(1) of the Securities Exchange Act of 1934, as amended (“Exchange Act”), and Rule 14a-9 thereunder, as a result of the alleged materially incomplete and misleading information; that the directors and officers of ADGE have control person liability for the alleged material misstatements and omissions pursuant to Section 20(a) of the Exchange Act; that the

directors of ADGE breached their fiduciary duties to ADGE's stockholders related to the merger, including that they failed to take steps to obtain the highest possible consideration for ADGE shareholders in the transaction; that Mr. John Hatsopoulos and Mr. George Hatsopoulos, acting in concert and as a group, as controlling shareholders of ADGE, violated their fiduciary duties to the shareholders of ADGE; and that Mr. George Hatsopoulos, Tecogen.ADGE Acquisition Corp., and ADGE's financial advisor aided and abetted breaches of fiduciary duties by the directors and officers of ADGE. Vardakas is seeking to certify a class action, a preliminary injunction,

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damages, costs and disbursements, including reasonable attorneys' fees, and such other relief as the court deems just and proper. As of the date of this report, none of the defendants in this action have been served with the complaint in the matter.

#### Comparison of Rights of Tecogen and ADGE Stockholders

ADGE stockholders will have substantially the same rights once they become Tecogen stockholders following the Merger due to similarity between the governing documents of Tecogen and ADGE. See "Summary - Comparison of Rights of Tecogen Stockholders and ADGE Stockholders."

#### Selected Historical Financial Information of Tecogen

The following selected historical financial information of Tecogen as of December 31, 2016 and 2015 and for each of the years in the two year period ended December 31, 2016 has been derived from Tecogen's audited consolidated financial statements included elsewhere herein.

You should read this selected historical financial information together with the financial statements included elsewhere in this joint proxy statement/prospectus and their accompanying notes together with Tecogen's management's discussion and analysis of operations and financial condition of Tecogen. See "Information About Tecogen -- Management's Discussion and Analysis of Financial Condition and Results of Operations of Tecogen."

	Years Ended December 31,	
	2016	2015
Statements of Operations Data:		
Revenues	\$24,490,386	\$21,442,657
Cost of sales	15,189,708	13,809,431
Gross profit	9,300,678	7,633,226
Operating expenses	10,298,129	10,276,576
Loss from operations	(997,451 )	(2,643,350 )
Other expense, net	(163,794 )	(157,610 )
Consolidated net loss	(1,161,245 )	(2,800,960 )
Loss attributable to the noncontrolling interest	64,962	73,547
Net loss attributable to Tecogen Inc.	\$(1,096,283 )	\$(2,727,413 )
Net loss attributable to Tecogen Inc. per share - basic and diluted	\$(0.06 )	\$(0.16 )
Weighted average shares outstanding - basic and diluted	19,295,922	16,860,453

	As of December 31,	
	2016	2015
Financial Position Data:		
Cash and cash equivalents	\$3,721,765	\$5,486,526
Working capital <sup>(1)</sup>	14,436,452	14,027,370
Total Assets	23,741,361	21,090,640
Total current liabilities	5,622,504	5,375,610
Total non-current liabilities	3,607,784	3,273,162
Total shareholders' equity	14,511,073	12,441,868

<sup>(1)</sup> Tecogen defines working capital as total current assets minus total current liabilities

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## Selected Historical Financial Information of ADGE

The following selected historical financial information of ADGE as of December 31, 2016 and 2015 and for each of the years in the two year period ended December 31, 2016 has been derived from ADGE's audited consolidated financial statements included elsewhere herein.

You should read this selected historical financial information together with the financial statements included elsewhere in this joint proxy statement/prospectus and their accompanying notes together with management's discussion and analysis of operations and financial condition of ADGE. See "Information About ADGE -- Management's Discussion and Analysis of Financial Condition and Results of Operations of ADGE."

	Years Ended December	
	31,	
	2016	2015
Statements of Operations Data:		
Revenues	\$6,141,749	\$6,358,196
Cost of sales	6,012,757	6,411,568
Gross profit (loss)	128,992	(53,372 )
Operating expenses	2,568,693	3,386,362
Loss from operations	(2,439,701 )	(3,439,734 )
Other income (expense), net	2,285,470	(1,034,254 )
Loss from continuing operations	(214,803 )	(4,501,593 )
Loss from discontinued operations	(1,219,256 )	(1,384,122 )
Consolidated net loss	(1,434,059 )	(5,885,715 )
Loss attributable to the noncontrolling interest	675,612	455,312
Net loss attributable to ADGE Inc.	\$(758,447 )	\$(5,430,403)
Income (loss) per share from continuing operations - basic and diluted	\$0.01	\$(0.09 )
Net loss per share - basic and diluted	\$(0.01 )	\$(0.11 )
Weighted average shares outstanding - basic and diluted	50,684,095	50,689,633

	As of December 31,	
	2016	2015
Financial Position Data:		
Cash and cash equivalents	\$338,627	\$4,999,709
Working capital <sup>(1)</sup>	1,715,740	6,210,765
Total Assets	19,105,058	84,022,378
Total current liabilities	920,507	2,291,735
Total non-current liabilities	850,000	20,615,334
Total shareholders' equity	17,334,551	11,115,309

<sup>(1)</sup> ADGE defines working capital as total current assets minus total current liabilities

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## Summary Unaudited Pro Forma Condensed Combined Financial Information

The following table shows summary unaudited pro forma condensed combined financial information, which we refer to as the summary pro forma financial information, about the financial position and results of operations of Tecogen, after giving effect to the Merger, which were prepared using the acquisition method of accounting with Tecogen designated as the accounting acquirer of ADGE. See “Unaudited Pro Forma Condensed Combined Financial Information” for more information.

The summary pro forma financial information is presented for informational purposes only and are not necessarily indicative of what the combined company’s financial position actually would have been had the Merger been completed on date indicated or what the combined company's results of operations actually would have been had the Merger been completed as of the beginning of the periods indicated. In addition, the pro forma financial statements do not purport to project the future financial position or operating results of the combined company. The summary pro forma financial information includes adjustments which are preliminary and may be revised. There can be no assurance that such revisions will not result in material changes to the information presented.

The summary pro forma financial information has been derived from and should be read in conjunction with the consolidated financial statements and the related notes of Tecogen, including the notes thereto, appearing elsewhere in this joint proxy statement/prospectus. See “Unaudited Pro Forma Condensed Combined Financial Information.”

As of or for  
the Year  
Ended  
December  
31, 2016  
(Unaudited)

## Pro Forma Condensed Combined Statement of Operation Data:

Net sales and gross revenues	\$29,645,932
Loss from continuing operations	(3,476,161 )
Net loss attributable to Tecogen Inc. shareholders	(2,735,587 )
Loss per share - basic and diluted	\$(0.11 )

## Pro Forma Condensed Combined Balance Sheet

## Data:

Total assets	\$52,804,252
Total liabilities	20,065,694
Total equity	\$32,738,558

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Unaudited Pro Forma Condensed Combined Financial Information

On November 1, 2016, Tecogen, Merger Sub and ADGE entered into the Merger Agreement, as amended. Subject to the terms and conditions of the Merger Agreement, Merger Sub will merge with and into ADGE with ADGE surviving as a wholly-owned subsidiary of Tecogen.

The following unaudited pro forma condensed combined financial statements, which we refer to as the pro forma financial statements, present the combination of the historical consolidated financial statements of Tecogen and ADGE, adjusted to give effect to the Merger.

The unaudited pro forma condensed combined balance sheet, which we refer to as the pro forma balance sheet, combines the audited historical consolidated balance sheets of Tecogen and ADGE as of December 31, 2016, giving effect to the Merger as if it had been consummated on December 31, 2016.

The unaudited pro forma condensed combined statement of operations, which we refer to as the pro forma statement of operations, for the fiscal year ended December 31, 2016 combines the audited historical consolidated statements of operations of Tecogen and ADGE for the fiscal year ended December 31, 2016, giving effect to the Merger as if it had been consummated on January 1, 2016.

The historical consolidated financial information of Tecogen and ADGE has been adjusted in the pro forma financial statements to give effect to pro forma events that are (1) directly attributable to the Merger, (2) factually supportable, and (3) with respect to the pro forma statements of income, expected to have a continuing impact on the combined results. The pro forma financial statements should be read in conjunction with the accompanying notes to the pro forma financial statements. In addition, the pro forma financial statements were based on and should be read in conjunction with the following historical consolidated financial statements and accompanying notes of Tecogen and ADGE for the applicable periods:

- Separate historical financial statements of Tecogen as of and for the year ended December 31, 2016 and the related notes included elsewhere herein; and

- Separate historical financial statements of ADGE as of and for the year ended December 31, 2016 and the related notes included elsewhere herein.

The pro forma financial statements have been presented for informational purposes only and are not necessarily indicative of what the combined company's financial position or results of operations actually would have been had the Merger been completed as of the dates indicated. In addition, the pro forma financial statements do not purport to project the future financial position or operating results of the combined company. Transactions between Tecogen and ADGE during the period presented in the pro forma financial statements have been eliminated as if Tecogen and ADGE were consolidated during the period.

The pro forma financial statements have been prepared using the acquisition method of accounting under existing U.S. GAAP, which requires that one of the two companies in a merger be designated as the acquirer for accounting purposes. Based on the evidence available, Tecogen has been designated as the acquirer in the Merger for accounting purposes. The acquisition accounting is dependent upon certain valuations and other studies that have yet to progress to a stage where there is sufficient information for a definitive measurement. Tecogen intends to complete the valuations and other studies upon completion of the Merger and will finalize the allocation of consideration as soon as practicable within the measurement period in accordance with ASC 805, but in no event later than one year following the effective date of the Merger. The assets and liabilities of ADGE have been measured based on various preliminary estimates using assumptions that Tecogen believes are reasonable based on information that is currently available. In addition, the proposed Merger has not yet received all necessary approvals from governmental authorities. Under the HSR Act and other relevant laws and regulations, there are significant limitations regarding the information Tecogen and ADGE can share with each other prior to the closing. Accordingly, the pro forma adjustments are preliminary and have been made solely for the purpose of providing pro forma financial statements prepared in accordance with the rules and regulations of the SEC. Differences between these preliminary estimates and the final acquisition accounting may occur and these differences could have a material impact on the accompanying pro forma financial statements and the combined company's future results of operations and financial position.

The unaudited pro forma condensed combined financial statements set forth below primarily give effect to the following:

• application of the acquisition method of accounting in connection with the Merger to reflect the aggregate purchase consideration;

• the issuance of Tecogen common shares to the shareholders of ADGE as a portion of the merger consideration;

• the assumption of equity awards for holders of ADGE's outstanding equity awards; and

• transaction costs in connection with the Merger.

Upon completion of the Merger, Tecogen will perform a detailed review of ADGE's accounting policies. As a result of that review, Tecogen may identify differences between the accounting policies of the two companies that, when conformed, could have a material impact on the consolidated financial statements of the combined company. At this time, Tecogen is not aware of any significant accounting policy differences.

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The pro forma financial statements do not reflect any cost or growth synergies that the combined company may achieve as a result of the Merger, or the costs to combine the operations of Tecogen and ADGE, or the costs necessary to achieve these cost or growth synergies.

Additional Events

Additionally, the historical consolidated financial information of Tecogen and ADGE has been adjusted in the pro forma financial statements to give effect to the extinguishment of indebtedness of ADGE through a series of exchange transactions which occurred during the year ended December 31, 2016. Those transactions resulted in the elimination of a significant majority of ADGE's outstanding convertible indebtedness in exchange for a significant majority of ADGE's interest in one of its previously consolidated subsidiaries. The operating results of that previously consolidated subsidiary are reflected as discontinued operations in ADGE's historical financial statements. The historical consolidated financial information of Tecogen and ADGE has been adjusted in the pro forma financial statements to give effect to the exchange transactions as if they had occurred on January 1, 2016. The effects of those adjustments are separately identified in the unaudited pro forma condensed combined financial statements set forth below.



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TECOGEN INC.  
Pro Forma Condensed Combined Balance Sheet  
As of December 31, 2016  
(Unaudited)

	Historical		Merger		Tecogen Pro
	Tecogen	ADGE	Related Pro	Notes	Forma
			Forma		Condensed
			Adjustments		Combined
Assets					
Current assets:					
Cash and cash equivalents	\$3,721,765	\$338,627	\$—		\$4,060,392
Accounts receivable, net	8,630,418	815,748	—		9,446,166
Unbilled revenue	2,269,645	18,797	—		2,288,442
Inventory, net	4,774,264	128,680	—		4,902,944
Due from related party	260,988	87,845	(167,726)	) 5(a)	181,107
Assets held for sale	—	946,883	—		946,883
Prepaid and other current assets	401,876	299,667	—		701,543
Total current assets	20,058,956	2,636,247	(167,726)	)	22,527,477
Property, plant and equipment, net	517,143	15,831,160	(859,438)	) 5(b)	15,488,865
Intangible assets, net	1,065,967	—	1,450,278	5(d)	2,516,245
Excess of cost over fair value of net assets acquired	40,870	—	9,534,719	3,4	9,575,589
Investment in Ultra Emissions Technologies Limited	2,000,000	—	—		2,000,000
Investment securities	—	637,651	—		637,651
Other assets	58,425	—	—		58,425
Total assets	\$23,741,361	\$19,105,058	\$9,957,833		\$52,804,252
Liabilities and stockholders' equity					
Current liabilities:					
Accounts payable	\$3,367,481	\$270,078	\$(39,822)	) 5(a)	\$3,597,737
Accrued expenses	1,378,258	522,525	370,000	5(c)	2,270,783
Due to related party	—	127,904	(127,904)	) 5(a)	—
Deferred revenue	876,765	—	—		876,765
Total current liabilities	5,622,504	920,507	202,274		6,745,285
Deferred revenue, net of current portion	459,275	—	—		459,275
Loan due to related party	—	850,000	—		850,000
Unfavorable contract liability	—	—	8,862,625	5(d)	8,862,625
Senior convertible promissory note, related party	3,148,509	—	—		3,148,509
Total liabilities	9,230,288	1,770,507	9,064,899		20,065,694
Stockholders' equity:					
Tecogen Inc shareholders' equity	14,511,073	—	17,670,021	5(e)	32,181,094
American DG Energy Inc. shareholders' equity	—	17,356,319	(17,356,319)	5(f)	—
Noncontrolling interest	—	(21,768)	) 579,232	5(g)	557,464
Total stockholders' equity	14,511,073	17,334,551	892,934		32,738,558
Total liabilities and stockholders' equity	\$23,741,361	\$19,105,058	\$9,957,833		\$52,804,252

The accompanying notes are an integral part of the unaudited pro forma condensed combined financial statements.



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TECOGEN INC.  
Pro Forma Condensed Combined Statement of Operations  
For the Year Ended December 31, 2016  
(Unaudited)

	Historical		Merger Related Pro Forma Adjustments	Notes	Pro Forma Results of Acquisition of American DG	Exchange Transactions Pro Forma Adjustments	Notes	Tecogen Pro Forma Condensed Combined
	Tecogen	ADGE						
Net sales and gross revenues	\$24,490,386	\$6,141,749	\$(986,203 )	6(a)	\$29,645,932	\$—		\$29,645,932
Cost and expenses applicable to sales and revenues	15,189,708	6,012,757	(1,893,247 )	6(b)	19,309,218	—		19,309,218
Gross profit	9,300,678	128,992	907,044		10,336,714	—		10,336,714
Selling, general and administrative expenses	9,631,065	2,568,693	(528,327 )	6(c)	11,671,431	—		11,671,431
Research and development	667,064	—	—		667,064	—		667,064
Loss from operations	(997,451 )	(2,439,701 )	1,435,371		(2,001,781 )	—		(2,001,781 )
Interest and other income	11,988	21,837	—		33,825	—		33,825
Interest and other expenses	(175,782 )	(1,062,582 )	—		(1,238,364 )	534,501	8	(703,863 )
Gain on extinguishment of debt	—	182,887	—		182,887	(182,887 )	8	—
Gain on deconsolidation of subsidiary	—	3,887,098	—		3,887,098	(3,887,098 )	8	—
Held for sale fair value adjustment	—	(743,770 )	—		(743,770 )	—		(743,770 )
Loss from continuing operations before income taxes	(1,161,245 )	(154,231 )	1,435,371		119,895	(3,535,484 )		(3,415,589 )
Provision for income taxes on continuing operations	—	(60,572 )	—		(60,572 )	—		(60,572 )
Loss from continuing	(1,161,245 )	(214,803 )	1,435,371		59,323	(3,535,484 )		(3,476,161 )

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operations						
Loss attributable to noncontrolling interest	64,962	675,612	—	740,574	—	740,574
Net income (loss) attributable to Tecogen Inc. shareholders	\$(1,096,283 )	\$460,809	\$1,435,371	\$799,897	\$(3,535,484)	\$(2,735,587 )
Per common share data (Note 7)						
Net income (loss) per share - basic	\$(0.06 )			\$0.03		\$(0.11 )
Net income (loss) per share - diluted	\$(0.06 )			\$0.03		\$(0.11 )
Weighted average shares outstanding - basic	19,295,922			23,958,859		23,958,859
Weighted average shares outstanding - diluted	19,295,922			23,958,859		23,958,859

The accompanying notes are an integral part of the unaudited pro forma condensed combined financial statements.

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Notes to Unaudited Pro Forma Condensed Combined Financial Statements

Note 1. Description of the Transaction

Tecogen Inc. and ADGE have agreed to the strategic combination of Tecogen and ADGE under the terms of the Merger Agreement that is described in this joint proxy statement/prospectus. On November 1, 2016, Tecogen Inc. (NASDAQ: TGEN), a Delaware corporation ("Tecogen"), entered into an Agreement and Plan of Merger, as amended by Amendment No. 1 (the "Merger Agreement") by and among, Tecogen and American DG Energy Inc. (NYSE MKT: ADGE), a Delaware corporation ("ADGE"), and Tecogen.ADGE Acquisition Corp., a Delaware corporation and a wholly-owned subsidiary of Tecogen ("Merger Sub").

Under the terms of the Merger Agreement, Merger Sub will merge with and into ADGE, with ADGE becoming a wholly-owned subsidiary of Tecogen, and the surviving corporation of the transaction (the "Merger"). The Merger is intended to qualify for federal income tax purposes as a tax-free reorganization under the provisions of Section 368(a) of the Internal Revenue Code of 1986. Subject to the terms and conditions of the Merger Agreement and shareholder approval, at the closing of the Merger, each outstanding share of ADGE common stock will be converted into the right to receive approximately 0.092 shares of common stock of Tecogen (the "Exchange Ratio"). Consummation of the Merger is subject to customary closing conditions, including, among other things, approval by the stockholders of Tecogen and ADGE of the respective proposals described herein. The Merger Agreement does not contain any termination, prohibitions on termination, no-shop clause, or reimbursements of Merger related expenses. As part of the Merger Agreement, ADGE and Tecogen have made customary mutual representations and warranties.

Also in connection with the Merger, Tecogen will, at the effective time of the Merger, assume the (a) outstanding stock options of ADGE and (b) outstanding warrants to purchase common stock of ADGE, each as adjusted pursuant to the Exchange Ratio and subject to the terms of the Merger Agreement. All outstanding stock options and restricted stock units of ADGE will continue to exist with the right however to be exercised for Tecogen common stock at the effective time of the Merger.

Note 2. Basis of Pro Forma Presentation

The accompanying pro forma financial statements were prepared in accordance with Article 11 of Regulation S-X using the acquisition method of accounting in accordance with ASC 805, and are based on the historical consolidated financial information of Tecogen and ADGE. The historical consolidated financial information has been adjusted in the accompanying pro forma financial statements to give effect to pro forma events that are (i) directly attributable to the merger, (ii) factually supportable, and (iii) with respect to the unaudited pro forma condensed combined statements of operation, expected to have a continuing impact on the consolidated results.

U.S. GAAP requires that one of the two companies in the merger be designated as the acquirer for accounting purposes based on the evidence available. In identifying Tecogen as the acquiring entity for accounting purposes, the companies took into account the voting rights of all equity instruments, the intended corporate governance structure of the combined company, and the size of each of the companies. In assessing the size of each of the companies, the companies evaluated various metrics, including, but not limited to: assets, revenue, operating income (loss), EBITDA, adjusted EBITDA, market capitalization and enterprise value. No single factor was the sole determinant in the overall conclusion that Tecogen is the acquirer for accounting purposes; rather, all factors were considered in arriving at the conclusion. Under ASC 805, Tecogen, as the accounting acquirer, will account for the transaction by using Tecogen historical information and accounting policies and adding the assets and liabilities of ADGE as of the closing date at their respective fair values.

The acquisition method of accounting uses the fair value concepts defined in ASC 820, Fair Value Measurements and Disclosures (ASC 820). Fair value is defined in ASC 820 as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value measurements can be highly subjective and it is possible the application of reasonable judgment could develop different assumptions resulting in a range of alternative estimates using the same facts and circumstances. The allocation of the estimated consideration is preliminary, pending finalization of various estimates and analyses. Since these pro forma financial statements have been prepared based on preliminary estimates of consideration and fair values attributable to the Merger, the actual amounts eventually recorded for the Merger, including goodwill, may

differ materially from the information presented.

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The initial allocation of the preliminary consideration in these pro forma financial statements is based upon an estimated preliminary consideration of approximately \$18.0 million. This amount is based on approximately 4.7 million shares of common stock that Tecogen would expect to issue to holders of ADGE common stock in connection with the Merger, based on the number of shares of ADGE common stock outstanding as of March 17, 2017 and the ADGE Exchange Ratio of 0.092 provided in the Merger Agreement. The preliminary consideration has been prepared based on the share price of Tecogen common stock on March 17, 2017 (the latest practicable date prior to the date of this document), equal to \$3.85 per share. The actual number of shares of Tecogen common stock issued to holders of ADGE common stock will be based upon the actual number of ADGE shares issued and outstanding immediately prior to the effective time of the Merger. Additional consideration, currently estimated at approximately \$0.1 million is expected for equity-based awards of ADGE as all awards will vest immediately upon the close of the Merger under a preexisting provision and Tecogen is obligated in the Merger Agreement to be assumed by Tecogen. The Merger Agreement does not contain any provision that would adjust the Exchange Ratio based on the fluctuations in the market value of either the Tecogen common stock or ADGE common stock. As a result, the implied value of the Merger consideration to the Tecogen stockholders and ADGE stockholders will fluctuate between now and the closing date of the Merger.

One-time transaction-related expenses anticipated to be incurred prior to, or concurrent with, the closing are not included in the pro forma statements of operations. However, the impact of such transaction expenses is reflected in the pro forma balance sheet as an increase to accumulated deficit and an increase to accrued expenses and other current liabilities.

The pro forma statement of operations for the fiscal year ended December 31, 2016 combines the audited historical consolidated statements of operations of Tecogen and ADGE for the fiscal year ended December 31, 2016, giving effect to the Merger as if it had been consummated on January 1, 2016.

The pro forma balance sheet combines the unaudited historical consolidated balance sheets of Tecogen and ADGE as of December 31, 2016, giving effect to the Merger as if it had been consummated on December 31, 2016.

### Note 3. Preliminary Consideration

The preliminary consideration is calculated as follows:

ADGE common shares outstanding as of March 17, 2017	50,684,095
ADGE Exchange Ratio	0.092
Tecogen common shares issued in exchange	4,662,937
Tecogen closing share price on March 17, 2017	3.85
Fair value of Tecogen common shares issued in exchange	17,952,306
Fair value of ADGE vested equity awards	67,715
Preliminary consideration	\$18,020,021

As there is no required service condition in the assumed equity-based awards, 100% of the fair value of the ADGE equity-based awards at the date of the Merger is considered attributable to pre-combination service and accordingly is included in the preliminary consideration.

The preliminary value of the consideration does not purport to represent the actual value of the total consideration that will be received by the ADGE stockholders when the Merger is completed. In accordance with U.S. GAAP, the fair value of the equity securities comprising the consideration will be measured on the closing date of the Merger at the then-current market price per share of Tecogen common stock. This requirement will likely result in a difference from the \$3.85 per share on March 17, 2017, assumed in the calculation, and that difference may be material. For example, an increase or decrease of 30% in the price of Tecogen's common stock on the closing date of the Merger from the price of Tecogen common stock assumed in these pro forma financial statements would change the value of the preliminary consideration by approximately \$5.4 million, which would be reflected as a corresponding increase or decrease to goodwill. Based on Tecogen's annual historical stock price volatility of approximately 32%, a 30% change in Tecogen common share price is reasonably possible during the period between the date of this joint proxy statement/prospectus and the expected closing date of the Merger.

The purchase price was determined primarily based on the projected future cash flows of ADGE. Projected cash flows include an expectation of further and continued improvement under ADGE's initiative ("initiative") to increase the productivity of its existing sites' operations thereby optimizing margins and increasing cash flows. This initiative began in 2015, and as described elsewhere herein is comprised of several phases which include various analysis and evaluations followed by certain dependent actions aimed at optimizing the long-term profitability of each site's operations. The positive results of ADGE's initiative have only recently begun to be realized and are evidenced in its most recent annual results. Tecogen's understanding of the operational and economic dynamics of these sites offers Tecogen the unique ability to evaluate the feasibility of the actions necessary and related profitability improvements. See "Information About ADGE -- Business of ADGE."



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Notwithstanding contractual terms, in respect to pricing the energy generated by the ADGE sites that cause the contracts related to the majority of the sites to be unfavorable to the market due to decreased electrical utility rates (see Note 5(d)), projected future cash flows for ADGE are supportive of both the purchase price and the expected level of resultant goodwill. This incorporates the expectation of further and continued improvement under ADGE's initiative and includes the elimination of certain duplicative personnel and administrative functions as well as other cost savings.

## Note 4. Fair Value Estimate of Assets to be Acquired and Liabilities to be Assumed

The table below represents an allocation of the preliminary consideration to ADGE's tangible and intangible assets acquired and liabilities assumed based on management's preliminary estimate of their respective fair values as of December 31, 2016. The final consideration and determination of the allocation of that consideration may be materially different than the preliminary estimates used in these pro forma financial statements. Any consideration in excess of the fair value of assets acquired less liabilities assumed is recognized as goodwill. Goodwill is primarily attributable to the going concern element of ADGE's business, including its assembled workforce and the long-term contractual nature of its business, as well as expected cost synergies from the merger related primarily to the elimination of administrative overhead and duplicative personnel.

	ADGE	Fair Value Adjustment	Fair Value	Goodwill Calculation	Notes
Preliminary consideration	\$—	\$—	\$ 18,020,021		3
Noncontrolling interest	(21,768 )	579,232	557,464		5(g)
Total	\$(21,768 )	\$579,232	\$ 18,577,485	\$ 18,577,485	
Net properties	15,831,160	(859,438 )	14,971,722		5(b)
Intangibles	—	1,450,278	1,450,278		5(d)
All other assets (excluding goodwill) (i)	3,273,898	—	3,273,898		
Total assets (excluding goodwill)	\$ 19,105,058	\$ 590,840	\$ 19,695,898		
Accrued expenses and other current liabilities	\$ 522,525	\$ 20,000	\$ 542,525		5(c)
Unfavorable contract liability	—	8,862,625	8,862,625		5(d)
All other liabilities (i)	1,247,982	—	1,247,982		
Total liabilities	\$ 1,770,507	\$ 8,882,625	\$ 10,653,132		
Fair value of net assets (excluding goodwill)				9,042,766	
Tecogen goodwill attributable to ADGE				\$ 9,534,719	3

(i) Management determined the carrying values approximated fair value.

## Note 5. Adjustments to Pro Forma Balance Sheet

Explanations of the adjustments to the pro forma balance sheet are as follows:

(a) Represents elimination of amounts due to and amounts due from and between Tecogen and ADGE as if they were intercompany balances normally subject to elimination in consolidation.

(b) Represents the preliminary fair value and resulting adjustment to net property. The preliminary amounts assigned to net property and estimated weighted average useful lives are as follows:

	Preliminary Fair Value	Estimated Weighted Average Useful Life (in years)
Energy systems	\$ 13,000,426	10.35
Computer equipment and software	17,268	1.15
Furniture and fixtures	21,035	1.25
Vehicles	28,000	2.75
Construction in process	1,904,993	NA
Total fair value of ADGE net property	\$ 14,971,722	
Less: ADGE's historical net property	(15,831,160 )	
Pro forma adjustment	\$(859,438 )	

The preliminary fair values of the net property were estimated by asset group using a replacement-cost approach which considered the depreciated cost of a replacement equivalent and factors for functional obsolescence. The downward adjustment to the carrying value of ADGE's net property considers recent innovation and economies inherent in Tecogen's current technologies and that equivalent capacity replacements are at a nominally lower cost than has historically been available. Newer component

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parts used in site installations have been configured in a manner which both simplifies site design and reduces installation costs. Estimated design and installation costs included in the cost of a replacement equivalent are assumed to be marginally lower than has been historically experienced due to the experience and expertise gained from past design and installation efforts. These factors, combined, result in an estimated depreciated cost of a replacement equivalent or fair value nominally lower than the carrying value at December 31, 2016.

The preliminary estimate of the fair value of net property is lower than the carrying value of net property at December 31, 2016. When ADGE identifies events or changes in circumstances which might represent an indicator of impairment, a test for impairment is performed using an undiscounted cash flow analysis to determine the recoverability of the carrying value of the property. This undiscounted cash flow analysis may result in a different amount than a fair value analysis.

(c) Represents an estimate of the fair value of the liability related to the non-contingent aspect of the obligation under ADGE's guarantee of certain outstanding obligations and guarantees of performance under certain operating agreements of one of its former subsidiaries of \$20,000 and an estimate of merger related costs of \$350,000 to be incurred subsequent to December 31, 2016. The obligations guaranteed include: 1.) certain long term unsecured convertible indebtedness, with a remaining principal amount outstanding subject to the guarantee at December 31, 2016 of \$300,000 with a maturity date of June 17, 2017, 2.) a payment performance guarantee in respect of collateralized equipment financing loans, with a remaining principal amount outstanding subject to the guarantee at December 31, 2016 of approximately \$322,000 due ratably in equal installments through September 2021, and 3.) certain guarantees of performance in respect of certain customer contracts, which amounts are not quantifiable until performance under the guarantees with respect to a particular contract becomes probable of occurrence.

The aforementioned guarantees were issued by ADGE in order to secure the respective borrowings and contracts during periods when the former subsidiary, EuroSite Power, was considered to be a subsidiary of ADGE. The determination of the fair value of the liability related to these guarantees at December 31, 2016 considered the former subsidiary's current financial position, that no known situations were evident which may suggest performance under any of the guarantees was probable of occurrence, and that the issuances and existence of the guarantees represent non-contingent obligations to perform under the guarantees over the terms of the respective guarantees. The value ascribed to the liability related to the guarantees of the outstanding debt obligations of approximately \$10,000 was calculated as a 1.5% premium on the outstanding balances of the debt with an equal amount of \$10,000 subjectively ascribed to the obligations under the guarantees of performance in respect of customer contracts. The latter amount is subject to revision pending further analysis however, based on current understanding, the revised value ascribed should not differ materially.

The estimate of the future merger related costs of \$350,000 is comprised of legal fees for both Tecogen's and ADGE's outside counsel, financial advisor fees for both Tecogen and ADGE as well as legal fees associated with each of the advisor's outside counsel, accounting, valuation and consulting fees associated with the merger as well as the cost related to professional opinions required and various printing and mailing costs.

(d) Represents the estimated fair value of ADGE's customer contracts. These contracts are long-term and provide customers with an alternative source of electrical power in addition to that provided by the local power utility, at rates that are lower than local utilities. This alternative electrical power is typically produced by ADGE owned, operated and maintained natural gas powered systems installed at the customers' sites, with ADGE bearing all costs of operation and maintenance. In addition to the alternative source of electrical power provided by ADGE's systems, customers can opt to add and take advantage of the heat generated in the electrical production process in the form of hot water and/or space heating. Pricing to the customer for electrical power produced and supplied by ADGE under the contracts is under a fixed formula which requires the customer to pay for the kilowatts of electrical power provided at a fixed percentage discount to the local utility's electric rate for that period. As a result, as utility rates for electrical power change, the amount ADGE is able to charge the customer under the contract also changes. There has been a sharp decrease in electric rates over the past several years, subsequent to the vast majority of customer contract dates, causing the billable value of the electrical power generated by ADGE's systems to decrease, resulting in a deterioration of expected profitability. Current utility electric rates remain significantly below the level anticipated at

the time the fixed percentage discounts contained in the vast majority of ADGE's customer contracts were contracted for, thus these contract terms, although they produce cash flow, are considered to be off market in the vast majority of ADGE's customer contracts. Additionally, the demand and volume of kilowatts produced and billed for vary by contract and by period and in certain instances have been significantly below what was originally expected such that had it been known at the time the contract(s) were negotiated, it would have influenced ADGE's determination of the level of the fixed percentage discount in those contracts.

The determination of fair value requires development of an estimate of the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. Contracts are considered to be assets or liabilities by virtue of the rights and obligations inherent in the contract terms. Typically, contracts with terms considered to be at market are considered to have no fair value as in order to be entitled to the rights under the contract performance must occur for which a market rate of return is earned due to the at market terms. The fair value of a contract is primarily a measurement of its off market terms. The obligation to perform under a contract with terms that are unfavorable to market results in a liability to the extent its terms are off market. The resulting liability is an estimate of the

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price that would need to be paid to a willing market participant to assume the obligations under the contract in order for them to receive a market rate of return for their remaining performance obligation under the contract. The exact opposite holds true in instances where the terms of a contract are considered to be favorable to market. In that case an asset would exist as an estimate of the price that would be received from a willing market participant in order to be entitled to the rights under the contract.

In determining the estimate of fair value of ADGE's customer contracts, the measure of at market, and thus the baseline to measure the amount related to any of off market terms or conditions with respect to the contracts, was considered best determined, given the nature of the services provided under the contracts, by utilizing a benchmark level of margin contribution, in this case 35% on revenue. It is believed that a market participant would utilize a similar margin in arriving at a buy price for the contract(s). Specifically, in determining the estimate of fair value of ADGE's customer contracts, the actual margin contribution percentages by contract for the twelve month period ended September 30, 2016 were individually compared to the benchmark 35% and any excess or shortfall quantified by contract. It is believed that utilization of a recent twelve month period appropriately considers variations in results due to seasonality while still reflecting an acceptable approximation of the impact of current electrical rates.

The annual excesses or shortfalls in margin contribution were discounted at a rate of 5.6% by year, by contract for the period October 1, 2016 through the end of the term of the contract in order to determine the present value of such excesses and shortfalls with such discounted amounts summed by contract and then summed in the aggregate with favorable amounts classified as intangible assets and unfavorable amounts classified as unfavorable contract liabilities.

The benchmark contribution margin of 35% was determined as the amount required to provide a return on revenue, based on current market conditions and current contract terms, consistent with the average return on revenue of US investor owned public utilities. Electrical utilities are ADGE's primary competitors and potential market participants. It is believed that current market participants would require a return substantially consistent with that described in the foregoing for the remaining performance obligations under the contracts.

The discount rate of 5.6% recognizes the time value of money by including a risk free rate of 2.1% based on an average of 5 and 10 year US treasury bond yields, by including a rate of 2.5% for future inflation based on recent CPI factors, and an additional factor of 1.0% related to the risk of default by the customer under the contracts. It is believed that this rate appropriately considers those factors and values that a market participant would use in the process of discounting the annual differential between projected profitability and a market level of profitability, over the remaining term of a contract, in order to arrive at an amount to be paid to acquire a contract with terms favorable to market, or to be received to assume a contract with terms unfavorable to market.

The pro forma adjustment includes amounts related to contracts with terms favorable to the current market as well as contracts with terms unfavorable to the current market as follows:

Contracts with terms unfavorable to market - Unfavorable contract liability	\$8,862,625
Contracts with terms favorable to market - Intangible asset	(1,450,278 )
Fair value of contracts	\$7,412,347

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Amortization of the aggregate fair value assigned to customer contracts is calculated using the straight line method by year and is estimated to be as follows:

Year 1	\$874,025
Year 2	844,933
Year 3	776,630
Year 4	731,889
Year 5	729,661
Year 6	712,572
Year 7	677,485
Year 8	640,297
Year 9	511,059
Year 10	320,207
Year 11	206,400
Year 12	151,376
Year 13	104,120
Year 14	83,826
Year 15	47,867
	\$7,412,347

(e) Represents the preliminary consideration above in Note 3, less expected merger costs to be incurred and expensed subsequent to December 31, 2016 as follows:

Preliminary consideration	\$18,020,021
Less: Estimated merger costs	(350,000 )
Pro forma adjustment	\$17,670,021

(f) Represents elimination of ADGE's historical equity.

(g) Represents an estimate of the adjustment necessary to the historical noncontrolling interest to reflect the 49% common equity ownership interest in American DG New York, LLC, a partially owned subsidiary of ADGE, at fair value. The total fair value of American DG New York, LLC was estimated for purposes of these pro forma financial statements using a discounted cash flow analysis of the combined sites owned by American DG New York, LLC. That analysis utilized the expected cash flows of the sites over the expected terms of the contracts related to the sites, including expected extensions, discounted at a rate of 6% per annum, which is an estimate of the rate a market participant would use in valuing this entity on a stand-alone basis.

No deferred tax assets have been included as an adjustment in the pro forma balance sheet related to the foregoing fair value adjustments as it not considered more likely than not that any such deferred tax assets would be realizable.

#### Note 6. Adjustments to Pro Forma Income Statements

Explanations of the adjustments to the pro forma income statements are as follows:

(a) Represents elimination of sales and service revenue by Tecogen to ADGE as if they were intercompany transactions normally subject to elimination in consolidation.

(b) Represents amortization of the fair value of customer contracts in Note 5(d), elimination of purchase and operating cost from Tecogen recognized by ADGE (see Note 6(a)), and an adjustment to depreciation expense related to the fair value adjustment to net property (see Note 5(b)) as follows:

	Year Ended December 31, 2016
Amortization of the fair value of customer contracts	\$(874,025 )
Elimination of ADGE purchases and service costs from Tecogen	(986,203 )
Adjustment for depreciation for fair value adjustment to net property	(33,019 )
Pro forma adjustment	\$(1,893,247)



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The pro forma adjustment reducing historical depreciation expense was calculated by asset category as reflected in Note 5(b) above utilizing the estimated weighted average useful life applied to the pro forma adjustment to historical fixed asset costs by asset category.

(c) Represents the elimination of one-time transaction costs incurred and expensed during the year ended December 31, 2016 directly attributable to the Merger as such costs are not expected to have a continuing impact on combined results.

#### Note 7. Tecogen Earnings Per Share Information

The weighted average shares used in determining earnings or loss per share in the accompanying pro forma statement of operations are shown in the following table.

	Tecogen Historical	Pro Forma Results of Acquisition of ADGE	Tecogen Pro Forma Condensed Combined
Year ended ended December 31, 2016:			
Historical Tecogen weighted average shares outstanding	19,295,922	19,295,922	19,295,922
Tecogen shares issuable to the shareholders of ADGE in connection with the merger	—	4,662,937	4,662,937
Denominator for basic earnings (loss) per share	19,295,922	23,958,859	23,958,859
Common stock equivalents related to stock options	—	—	—
Common stock equivalents related to convertible debt	—	—	—
Denominator for diluted earnings (loss) per share	19,295,922	23,958,859	23,958,859

Common stock equivalents are anti-dilutive in a period of loss.

#### Note 8. Exchange Transactions

These adjustments to the pro forma statement of operations for the year ended December 31, 2016 are not related to or directly attributable to the merger of Tecogen and ADGE. Rather they relate to certain events and transactions which occurred with ADGE during the year ended December 31, 2016. Through a series of exchange transactions, ADGE extinguished a significant majority of its convertible indebtedness in exchange for a significant majority of ADGE's interest in one of its previously consolidated subsidiaries. The operating results of that previously consolidated subsidiary are reflected as discontinued operations in ADGE's historical financial statements. The historical financial statements of ADGE also include a gain related to the extinguishment of that convertible indebtedness as a result of the exchange transactions as well as the historical interest expense related to the indebtedness which was extinguished as a result of the exchange transactions. The pro forma statement of operations includes only amounts relating to the continuing operations of ADGE as required by Article 11 of regulation S-X. Additionally, during the period between the exchange transactions, ADGE ceased to be the primary beneficiary of the same consolidated subsidiary causing it to deconsolidate that subsidiary resulting in a gain on deconsolidation. These adjustments serve to eliminate the gains recognized in ADGE's historical financial statements that were a result of these transactions and events and the interest cost associated with the convertible indebtedness which was extinguished in order to reflect the continuing impact of that extinguishment as if the exchange transactions had occurred on January 1, 2016.

The amount of historical interest expense eliminated in the pro forma statement of operations for the year ended December 31, 2016 was calculated in a manner so as to leave only the remaining debts' proportionate share of interest cost in the pro forma total of interest expense. Specifically, actual interest expense related to the entire issue of debt was apportioned between that which was extinguished and that which remained, by month, based on the respective principal amounts with the amount allocated to the debt which was extinguished being eliminated from the historical total.



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## Equivalent and Comparative Per Share Information

The following table sets forth, for the fiscal year ended December 31, 2016, selected per share information for shares of Tecogen common stock on a historical and pro forma combined basis and for shares of ADGE common stock on a historical and pro forma equivalent basis, each on an unaudited basis for the twelve months ended December 31, 2016 and after giving effect to the Merger. Tecogen will account for the Merger as a business combination with Tecogen treated as the acquirer of ADGE for accounting purposes. The data is derived from and should be read in conjunction with Tecogen and ADGE audited consolidated financial statements and related notes of Tecogen and ADGE and related notes, and the unaudited pro forma condensed combined financial information and related notes, which are included elsewhere in this joint proxy statement/prospectus.

The pro forma consolidated ADGE equivalent information shows the effect of the Merger from the perspective of an owner of shares of ADGE common stock and was calculated by multiplying the Tecogen pro forma combined per share amounts by the Exchange Ratio.

The unaudited pro forma combined per share data is presented for illustrative purposes only and is not necessarily indicative of the operating results or financial position that would have occurred if the transactions had been completed at the beginning of the earliest period presented, nor is it necessarily indicative of future operating results or financial position. The pro forma adjustments are estimates based upon information and assumptions available at the time of the filing of this joint proxy statement/prospectus.

The pro forma income from continuing operations per share includes the combined income (loss) from continuing operations of Tecogen and ADGE on a pro forma basis as if the Merger was completed on January 1, 2016.

	Tecogen		ADGE	
For the year ended December 31, 2016	Historical	Pro Forma Combined	Historical	Pro Forma Equivalent
Income (loss) from continuing operations attributable to common shareholders per share - basic	\$(0.06)	\$ (0.11 )	\$0.01	\$ (0.01 )
Income (loss) from continuing operations attributable to common shareholders per share - diluted	(0.06 )	(0.11 )	\$0.01	(0.01 )
Dividends per common share	—	NA	—	NA
Book value per common share	\$0.73	\$ 1.33	\$0.34	\$ 0.12

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## Comparative Tecogen and ADGE Market Price and Distribution Information

## Tecogen and ADGE Recent Closing Prices

The following table sets forth the closing price per share of Tecogen common stock and the closing price per share of ADGE common stock on November 1, 2016, (the last business day preceding the public announcement of the execution and delivery of the Merger Agreement) and on \* (the latest practicable trading date prior to the mailing this joint proxy statement/prospectus). The table also presents the equivalent market value per share of ADGE common stock based on the Exchange Ratio of 0.092 shares of Tecogen common stock for each share of ADGE common stock. You are urged to obtain current market quotations for shares of Tecogen and ADGE common stock before making a decision with respect to the Merger. Tecogen common stock is listed on the Nasdaq Capital Market under the symbol "TGEN," and ADGE common stock is listed on the NYSE MKT under the symbol "ADGE."

Date	Tecogen Common Stock	ADGE Common Stock	
	Historical	Historical	Equivalent Market Value Per Share
November 1, 2016	\$4.03	\$0.30	\$0.37
*	*	*	*

Because the market price of shares of Tecogen common stock is subject to fluctuation between the date of this joint proxy statement/prospectus and the Merger effective time, the market value of the shares of Tecogen common stock that ADGE stockholders may receive in the Merger may increase or decrease prior to and following the Merger. ADGE stockholders are urged to obtain current market quotations for Tecogen common stock.

## Tecogen's Market Price Data

The shares of Tecogen common stock are listed on the Nasdaq Capital Market under the symbol "TGEN." This table sets forth, for the periods indicated, the high and low closing per share sales prices of Tecogen common stock, as reported on the Nasdaq Capital Market composite transaction reports. No distributions were made by Tecogen during the periods presented.

	Price Per Tecogen Common Share	
	High	Low
2015		
1st Quarter	\$5.65	\$4.55
2nd Quarter	5.19	3.90
3rd Quarter	4.40	2.80
4th Quarter	4.10	2.46
2016		
1st Quarter	\$6.50	\$2.80
2nd Quarter	5.75	3.50
3rd Quarter	5.20	4.00
4th Quarter	4.80	3.75

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## ADGE's Market Price Data

The shares of ADGE common stock are listed on the NYSE MKT under the symbol "ADGE." This table sets forth, for the periods indicated, the high and low closing per share sales prices of ADGE common stock, as reported on the NYSE MKT composite transaction reports. No distributions were made by ADGE during the periods presented.

	Price Per ADGE Common Share	
	High	Low
2015		
1st Quarter	\$0.65	\$0.42
2nd Quarter	0.88	0.28
3rd Quarter	0.43	0.28
4th Quarter	0.58	0.32
2016		
1st Quarter	\$0.42	\$0.30
2nd Quarter	0.41	0.23
3rd Quarter	0.33	0.22
4th Quarter	0.34	0.23

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**RISK FACTORS**

In addition to the other information included in this joint proxy statement/prospectus, including the matters addressed under “Cautionary Statement Concerning Forward-Looking Statements,” you should carefully consider the following risks before deciding how to vote your shares of Tecogen or ADGE common stock, as applicable.

In addition, you should read and consider the risks associated with each of Tecogen and ADGE, including regarding their respective businesses, operations, and related to each company, described herein or below, because these risks also may affect Tecogen following the Merger.

You should also read and consider the other information in this joint proxy statement/prospectus, including the information under “Management’s Discussion and Analysis of Financial Condition and Results of Operations” for each of Tecogen and ADGE contained herein for further risks.

**RISKS RELATING TO THE PROPOSED MERGER**

Tecogen and Tecogen.ADGE Acquisition Corp. (“Merger Sub”), a wholly owned subsidiary of Tecogen, entered into a Merger Agreement with ADGE, dated November 1, 2016, (the “Merger Agreement”). Pursuant to the Merger Agreement, Merger Sub is proposed to be merged with and into ADGE and ADGE will become the surviving corporation in the merger (the “Merger”). Tecogen’s and ADGE’s obligations to effect the Merger are subject to certain conditions, including that the issuance of the shares of common stock of Tecogen in the Merger be approved by a vote of Tecogen’s stockholders and the adoption of the Merger Agreement and approval of the Merger by ADGE’s stockholders at separate special meetings of such stockholders. There is no assurance that such conditions will be satisfied or waived or that Tecogen’s or ADGE’s stockholders will approve or adopt such proposals.

Tecogen’s obligations and the obligations of ADGE to complete the transaction are subject to satisfaction or waiver of a number of conditions. Tecogen’s and ADGE’s obligations to complete the transactions are each subject to, among other conditions: (i) approval of the issuance of the shares of common stock of Tecogen in the Merger as contemplated by the Merger Agreement by Tecogen’s stockholders; (ii) adoption of the Merger Agreement and approval of the Merger by ADGE’s stockholders, (iii) approval of the listing on the Nasdaq Capital Market of the shares of Tecogen common stock to be issued in the Merger, upon official notice of issuance, (iv) the effectiveness of Tecogen’s Form S-4 registration statement under the Securities Act, (v) the absence of any applicable law or order that prohibits completion of the transaction, (vi) the accuracy of the representations and warranties made in the Merger Agreement by Tecogen and ADGE, subject to certain materiality qualifications, and (vii) the performance in all material respects of the material obligations required to be performed by Tecogen and ADGE at or prior to the Merger effective time.

The satisfaction of the required conditions could delay the completion of the transaction for a significant period of time or prevent it from occurring. Any delay in completing the transaction could cause Tecogen or ADGE not to realize some or all of the benefits that Tecogen or ADGE expect to achieve if the transaction is successfully completed within its expected time frame. Further, there can be no assurance that the conditions to the closing of the transaction will be satisfied or waived or that the transaction will be completed.

The Exchange Ratio is fixed and will not be adjusted in the event of any change in either Tecogen’s or ADGE’s stock price.

Upon the closing of the Merger, each share of ADGE common stock will be converted into the right to receive 0.092 of a share of Tecogen common stock, with cash paid in lieu of fractional shares. This Exchange Ratio was fixed in the Merger Agreement and will not be adjusted for changes in the market price of either Tecogen common stock or ADGE common stock. Changes in the price of Tecogen common stock prior to the Merger will affect the market value of the Merger consideration that ADGE stockholders will receive on the date of the Merger. Stock price changes may result from a variety of factors (many of which are beyond either company’s control), including the following factors:

- market reaction to the announcement of the Merger and Tecogen’s prospects following the Merger effective time;
- changes in the business, operations, assets, liabilities, financial position and prospects of either company or in market assessments thereof;
- changes in the operating performance of Tecogen, ADGE or similar companies;

- changes in market valuations of similar companies;
- market assessments of the likelihood that the Merger will be completed;
- interest rates, general market and economic conditions and other factors generally affecting the price of Tecogen's and ADGE's common stock;
- federal, state and local legislation, governmental regulation and legal developments in the businesses in which ADGE and Tecogen operate;
- dissident stockholder activity;

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changes that affect Tecogen's and ADGE's industry, the U.S. or global economy, or capital, financial or securities markets generally; and

other factors beyond the control of either Tecogen or ADGE, including those described or referred to elsewhere in these "Risk Factors."

The price of Tecogen common stock at the closing of the Merger may vary from its price on the date the Merger Agreement was executed, on the date of this joint proxy statement/prospectus and on the date of the Tecogen and the ADGE special meetings. As a result, the market value of the Merger consideration represented by the Exchange Ratio will also vary. For example, based on the range of closing prices of Tecogen common stock during the period from November 1, 2016, the last trading day before public announcement of the Merger, and March 17, 2017, the latest practicable date before the date of this joint proxy statement/prospectus, the Exchange Ratio represented approximately \$0.35 in Tecogen common stock for each share of ADGE common stock.

Because the Merger will be completed after the date of the special meetings, at the time of your special meeting, you will not know the exact market value of Tecogen common stock that ADGE stockholders will receive upon completion of the Merger. As a result, you should consider the following two risks:

If the market price of Tecogen common stock declines between the date the Merger Agreement was signed or the date of the ADGE special meeting and the Merger effective time, ADGE stockholders will receive shares of Tecogen common stock that have a market value upon completion of the Merger that is less than the market value of such shares calculated pursuant to the Exchange Ratio on the date the Merger Agreement was signed or on the date of the ADGE special meeting, respectively.

If the market price of Tecogen common stock increases between the date the Merger Agreement was signed or the date of the Tecogen special meeting and the Merger effective time, ADGE stockholders will receive shares of Tecogen common stock that have a market value upon completion of the Merger that is greater than the market value of such shares calculated pursuant to the Exchange Ratio when the Merger Agreement was signed or the date of the Tecogen special meeting, respectively.

Under the Merger Agreement, and as a condition to the closing of the transaction, the Form S-4 registration statement, as amended, filed by Tecogen with the SEC relating to the registration of the shares of Tecogen to be issued in the Merger, of which this joint proxy statement/prospectus forms a part, is required to be declared effective by the SEC. If it is not declared effective by the SEC for any reason, or the SEC imposes a "stop order" or takes other administrative action with respect thereto, completion of the transaction may be jeopardized or the anticipated benefits of the transaction could be reduced.

On December 21, 2016, Tecogen filed a registration statement on Form S-4 under the Securities Act with the SEC to register the shares of Tecogen to be issued as consideration in the Merger and to include a joint proxy statement/prospectus pursuant to which Tecogen and ADGE are seeking required approvals of their respective stockholders of certain matters related to the Merger. The effectiveness of the Form S-4, as amended, is a condition to the ability of Tecogen and ADGE to solicit their respective stockholders to obtain required stockholder approvals and their ability to consummate the transaction. It is not a waivable condition. There can be no assurance that Tecogen's Form S-4 registration statement, as amended, will be declared effective by the SEC, that Tecogen and ADGE will successfully close the transaction, or that they will realize the benefits of the proposed transaction.

The Merger Agreement contains a "go shop" provision permitting the board of ADGE to solicit competing offers for ADGE. Also, the agreement does not provide for a "breakup" fee in the event of a termination of the agreement by ADGE. Further, the Merger Agreement contains a "fiduciary out" provision permitting ADGE's board to terminate the Merger Agreement; however, the Merger Agreement contains a provision that, upon such a termination, requires ADGE's board of directors to negotiate in good faith with Tecogen amendments to the Merger Agreement that would obviate the need for such a termination. This provision could discourage a potential competing acquiror of ADGE.

The Merger Agreement contains a "go shop" provision which permits ADGE to initiate or solicit a competing acquisition proposal prior to approval of the issuance of the shares of Tecogen common stock to be issued in the Merger by Tecogen's stockholders and the adoption of the Merger Agreement and approval of the Merger by ADGE's stockholders. Also, the Merger Agreement does not provide for the payment of a break up or termination fee in the

event ADGE terminates the Merger Agreement.

The Merger Agreement contains a “fiduciary out” provision the effect of which is that, before the closing of the Merger, ADGE’s board of directors may terminate the Merger Agreement if it (or a committee of the board) determines there is a reasonable probability the failure to take such action would cause ADGE’s board to violate its fiduciary duties to ADGE’s stockholders. However, before ADGE’s board (or its committee) withdraws, qualifies or modifies its recommendation of the transaction with Tecogen or terminates the Merger Agreement to enter into a third-party acquisition proposal, Tecogen has an opportunity to offer to modify the terms of the transaction.

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This provision could discourage a potential third-party acquiror that might have an interest in acquiring all or a significant portion of ADGE from considering or proposing that acquisition, even if it were prepared to pay consideration with a higher per share cash or market value than the market value proposed to be received or realized in the transaction, or might otherwise result in a potential third-party acquiror proposing to pay a lower price to ADGE stockholders than it might otherwise have proposed to pay.

Accordingly, if the Merger Agreement is terminated and ADGE decides to seek another business combination, it may not be able to negotiate or consummate a transaction with another party on terms comparable to, or better than, the terms of the Merger Agreement.

The unaudited pro forma condensed combined financial information in this joint proxy statement/prospectus is presented for illustrative purposes only and the operating results and financial condition of Tecogen following completion of the transactions contemplated by the Merger Agreement may differ and such differences may be material.

The unaudited pro forma condensed combined financial information in this joint proxy statement/prospectus is presented for illustrative purposes only and is not necessarily indicative of what Tecogen's actual financial position or results of operations would have been had the transactions contemplated by the Merger Agreement been completed on the dates indicated. Further, Tecogen's actual results and financial position following the completion of the Merger may differ materially and adversely from the unaudited pro forma condensed combined financial data that is included in this joint proxy statement/prospectus. The unaudited pro forma condensed combined financial information reflects adjustments based upon preliminary estimates of the fair value of assets to be acquired and liabilities to be assumed. The final acquisition accounting will be based upon the actual purchase price and the fair value of the assets and liabilities of Tecogen as of the Merger effective time. In addition, subsequent to the Merger closing date, there will be further refinements of the acquisition accounting as additional information becomes available. Accordingly, the final acquisition accounting may differ materially from the pro forma condensed combined financial information reflected in this document. See "Summary - Unaudited Pro Forma Condensed Combined Financial Information."

Failure to complete the transaction could negatively impact Tecogen's and ADGE's stock prices and Tecogen's and ADGE's future business and financial results.

If the transaction is not completed for any reason, including as a result of ADGE's stockholders failing to adopt the Merger Agreement or Tecogen's stockholders failing to approve the issuance of the Tecogen common stock in the Merger, Tecogen's and ADGE's ongoing businesses may be adversely affected and, without realizing any of the benefits of having completed the transaction, Tecogen and ADGE would be subject to a number of risks, including the following:

• Tecogen and ADGE may experience negative reactions from the financial markets, including negative impacts on the stock prices and debt instruments of ADGE or Tecogen;

• Tecogen and ADGE may experience negative reactions from their respective customers and employees;

• Tecogen and ADGE will be required to pay certain costs relating to the transaction, whether or not the transaction is completed;

• the Merger Agreement places certain restrictions on the conduct of Tecogen's and ADGE's businesses prior to completion of the transaction. Such restrictions, the waiver of which is subject to the consent of the other party (not to be unreasonably withheld, conditioned or delayed), may prevent Tecogen or ADGE from making certain acquisitions or taking other specified actions during the pendency of the transaction;

• matters relating to the transaction (including integration planning) will require substantial commitments of time and resources by Tecogen's and ADGE's management, which would otherwise have been devoted to day-to-day operations and other opportunities that may have been beneficial to either Tecogen or ADGE as an independent company.

Further, Tecogen or ADGE could be subject to litigation related to any failure to complete the transaction or related to any proceeding commenced against Tecogen or ADGE to enforce performance of their respective obligations under the Merger Agreement. If the transaction is not completed, these risks may materialize and may adversely affect Tecogen's and ADGE's businesses, financial condition, financial results and stock prices.



The shares of Tecogen common stock to be received by ADGE's stockholders as a result of the transaction will have rights different from the shares of ADGE's common stock.

Upon completion of the transaction, ADGE's stockholders will no longer be ADGE's stockholders, but will instead become Tecogen stockholders, and their rights as stockholders will be governed by the terms of the Tecogen's charter and the bylaws. With immaterial exceptions, the provisions of the ADGE and Tecogen charters and bylaws are substantially identical. See " Comparison of Rights of Tecogen's Stockholders and ADGE Stockholders."

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Tecogen's directors and executive officers have interests in the transaction that may be different from the interests of Tecogen's stockholders.

Tecogen's stockholders should be aware that Tecogen's directors and executive officers have certain interests in the transaction that may be different from or in addition to the interests of Tecogen's stockholders generally. These interests include the fact that certain of Tecogen's directors and executive officers also serve as directors and executive officers of ADGE, the treatment in the transaction of ADGE's stock options and restricted stock awards held by such directors and executive officers, and certain other rights held by such directors and executive officers, and the continued indemnification of such directors and executive officers by Tecogen. Tecogen's board was aware of these interests and considered them, among other things, in evaluating and approving the Merger Agreement and the transaction and in recommending that ADGE's stockholders adopt the Merger Agreement and approve the Merger. See "Summary-Interests of Tecogen's Directors and Executive Officers in the Merger" and "The Merger--Interests of Tecogen's Directors and Executive Officers in the Merger."

ADGE's directors and executive officers have interests in the transaction that may be different from the interests of ADGE's stockholders.

ADGE's stockholders should be aware that ADGE's directors and executive officers have certain interests in the transaction that may be different from or in addition to the interests of ADGE's stockholders generally. These interests include the treatment in the transaction of ADGE's stock options and restricted stock awards, and certain other rights held by ADGE's directors and executive officers, and the continued indemnification of ADGE's directors and executive officers by Tecogen. ADGE's board was aware of these interests and considered them, among other things, in evaluating and approving the Merger Agreement and the transaction and in recommending that ADGE's stockholders adopt the Merger Agreement and approve the Merger. See "Summary - Interests of ADGE's Directors and Executive Officers in the Merger" and "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger."

The completion of the Merger is not conditioned on the receipt of an opinion of counsel to the effect that the transaction will qualify for the intended tax treatment, and neither ADGE nor Tecogen intends to request a ruling from the Internal Revenue Service regarding the United States federal income tax consequences of the transaction.

It is intended that, for United States federal income tax purposes, the Merger will qualify as a "reorganization" within the meaning of Section 368(a) of the Internal Revenue Code (the "intended tax treatment"). However, the completion of the transaction is not conditioned on the transaction qualifying for the intended tax treatment or on the receipt of an opinion of counsel to that effect, and whether or not the transaction will qualify for the intended tax treatment depends on facts that will not be known until the transaction is completed. No assurance can be given that the transaction will qualify for the intended tax treatment. In addition, neither Tecogen nor ADGE intends to request a ruling from the Internal Revenue Service regarding the United States federal income tax consequences of the transaction.

Accordingly, even if Tecogen and ADGE conclude that the transaction qualifies for the intended tax treatment, no assurance can be given that the Internal Revenue Service will not challenge that conclusion or that a court would not sustain such a challenge.

It will not be known at the time of the special meeting at which ADGE's stockholders will be asked to vote on the adoption of the Merger Agreement and approve the Merger whether the requirements for the transaction to qualify for the intended tax treatment will be met.

A stockholder of ADGE has filed a class action lawsuit in state court seeking, among other things, to obtain a temporary and/or permanent injunction related to the proposed Merger. If the court grants such temporary or permanent injunctive relief, or other relief to the plaintiff, Tecogen and ADGE may not be able to close the proposed transaction.

On or about February 6, 2017, ADGE, John Hatsopoulos, George N. Hatsopoulos, Charles T. Maxwell, Deanna M. Petersen, Christine Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen, and Tecogen.ADGE Acquisition Corp., were served with a Verified Complaint by William C. May, individually and on behalf of the other stockholders of ADGE as a class. The complaint alleges the proposed Merger is subject to certain conflicts of interest; that ADGE's board failed to protect ADGE's stockholders by failing to conduct an auction or market check; that the Exchange Ratio undervalues ADGE's outstanding shares; that ADGE's directors breached their fiduciary duties in

approving the Merger proposal; that the registration statement on Form S-4 contained material omissions; that Tecogen aided and abetted breaches of fiduciary duties by the board of ADGE; and other claims. The plaintiff is seeking preliminary and permanent injunctions related to the Merger, rescissionary damages, compensatory damages, accounting, and other relief. If the court grants such relief or other relief to the plaintiff in such case, even if temporary, and Tecogen and ADGE may not be able to close the proposed transaction and realize the benefits of the proposed transaction. See “The Merger - Litigation Relating to the Merger.”

Tecogen and ADGE are aware of the filing of a class action lawsuit in the United States District Court for the District of Massachusetts; however, none of the persons named as defendants in such suit have been served with process.

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**RISKS RELATING TO AN INVESTMENT IN TECOGEN COMMON STOCK FOLLOWING THE MERGER**

The market price of Tecogen's common stock after completion of the transaction will continue to fluctuate, and may be affected by factors different from those affecting shares of ADGE's common stock currently.

Upon completion of the Merger, holders of ADGE's common stock will become holders of shares of Tecogen's common stock. The market price of Tecogen's common stock may fluctuate significantly following consummation of the transaction and holders of ADGE's common stock could lose the value of their investment in Tecogen common stock. The issuance of shares of Tecogen common stock in the Merger could on its own have the effect of depressing the market price for Tecogen common stock. In addition, many of ADGE's stockholders may decide not to hold the shares of Tecogen common stock they receive as a result of the Merger. Other stockholders of ADGE, such as funds with limitations on their permitted holdings of stock in individual issuers, may be required to sell the shares of Tecogen common stock they receive as a result of the Merger. Such sales of Tecogen common stock may take place shortly following the completion of the transaction and could have the effect of depressing the market price for Tecogen common stock.

Moreover, general fluctuations in stock markets could have a material adverse effect on the market for, or liquidity of, the Tecogen common stock, regardless of Tecogen's actual operating performance.

The business of Tecogen differs from that of ADGE's in important respects, and, accordingly, the results of operations of Tecogen after the transaction, as well as the market price of Tecogen common stock, may be affected by factors different from those currently affecting the results of ADGE's operations. Following the closing of the transaction, ADGE will be part of a larger company with other lines of business, so decisions affecting ADGE may be made in respect of the larger combined business as a whole rather than ADGE's business individually.

After the transaction, ADGE's stockholders will have a significantly lower ownership and voting interest in Tecogen than they currently have in ADGE and will exercise less influence over management.

Based on the number of shares of ADGE's common stock outstanding as of March 17, 2017, and the number of shares of Tecogen common stock outstanding as of March 17, 2016, it is expected that, immediately after completion of the transaction, ADGE's former stockholders will own approximately 19% of the outstanding shares of Tecogen common stock. Consequently, ADGE's stockholders will have less influence over the management and policies of Tecogen than they currently have over ADGE's management and policies.

**RISKS RELATING TO TECOGEN AND ITS OPERATIONS AFTER THE MERGER**

Tecogen and ADGE may have difficulty attracting, motivating and retaining executives and other key employees in light of the transaction.

Tecogen's success after the transaction will depend in part on the ability of Tecogen to retain key employees of ADGE. Competition for qualified personnel can be intense. Current and prospective employees of ADGE may experience uncertainty about the effect of the transaction, which may impair Tecogen's and ADGE's ability to attract, retain and motivate key management, sales, marketing, engineering, research and development, technical and other personnel prior to and following the transaction. Employee retention may be particularly challenging during the pendency of the transaction, as employees of ADGE may experience uncertainty about their future roles with the combined company. If key employees of ADGE depart, the integration of the companies may be more difficult and/or the combined company's business following the transaction may be harmed. Furthermore, Tecogen may have to incur significant costs in identifying, hiring and retaining replacements for departing employees and may lose significant expertise and talent relating to the business of ADGE, and Tecogen's ability to realize the anticipated benefits of the transaction may be adversely affected. Accordingly, no assurance can be given that Tecogen will be able to attract or retain key employees of ADGE to the same extent that ADGE has been able to attract or retain employees in the past.

Tecogen's and ADGE's business relationships may be subject to disruption due to uncertainty associated with the transaction.

Parties with which Tecogen or ADGE do business may experience uncertainty associated with the transaction, including with respect to current or future business relationships with Tecogen, ADGE or the combined company. Tecogen's and ADGE's business relationships may be subject to disruption as customers, distributors, suppliers, vendors and others may attempt to negotiate changes in existing business relationships or consider entering into

business relationships with parties other than Tecogen, ADGE or the combined company. These disruptions could have an adverse effect on the businesses, financial condition, results of operations or prospects of the combined company, including an adverse effect on Tecogen's ability to realize the anticipated benefits of the transaction. In addition, the risk, and adverse effect, of such disruptions could be exacerbated by a delay in completion of the transaction or termination of the merger agreement.

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Although Tecogen expects that the transaction will result in synergies and other benefits to Tecogen, it may not realize those benefits because of difficulties related to integration, the realization of synergies, and other challenges. Tecogen and ADGE have operated and, until completion of the transaction, will continue to operate, independently, and there can be no assurances that the respective businesses can be combined in a manner that allows for the achievement of substantial benefits. It is possible that there could be loss of Tecogen's or ADGE's key employees, the loss of customers, the disruption of either company's or both companies' ongoing businesses or unexpected issues, higher than expected costs and an overall post-completion process that takes longer than originally anticipated. Specifically, the following issues, among others, must be addressed in combining Tecogen's and ADGE's operations in order to realize the anticipated benefits of the transaction so the combined company performs as the parties hope:

- combining the companies' corporate functions;
- combining Tecogen's and ADGE's businesses in a manner that permits Tecogen to achieve the synergies anticipated to result from the transaction, the failure of which would result in the anticipated benefits of the transaction not being realized in the time frame currently anticipated or at all;
- maintaining existing agreements with customers, distributors, and vendors and avoiding delays in entering into new agreements with prospective customers, distributors, and vendors;
- determining whether and how to address possible differences in corporate cultures and management philosophies;
- integrating fully the companies' administrative and technology infrastructures; and
- effecting potential actions that may be required in connection with obtaining regulatory approvals.

In addition, at times the attention of certain members of either company's or both companies' management and resources may be focused on completion of the transaction and integration planning of the businesses of the two companies and diverted from day-to-day business operations, which may disrupt each company's ongoing business and the business of the combined company.

The transaction may not be accretive, and may be dilutive, to Tecogen's earnings per share, which may negatively affect the market price of Tecogen's common stock.

Tecogen currently expects the transaction to be accretive to its adjusted earnings per share within 12 months after the completion of the transaction. This expectation, however, is based on preliminary estimates that may materially change. In addition, Tecogen could fail to realize all the benefits anticipated in the transaction or experience delays or inefficiencies in realizing such benefits. Such factors could, combined with the issuance of shares of Tecogen common stock in the Merger, result in the transaction being dilutive to Tecogen's earnings per share, which could negatively affect the market price of shares of Tecogen's common stock.

**RISKS RELATING TO TECOGEN**

We may be unable to fund our future operating requirements, which could force us to curtail our operations.

If the cash generated by operations is insufficient to fund our future operating requirements, we would need to raise additional funds through further public or private equity or debt financings depending upon prevailing market conditions. These financings may not be available to us, or if available, may be on terms that are not favorable to us and could result in significant dilution to our stockholders and reduction in the trading price of our stock. The state of worldwide capital markets could also impede our ability to raise additional capital on favorable terms or at all. If adequate capital were not available to us, we likely would be required to significantly curtail our operations or possibly even cease our operations.

If we experience a period of significant growth or expansion, it could place a substantial strain on our resources.

If our cogeneration and chiller products penetrate the market rapidly, we would be required to deliver even larger volumes of technically complex products or components to our customers on a timely basis and at a reasonable cost to us. We have never ramped up our manufacturing capabilities to meet significant large-scale production requirements. If we were to commit to deliver large volumes of products, we may not be able to satisfy these commitments on a timely and cost-effective basis.

Our operating history is characterized by net losses.

For each of our last five fiscal years and prior thereto, we have incurred annual operating losses. We do not expect this trend to continue. We believe we have adequate cash resources to reach the point of full year profitability. Even if we

do achieve this annual profitability, we may be unable to increase our sales and sustain or increase our profitability in the future.

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We are dependent on a limited number of third-party suppliers for the supply of key components for our products. We use third-party suppliers for components in all of our products. Our engine supplier, generator supplier for cogeneration products (other than the InVerde), and the compressor and vessel sets in our chillers, are all purchased from large multinational equipment manufacturers. The loss of one or more of our suppliers could materially, and adversely affect our business if we are unable to replace them. While alternate suppliers for the manufacture of our engine, generator and compressor have been identified, should the need arise, there can be no assurance that alternate suppliers will be available and able to manufacture our engine, generator or compressor on acceptable terms. From time to time, shipments can be delayed because of industry-wide or other shortages of necessary materials and components from third-party suppliers, as well as shipping delays at points of importation. A supplier's failure to supply components in a timely manner, or to supply components that meet our quality, quantity, or cost requirements, or our inability to obtain substitute sources of these components on a timely basis or on terms acceptable to us, could impair our ability to deliver our products in accordance with contractual obligations.

The amount of Tecogen's backlog is subject to fluctuation due to its customers' experiencing unexpected delays in financing, permitting or modifications in specifications of the equipment.

Tecogen's total product and installation backlog as of December 31, 2016 was \$11.1 million compared to \$11.6 million as of December 31, 2015. Although Tecogen expects its customers to issue definitive purchase orders with respect to such backlog, there can be no assurance that such amounts will not be subject to modification in the event customers experience unexpected delays in obtaining permits, interconnection agreements or financing. Any of such events may result in customers modifying the equipment or the terms or timing of the expected installation, which may result in changes to the amount of backlog attributed to those projects.

We expect significant competition for our products and services.

Many of our competitors and potential competitors are well established and have substantially greater financial, research and development, technical, manufacturing and marketing resources than we do. If these larger competitors decide to focus on the development of distributed power or cogeneration, they have the manufacturing, marketing and sales capabilities to complete research, development and commercialization of these products more quickly and effectively than we can. There can also be no assurance that current and future competitors will not develop new or enhanced technologies or more cost-effective systems, and therefore, there can be no assurance that we will be successful in this competitive environment.

If we are unable to maintain our technological expertise in design and manufacturing processes, we will not be able to successfully compete.

We believe that our future success will depend upon our ability to continue to develop and provide innovative products and product enhancements that meet the increasingly sophisticated needs of our customers.

However, this requires that we successfully anticipate and respond to technological changes in design and manufacturing processes in a cost-effective and timely manner. The development of new, technologically advanced products and enhancements is a complex and uncertain process requiring high levels of innovation, as well as the accurate anticipation of technological and market trends. There can be no assurance that we will successfully identify new product opportunities, develop and bring new or enhanced products to market in a timely manner, successfully lower costs, and achieve market acceptance of our products, or that products and technologies developed by others will not render our products or technologies obsolete or noncompetitive.

The introduction of products embodying new technologies, and the shifting of customer demands or changing industry standards, could render our existing products obsolete and unmarketable. We may experience delays in releasing new products and product enhancements in the future. Material delays in introducing new products or product enhancements may cause customers to forego purchases of our products and purchase those of our competitors. Our intellectual property may not be adequately protected.

We seek to protect our intellectual property rights through patents, trademarks, copyrights, trade secret laws, confidentiality agreements, and licensing arrangements, but we cannot ensure that we will be able to adequately protect our technology from misappropriation or infringement. We cannot ensure that our existing intellectual property rights will not be invalidated, circumvented, challenged, or rendered unenforceable.



Our competitors may successfully challenge the validity of our patents, design non-infringing products, or deliberately infringe our patents. There can be no assurance that other companies are not investigating or developing other similar technologies. In addition, our intellectual property rights may not provide a competitive advantage to us or ensure that our products and technology will be adequately covered by our patents and other intellectual property. Any of these factors or the expiration, termination, or invalidity of one or more of our patents may have a material adverse effect on our business.

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Others may assert that our technology infringes their intellectual property rights.

We may be subject to infringement claims in the future. The defense of any claims of infringement made against us by third parties could involve significant legal costs and require our management to divert time from our business operations. If we are unsuccessful in defending any claims of infringement, we may be forced to obtain licenses or to pay additional royalties to continue to use our technology. We may not be able to obtain any necessary licenses on commercially reasonable terms or at all. If we fail to obtain necessary licenses or other rights, or if these licenses are costly, our operating results would suffer either from reductions in revenues through our inability to serve customers or from increases in costs to license third-party technologies.

Our success is dependent upon attracting and retaining highly qualified personnel and the loss of key personnel could significantly hurt our business.

To achieve success, we must attract and retain highly qualified technical, operational and executive employees. The loss of the services of key employees or an inability to attract, train and retain qualified and skilled employees, specifically engineering, operations, and business development personnel, could result in the loss of business or could otherwise negatively impact our ability to operate and grow our business successfully.

Our business is subject to product liability and warranty claims.

Our business exposes us to potential product liability claims, which are inherent in the manufacturing, marketing and sale of our products, and we may face substantial liability for damages resulting from the faulty design or manufacture of products or improper use of products by end users. We currently maintain a moderate level of product liability insurance, but there can be no assurance that this insurance will provide sufficient coverage in the event of a claim. Also, we cannot predict whether we will be able to maintain such coverage on acceptable terms, if at all, or that a product liability claim would not harm our business or financial condition. In addition, negative publicity in connection with the faulty design or manufacture of our products would adversely affect our ability to market and sell our products.

We sell our products with warranties. There can be no assurance that the provision in our financial statements for estimated product warranty expense will be sufficient. We cannot ensure that our efforts to reduce our risk through warranty disclaimers will effectively limit our liability. Any significant occurrence of warranty expense in excess of estimates could have a material adverse effect on our operating results, financial condition and cash flow. Further, we have at times undertaken programs to enhance the performance of units previously sold. These enhancements have at times been provided at no cost or below our cost. If we choose to offer such programs again in the future, such actions could result in significant costs.

Utilities or governmental entities could hinder our entry into and growth in the marketplace, and we may not be able to effectively sell our products.

Utilities or governmental entities on occasion have placed barriers to the installation of our products or their interconnection with the electric grid, and they may continue to do so. Utilities may charge additional fees to customers who install on-site CHP and rely on the grid for back-up power. These types of restrictions, fees, or charges could make it harder for customers to install our products or use them effectively, as well as increasing the cost to our potential customers. This could make our systems less desirable, thereby adversely affecting our revenue and other operating results.

We may not achieve production cost reductions necessary to competitively price our products, which would adversely affect our sales.

We believe that we will need to reduce the unit production cost of our products over time to maintain our ability to offer competitively priced products. Our ability to achieve cost reductions will depend on our ability to develop low-cost design enhancements, to obtain necessary tooling and favorable supplier contracts, and to increase sales volumes so we can achieve economies of scale. We cannot assure you that we will be able to achieve any such production cost reductions. Our failure to do so could have a material adverse effect on our business and results of operations.

Our products involve a lengthy sales cycle and we may not anticipate sales levels appropriately, which could impair our results of operations.

The sale of our products typically involves a significant commitment of capital by customers, with the attendant delays frequently associated with large capital expenditures. For these and other reasons, the sales cycle associated with our products is typically lengthy and subject to a number of significant risks over which we have little or no control. We expect to plan our production and inventory levels based on internal forecasts of customer demand, which is highly unpredictable and can fluctuate substantially. If sales in any period fall significantly below anticipated levels, our financial condition, results of operations and cash flow would suffer. If demand in any period increases well above anticipated levels, we may have difficulties in responding, incur greater costs to respond, or be unable to fulfill the demand in sufficient time to retain the order, which would negatively impact our operations. In addition, our operating expenses are based on anticipated sales levels, and a high percentage of our expenses are generally fixed in the short term. As a result of these factors, a small fluctuation in timing of sales can cause operating results to vary materially from period to period.

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The economic viability of our projects depends on the price spread between fuel and electricity, and the variability of these prices creates a risk that our projects will not be economically viable and that potential customers will avoid such energy price risks.

The economic viability of our CHP products depends on the spread between natural gas fuel and electricity prices. Volatility in one component of the spread, such as the cost of natural gas and other fuels (e.g., propane or distillate oil), can be managed to some extent by means of futures contracts. However, the regional rates charged for both base load and peak electricity may decline periodically due to excess generating capacity or general economic recessions. Our products could become less competitive if electric rates were to fall substantially in the future, noting that historically the rates have not had any sustained decline in price. Also, potential customers may perceive the unpredictable swings in natural gas and electricity prices as an increased risk of investing in on-site CHP, and may decide not to purchase CHP products.

We are exposed to credit risks with respect to some of our customers.

To the extent our customers do not advance us sufficient funds to finance our costs during the execution phase of our contracts, we are exposed to the risk that they will be unable to accept delivery or that they will be unable to make payment at the time of delivery.

We may make acquisitions or take other corporate strategic actions that could harm our financial performance.

To expedite development of our corporate infrastructure, particularly with regard to equipment installation and service functions, we anticipate the future acquisition of complementary businesses. Risks associated with such acquisitions include the disruption of our existing operations, loss of key personnel in the acquired companies, dilution through the issuance of additional securities, assumptions of existing liabilities, and commitment to further operating expenses. If any or all of these problems actually occur, acquisitions could negatively impact our financial performance and future stock value.

Investment in our Common Stock is subject to price fluctuations and market volatility.

Historically, valuations of many small companies have been highly volatile. The securities of many small companies have experienced significant price and trading volume fluctuations, unrelated to the operating performance or the prospects of such companies. The market price of shares of our Common Stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- results and timing of our product development;
- results of the development of our competitors' products;
- regulatory actions with respect to our products or our competitors' products;
- actual or anticipated fluctuations in our financial condition and operating results;
- actual or anticipated changes in our growth rate relative to our competitors;
- actual or anticipated fluctuations in our competitors' operating results or changes in their growth rate;
- competition from existing products or new products that may emerge;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations, or capital commitments;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- additions or departures of key management or personnel;
- disputes or other developments related to proprietary rights, including patents, litigation matters, and our ability to obtain, maintain, defend or enforce proprietary rights relating to our products and technologies;
- announcement or expectation of additional financing efforts;
- sales of our Common Stock by us, our insiders, or our other stockholders; and
- general economic and market conditions.

Furthermore, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political, and market conditions such as recessions, interest rate changes, or international currency fluctuations, may negatively impact the market price of shares of our Common Stock. In addition, such fluctuations could subject us to securities class action litigation, which could result in substantial costs and divert our management's attention from other business concerns, which could potentially harm our business.

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We experience significant fluctuations in revenues from quarter to quarter on our product sales.

We have low volume, high dollar sales for projects that are generally non-recurring, and therefore our sales have fluctuated significantly from period to period. For example, when compared to the previous quarter, our revenues in 2016 increased in each consecutive quarter. In 2015, our revenues increased during the first quarter, remained relatively flat in the second quarter, decreased in the third quarter, and slightly increased in the fourth quarter.

Fluctuations cannot be predicted because they are affected by the purchasing decisions and timing requirements of our customers, which are unpredictable.

We may be subject to litigation, which is expensive and could divert management attention.

Our share price may be volatile and in the past companies that have experienced volatility in the market price of their stock have been subject to an increased incidence of securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our Common Stock will depend on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. There can be no assurance that analysts will cover us, or provide favorable coverage. If one or more analysts downgrade our stock or change their opinion of our stock, our share price would likely decline. In addition, if one or more analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

Because our directors and executive officers are among our largest stockholders, they can exert influence over our business and affairs and have actual or potential interests that may depart from other stockholders or investors.

As of March 21, 2017, our directors and executive officers collectively beneficially own approximately 19.1% of our issued and outstanding common stock. Our directors and executive officers are entitled to cast an aggregate of approximately 3,522,833 votes on matters submitted to our stockholders for a vote or approximately 17.58% of the total number of votes entitled to be cast at a meeting of our stockholders. John Hatsopoulos, our co-Chief Executive Officer and a director, beneficially owns approximately 16.23% of our issued and outstanding common stock entitling him to cast an aggregate of approximately 3,252,395 votes on matters submitted to our stockholders for a vote or approximately 16.23% of the total number of votes entitled to be cast at a meeting of our stockholders. Additionally, the holdings of our directors and executive officers may increase in the future upon vesting or other maturation of exercise rights under any of the options or warrants they may hold or in the future be granted or if they otherwise acquire additional shares of our common stock. The interests of such persons may differ from the interests of our other stockholders. As a result, in addition to their board seats and offices, such persons will have influence over corporate actions requiring shareholder approval.

Such persons' stock ownership may discourage a potential acquirer from making a tender offer or otherwise attempting to acquire us, which in turn could reduce our stock price or prevent our stockholders from realizing a premium over our stock price.

Current stockholdings may be diluted if we make future equity issuances or if outstanding warrants or options are exercised for shares of our common stock.

"Dilution" refers to the reduction in the voting effect and proportionate ownership interest of a given number of shares of common stock as the total number of shares increases. Our issuance of additional stock, convertible preferred stock and convertible debt may result in dilution to the interests of shareholders and may also result in the reduction of your stock price. The sale of a substantial number of shares into the market, or even the perception that sales could occur, could depress the price of the common stock. Also, the exercise of warrants and options may result in additional dilution.

As of December 31, 2016, an aggregate of 1,367,918 shares of common stock are issuable upon exercise of outstanding warrants and options. The holders of outstanding warrants (and other convertible securities or derivatives, if any are subsequently issued) have the opportunity to profit from a rise in the market price of our common stock, if

any, without assuming the risk of ownership, with a resulting dilution in the interests of other stockholders. We may find it more difficult to raise additional equity capital if it should be needed for our business while the options, warrants and convertible securities are outstanding. At any time at which the holders of the options, warrants or convertible securities might be expected to exercise or convert them, we would probably be able to obtain additional capital on terms more favorable than that provided by those securities.

Future sales of common stock by our existing stockholders may cause our stock price to fall.

The market price of our common stock could decline as a result of sales by our existing stockholders of shares of common stock in the market or the perception that these sales could occur. These sales might also make it more difficult for us to sell equity securities at a time and price that we deem appropriate and thus inhibit our ability to raise additional capital when it is needed.

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Because we have not and do not intend to pay cash dividends, our stockholders receive no current income from holding our stock.

We have paid no cash dividends on our capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. We currently expect to retain earnings for use in the operation and expansion of our business, and therefore do not anticipate paying any cash dividends in the foreseeable future. In addition, the terms of any future debt or credit facility may preclude us from paying any cash dividends. In addition, the Company's outstanding convertible note provides that the Company shall not declare, pay or authorize any dividend without the prior consent of the note holder. As a result, capital appreciation, if any, of our common stock could be the sole source of gain for our stockholders for the foreseeable future.

Failure to comply with the Nasdaq Capital Market continued listing requirements could lead to the commencement of delisting proceedings in accordance with the Nasdaq rules. Delisting could limit investors' ability to effect transactions in the Company's securities and subject the stock to additional trading restrictions.

The Company's common stock is listed on the Nasdaq Capital Market, a national securities exchange. To maintain such listing, the Company is required to meet its continued listing requirements. If the Company is unable to maintain the listing of its stock on Nasdaq or another exchange for failure to comply with the continued listing requirements, including timely filing of Exchange Act reports and compliance with Nasdaq's corporate governance requirements, the Company and its security holders could face significant material adverse consequences including a limited availability of market quotations for its stock and a decreased ability to issue additional securities or obtain additional financing in the future.

Certain provisions of our charter and bylaws may discourage mergers and other transactions.

Certain provisions of our certificate of incorporation and bylaws may make it more difficult for someone to acquire control of us. These provisions may make it more difficult for stockholders to take certain corporate actions and could delay or prevent someone from acquiring our business. These provisions could limit the price that certain investors might be willing to pay for shares of our common stock. The ability to issue "blank check" preferred stock is a traditional anti-takeover measure. This provision may be beneficial to our management and the board of directors in a hostile tender offer, and may have an adverse impact on stockholders who may want to participate in such tender offer, or who may want to replace some or all of the members of the board of directors.

Our board of directors may issue additional shares of preferred stock without stockholder approval.

Our certificate of incorporation authorizes the issuance of up to 10,000,000 shares of preferred stock. Accordingly, our board of directors may, without shareholder approval, issue one or more new series of preferred stock with rights which could adversely affect the voting power or other rights of the holders of outstanding shares of common stock. In addition, the issuance of shares of preferred stock may have the effect of rendering more difficult or discouraging, an acquisition or change of control of us. Although we do not have any current plans to issue any shares of preferred stock, we may do so in the future.

Investor confidence in the price of our stock may be adversely affected if we are unable to comply with Section 404 of the Sarbanes-Oxley Act of 2002. As of December 31, 2016, our principal executive officers and principal financial and accounting officer have concluded there is a material weakness in our disclosure controls and procedures and our internal control over financial reporting, which could harm our operating results or cause us to fail to meet our reporting obligations.

As an SEC registrant, we are subject to the rules adopted by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, which require us to include in our annual report on Form 10-K our management's report on, an assessment of the effectiveness of, our internal control over financial reporting ("management's report"). If we fail to achieve and maintain the adequacy of our internal control over financial reporting, there is a risk that we will not comply with all of the requirements imposed by Section 404. Moreover, effective internal control over financial reporting, particularly that relating to revenue recognition, is necessary for us to produce reliable financial reports and is important in helping to prevent financial fraud. Any of these possible outcomes could result in an adverse reaction in the financial marketplace due to a loss in investor confidence in the reliability of our financial statements, which ultimately could harm our business and could negatively impact the market price of our common stock. Investor



confidence and the price of our common stock may be adversely affected if we are unable to comply with Section 404 of the Sarbanes-Oxley Act of 2002.

As of December 31, 2016, our principal executive officers and principal accounting officer performed an evaluation of disclosure controls and procedures and concluded that our controls were not effective to provide reasonable assurance that information required to be disclosed by our Company in reports that we file under the Exchange Act, is recorded, processed, summarized and reported as when required. Management conducted an evaluation of our internal control over financial reporting and based on this evaluation, management concluded that the company's internal control over financial reporting was not effective as of December 31, 2016. The Company currently does not have personnel with a sufficient level of accounting knowledge, experience and training in the selection, application and implementation of generally acceptable accounting principles as it relates to complex transactions and financial reporting requirements. The Company also has a small number of employees dealing with

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general controls over information technology security and user access. This constitutes a material weakness in financial reporting. Any failure to implement effective internal controls could harm our operating results or cause us to fail to meet our reporting obligations. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock, and may require us to incur additional costs to improve our internal control system.

In order to comply with public reporting requirements, we must continue to strengthen our financial systems and controls, and failure to do so could adversely affect our ability to provide timely and accurate financial statements. Refinement of our internal controls and procedures will be required as we manage future growth successfully and operate effectively as a public company. Such refinement of our internal controls, as well as compliance with the Sarbanes-Oxley Act of 2002 and related requirements, will be costly and will place a significant burden on management. We cannot assure you that measures already taken, or any future measures, will enable us to provide accurate and timely financial reports, particularly if we are unable to hire additional personnel in our accounting and financial department, or if we lose personnel in this area. Any failure to improve our internal controls or other problems with our financial systems or internal controls could result in delays or inaccuracies in reporting financial information, or non-compliance with SEC reporting and other regulatory requirements, any of which could adversely affect our business and stock price.

The JOBS Act allows us to postpone the date by which we must comply with certain laws and regulations and reduces the amount of information provided by us in reports filed with the SEC. We cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our Common Stock less attractive to investors. We are and we will remain an “emerging growth company”, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, until the earliest to occur of (i) the last day of the fiscal year during which our total annual gross revenues equal or exceed \$1 billion (subject to adjustment for inflation), (ii) the last day of the fiscal year following the fifth anniversary of our initial public offering, (iii) the date on which we have, during the previous three-year period, issued more than \$1 billion in non-convertible debt, or (iv) the date on which we are deemed a large accelerated filer under the Exchange Act.

For so long as we remain an emerging growth company we are not required to:

- have an auditor report on our internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;

- comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis);

- submit certain executive compensation matters to shareholder non-binding advisory votes;

- submit for shareholder approval golden parachute payments not previously approved; and

- disclose certain executive compensation related items such as the correlation between executive compensation and financial performance and comparisons of the Chief Executive Officer’s compensation to median employee compensation, when such disclosure requirements are adopted.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we have chosen to “opt out” of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

We cannot predict if investors will find our Common Stock less attractive because we may rely on some of these exemptions. If some investors find our Common Stock less attractive as a result, there may be a less active trading market for our Common Stock and our stock price may be more volatile. If we avail ourselves of certain exemptions from various reporting requirements, our reduced disclosure may make it more difficult for investors and securities

analysts to evaluate us and may result in less investor confidence.

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**RISKS RELATING TO ADGE**

ADGE has incurred losses, and these losses may continue.

ADGE has incurred losses in each of its fiscal years since inception. There is no assurance that profitability will be achieved in the near term, if at all in the future.

ADGE is dependent on a large customer. The loss of this customer could have an adverse effect on its financial results.

During the years ended December 31, 2016 and 2015, one of ADGE's customers accounted for approximately 18.3% and 18.0% of revenue, respectively. Accounts receivable from this customer at December 31, 2016 and 2015 were 20.6% and 27.0%, respectively, of the total accounts receivable balance at each such year end. Although subject to a long-term contracts expiring through 2029, the loss of this customer could have a material adverse effect on ADGE's financial condition and results of operations.

ADGE operates in highly competitive markets and may be unable to successfully compete against competitors having significantly greater resources and experience.

ADGE's business may be limited by competition from energy services companies arising from the breakup of conventional regulated electric utilities. Such competitors, both in the equipment and energy services sectors, are likely to have far greater financial and other resources than ADGE, and could possess specialized market knowledge with existing channels of access to prospective customer locations. ADGE may be unable to successfully compete against those competitors.

ADGE's ability to access capital for the repayment of debts and for future growth is limited as the financial markets can be unpredictable.

ADGE's ability to access capital could be impacted by various factors including general market conditions or a slowdown in the economy, interest rates, the perception of its potential future earnings and cash distributions, any unwillingness on the part of lenders to make loans to ADGE and any deterioration in the financial position of lenders that might make them unable to meet their obligations to ADGE. ADGE can provide no assurance that capital will be available on favorable terms, if at all.

Because unfavorable utility regulations make the installation of ADGE's systems more difficult or less economical, any slowdown in the utility deregulation process would be an impediment to the growth of ADGE's business.

In the past, many electric utility companies have raised opposition to DG, a critical element of ADGE's On-Site Utility business. Such resistance has generally taken the form of stringent standards for interconnection and the use of targeted rate structures as disincentives to combined generation of on-site power and heating or cooling services. A DG company's ability to obtain reliable and affordable back-up power through interconnection with the grid is essential to ADGE's business model. Utility policies and regulations in most states are often not prepared to accommodate widespread on-site generation. These barriers erected by electric utility companies and unfavorable regulations, where applicable, make more difficult or uneconomic ADGE's ability to connect to the electric grid at customer sites and are an impediment to the growth of ADGE's business. The development of ADGE's business could be adversely affected by any slowdown or reversal in the utility deregulation process or by difficulties in negotiating backup power supply agreements with electric providers in the areas where ADGE intend to do business.

The economic viability of ADGE's projects depends on the price spread between fuel and electricity, and the variability of the prices of these components creates a risk that ADGE's projects will be uneconomic.

The economic viability of DG projects is dependent upon the price spread between fuel costs and electricity prices. Volatility in one component of the spread, the cost of natural gas and other fuels (e.g., propane or distillate oil) can be managed to a greater or lesser extent by means of futures contracts. However, the regional rates charged for both base load and peak electricity services may decline periodically due to excess capacity arising from over-building of utility power plants or recessions in economic activity. Any sustained weakness in electricity prices could significantly limit the market for ADGE's cogeneration, cooling equipment and On-Site Utility energy services and have a material adverse effect on ADGE's business and financial performance.

ADGE may be exposed to substantial liability claims if ADGE fails to fulfill ADGE's obligations to its customers.

ADGE enters into contracts with large commercial and not-for-profit customers under which it assumes responsibility for meeting a portion of the customers' building energy demand and equipment installation. ADGE may be exposed to substantial liability claims if ADGE fail to fulfill its obligations to its customers. There can be no assurance that ADGE will not be vulnerable to claims by customers and by third parties that are beyond any contractual protections that ADGE are able to negotiate. ADGE may be unable to obtain liability and other insurance on terms and at prices that are commercially acceptable to ADGE. As a result, liability claims could cause ADGE significant financial harm.

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Expiring customer contracts may lead to decreases in revenue and increases in expenses.

One of ADGE's customer contracts has an expiration date in 2017 and three in 2018 which, if not extended, may lead to decreases in revenue. This decrease in revenue will be due to less energy billing. Expiring customer contracts can also lead to an increase in expenses because ADGE will have to remove the equipment at the customer location. ADGE will remove the equipment at its own expense and is obligated to do so at the end of the customer contract. Each year, a portion of ADGE's customer contracts expire and need to be renewed or replaced. ADGE may not be able to renew or extend contracts with its existing customers or obtain replacement contracts at attractive rates or for the same term as the expiring contracts.

ADGE may fail to make sales to certain prospective customers because of resistance from facilities management personnel to the outsourcing of their service function.

Any outsourcing of non-core activities by institutional or commercial entities will generally lead to reductions in permanent on-site staff employment. As a result, ADGE's proposals to implement On-Site Utility contracts are likely to encounter strong initial resistance from the facilities' managers whose jobs will be threatened by energy outsourcing. The growth of ADGE's business will depend upon ADGE's ability to overcome such barriers among prospective customers.

Future government regulations, such as increased emissions standards, safety standards and taxes, may adversely impact the economics of ADGE's business.

The operation of DG equipment at ADGE's customers' sites may be subject to future changes in federal, state and local laws and regulations (e.g., emissions, safety, taxes, etc.). Any such new or substantially altered rules and standards may adversely affect ADGE's revenues, profits and general financial condition.

If ADGE cannot expand ADGE's network of skilled technical support personnel, ADGE will be unable to grow ADGE's business.

Each additional customer site for ADGE's services requires the initial installation and subsequent maintenance and service of equipment to be provided by a team of technicians skilled in a broad range of technologies, including combustion, instrumentation, heat transfer, information processing, microprocessor controls, fluid systems and other elements of DG. If ADGE is unable to recruit, train, motivate, sub-contract, and retain such personnel in each of the regional markets where ADGE's business operates ADGE will be unable to grow its business in those markets. Future technology changes may render obsolete various elements of equipment comprising ADGE's On-Site Utility installations.

ADGE must select equipment for ADGE's DG projects so as to achieve attractive operating efficiencies, while avoiding excessive downtimes from the failure of unproven technologies. If ADGE is unable to achieve a proper balance between the cost, efficiency and reliability of equipment selected for its projects, ADGE's growth and profitability will be adversely impacted.

ADGE will need to raise additional capital for its business, which will dilute existing stockholders.

In the event the Merger is not consummated, ADGE expects to require additional financings to implement its overall business plan. Equity financings will dilute the percentage ownership of ADGE's existing stockholders. ADGE's ability to raise an adequate amount of capital and the terms of any capital that it is able to raise will be dependent upon its progress in implementing demonstration projects and related marketing service development activities. If ADGE does not make adequate progress, ADGE may be unable to raise adequate funds, which will limit its ability to expand its business. If the terms of any equity financings are unfavorable, the dilutive impact on ADGE's stockholders might be severe.

ADGE's revenue from energy billing is partly dependent on the weather and increased temperatures could reduce ADGE's revenue.

In warmer months the customers are not using as much thermal energy as they do not have as much of a demand to heat their locations. Due to the demand being lower in warmer months ADGE may not be able to bill for thermal energy and in turn may have a decrease in revenue.

Certain characteristics of specific sites may make it difficult to install and maintain ADGE's equipment.

When entering into customer contracts there is a risk that the customer's site will not be well-suited for ADGE's equipment. In certain situations, installing and maintaining ADGE's equipment at a customer's site may cost more than anticipated, which could lead to an increase in expenses. This has the potential to lead to a decrease in revenue if the site is not capable of running properly.

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Operating diverse on-site utility sites across many different locations presents significant maintenance challenges. ADGE operates 92 systems at various locations which require considerable monitoring and maintenance on a twenty-four hour basis. Managing multiple sites simultaneously creates challenges of engineering resource and spare part availability.

ADGE's business may be impacted adversely by political events, war, terrorism, public health issues, natural disasters and other circumstances that are not within ADGE's control.

War, terrorism, geopolitical uncertainties, public health issues, and other business interruptions have caused and could cause damage or disruption to international commerce and the global economy, and thus could have a material adverse effect on ADGE, ADGE's suppliers, and manufacturing vendors. ADGE's business operations are subject to interruption by natural disasters, fire, power shortages, nuclear power plant accidents, terrorist attacks, and other hostile acts, labor disputes, public health issues, and other events beyond ADGE's control. Such events could decrease demand for ADGE's products, make it difficult or impossible for ADGE to make and deliver products to its customers, or to receive products from its manufacturers and suppliers, and create delays and inefficiencies in ADGE's supply chain. If major public health issues, including pandemics, arise, ADGE could be adversely affected by more stringent employee travel restrictions, additional limitations in freight services, actions limiting the movement of products between regions, delays in production ramps of new products, and disruptions in the operations of ADGE's manufacturing vendors and suppliers. In the event of a natural disaster, ADGE could incur significant losses, require substantial recovery time and experience significant expenditures in order to resume operations.

Increased IT security threats and sophisticated computer crime pose a risk to ADGE's systems, networks, products and services.

ADGE relies on information technology ("IT") systems and networks in connection with its business activities, and ADGE collect and store sensitive data. IT security threats and sophisticated computer crime, including advanced persistent threats such as attempts to gain unauthorized access to ADGE's systems, are increasing in sophistication and frequency. These threats pose a risk to the security of ADGE's systems and networks and the confidentiality, availability and integrity of ADGE's data. As ADGE grows, it may experience attempts from hackers and other third parties to gain unauthorized access to its IT systems and networks. Any such attacks could have a material adverse effect on ADGE's financial condition, results of operations or liquidity. While ADGE actively manage IT risks within its control, ADGE can provide no assurance that ADGE's actions will be successful in eliminating or mitigating risks to ADGE's systems, networks and data. A failure of or breach in IT security could expose ADGE and ADGE's customers and suppliers to risks of misuse of information or systems, the compromise of confidential information, manipulation and destruction of data and operations disruptions. Any of these events in turn could adversely affect ADGE's reputation, competitive position, business and results of operations. In addition, such breaches in security could result in litigation, regulatory action and potential liability, as well as the costs and operational consequences of implementing further data protection measures.

Investor confidence in the price of ADGE's stock may be adversely affected if ADGE is unable to comply with Section 404 of the Sarbanes-Oxley Act of 2002. As of the end of the period ended December 31, 2016, ADGE's principal executive officers and principal financial and accounting officer concluded there is a material weakness in ADGE's disclosure controls and procedures and ADGE's internal control over financial reporting, which could harm ADGE's operating results or cause ADGE to fail to meet its reporting obligations.

As of the date of this joint proxy statement/prospectus ADGE is a registrant under the Exchange Act, is required to file certain periodic reports under the Exchange and, in the event the Merger is not consummated, ADGE may remain a registrant under the Exchange Act. As a registrant under the Exchange Act, ADGE is subject to the rules adopted by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, which requires ADGE to include in its annual report on Form 10-K its management's report on, and assessment of the effectiveness of, its internal control over financial reporting ("management's report"). If ADGE fails to achieve and maintain the adequacy of its internal control over financial reporting, there is a risk that ADGE will not comply with all of the requirements imposed by Section 404. Moreover, effective internal control over financial reporting, particularly that relating to revenue recognition, is necessary for ADGE to produce reliable financial reports and is important in helping to prevent financial fraud. Any



of these possible outcomes could result in an adverse reaction in the financial marketplace due to a loss in investor confidence in the reliability of ADGE's financial statements, which ultimately could harm ADGE's business and could negatively impact the market price of ADGE's common stock. Investor confidence and the price of ADGE's common stock may be adversely affected if ADGE is unable to comply with Section 404 of the Sarbanes-Oxley Act of 2002. As of the end of December 31, 2016 and for the year ended December 31, 2016, ADGE's principal executive officers and principal financial and accounting officer have performed an evaluation of controls and procedures and concluded that ADGE's controls were not effective to provide reasonable assurance that information required to be disclosed by ADGE's company in reports that ADGE file under the Exchange Act is recorded, processed, summarized and reported as and when required. Management conducted an evaluation of ADGE's internal control over financial reporting and based on this evaluation and concluded that its internal control over financial reporting was not effective as of the end of the period covered by such report. Currently, ADGE has material weaknesses in financial reporting relating to the lack of a sufficient number of controls over manual processes of revenue recognition. This

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constitutes a material weakness in financial reporting. Any failure to implement effective internal controls could harm ADGE's operating results or cause it to fail to meet ADGE's reporting obligations. Inadequate internal controls could also cause investors to lose confidence in ADGE's reported financial information, which could have a negative effect on the trading price of its common stock, and might require ADGE to incur additional costs to improve its internal control system.

In order to comply with public reporting requirements, ADGE must continue to strengthen its financial systems and controls, and failure to do so could adversely affect ADGE's ability to provide timely and accurate financial statements.

Refinement of ADGE's internal controls and procedures will be required as ADGE manage future growth successfully and operate effectively as a public company. Such refinement of ADGE's internal controls, as well as compliance with the Sarbanes-Oxley Act of 2002 and related requirements, will be costly and will place a significant burden on management. ADGE cannot assure you that measures already taken, or any future measures, will enable it to provide accurate and timely financial reports, particularly if ADGE is unable to hire additional personnel in ADGE's accounting and financial department, or if ADGE lose personnel in this area. Any failure to improve ADGE's internal controls or other problems with ADGE's financial systems or internal controls could result in delays or inaccuracies in reporting financial information, or non-compliance with SEC reporting and other regulatory requirements, any of which could adversely affect ADGE's business and stock price.

ADGE's directors and named executive officers beneficially own approximately 9.9% of ADGE's common stock. As of March 16, 2017, ADGE's directors and executive officers beneficially owned approximately 9.9% of ADGE's shares of common stock, including shares issuable upon exercise of options, warrants and restricted stock grants, or approximately 5,050,913 shares. These stockholders, if they acted together, could exert influence on matters requiring approval by ADGE's stockholders, including the election of directors, the approval of mergers or other business combination transactions, consolidation and sale of substantially all of ADGE's assets or other change of control transaction. This concentration of ownership may discourage or prevent someone from acquiring ADGE's business. Current shareholdings may be diluted if ADGE makes future equity issuances or if outstanding warrants or options are exercised for shares of ADGE's common stock.

"Dilution" refers to the reduction in the voting effect and proportionate ownership interest of a given number of shares of common stock as the total number of shares increases. ADGE's issuance of additional stock, convertible preferred stock and convertible debt may result in dilution to the interests of stockholders and may also result in the reduction of an ADGE stockholder's stock price. The sale of a substantial number of shares into the market, or even the perception that sales could occur, could depress the price of the common stock. Also, the exercise of warrants and options may result in additional dilution.

As of December 31, 2016, an aggregate of 5,559,270 shares of common stock are issuable upon exercise of outstanding warrants and options. The holders of outstanding warrants (and other convertible securities or derivatives, if any are subsequently issued) have the opportunity to profit from a rise in the market price of ADGE's common stock, if any, without assuming the risk of ownership, with a resulting dilution in the interests of other stockholders. ADGE may find it more difficult to raise additional equity capital if it should be needed for ADGE's business while the options, warrants and convertible securities are outstanding. At any time at which the holders of the options, warrants or convertible securities might be expected to exercise or convert them, ADGE would probably be able to obtain additional capital on terms more favorable than that provided by those securities.

Future sales of common stock by ADGE's existing stockholders may cause ADGE's stock price to fall.

The market price of ADGE's common stock could decline as a result of sales by ADGE's existing stockholders of shares of common stock in the market or the perception that these sales could occur. These sales might also make it more difficult for ADGE to sell equity securities at a time and price that ADGE deem appropriate and thus inhibit its ability to raise additional capital when it is needed.

Because ADGE does not intend to pay cash dividends, ADGE's stockholders will receive no current income from holding ADGE's stock.

ADGE has paid no cash dividends on its capital stock to date and ADGE currently intends to retain ADGE's future earnings, if any, to fund the development and growth of ADGE's business. ADGE currently expects to retain earnings for use in the operation and expansion of its business, and therefore does not anticipate paying any cash dividends in the foreseeable future. In addition, the terms of any future debt or credit facility may preclude ADGE from paying any cash dividends. As a result, capital appreciation, if any, of ADGE's common stock could be the sole source of gain for ADGE's stockholders for the foreseeable future.

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Failure of ADGE to comply with the listing requirements of the NYSE MKT could lead to the commencement of delisting proceedings in accordance with the NYSE MKT's Company Guide. Delisting could limit investors' ability to effect transactions in the Company's securities and subject the stock to additional trading restrictions.

ADGE's common stock is listed on the NYSE MKT, a national securities exchange. To maintain such listing, ADGE is required to meet the continued listing requirements of the NYSE MKT as set forth in its Company Guide. If ADGE is unable to maintain the listing of its stock on the NYSE MKT or another exchange for failure to comply with the continued listing requirements, including timely filing of Exchange Act reports and compliance with the NYSE MKT's corporate governance requirements, ADGE and its security holders could face significant material adverse consequences including a limited availability of market quotations for its stock and a decreased ability to issue additional securities or obtain additional financing in the future.

Certain provisions of ADGE's charter and bylaws may discourage mergers and other transactions.

Certain provisions of ADGE's certificate of incorporation and bylaws may make it more difficult for someone to acquire control of the company. These provisions may make it more difficult for stockholders to take certain corporate actions and could delay or prevent someone from acquiring ADGE's business. These provisions could limit the price that certain investors might be willing to pay for shares of ADGE's common stock. The ability to issue "blank check" preferred stock is a traditional anti-takeover measure. This provision may be beneficial to ADGE's management and the board of directors in a hostile tender offer, and may have an adverse impact on stockholders who may want to participate in such tender offer, or who may want to replace some or all of the members of the board of directors.

ADGE's board of directors may issue additional shares of preferred stock without stockholder approval.

ADGE's certificate of incorporation authorizes the issuance of up to 10,000,000 shares of preferred stock.

Accordingly, ADGE's board of directors may, without shareholder approval, issue one or more new series of preferred stock with rights which could adversely affect the voting power or other rights of the holders of outstanding shares of common stock. In addition, the issuance of shares of preferred stock may have the effect of rendering more difficult or discouraging, an acquisition or change of control of ADGE. Although ADGE does not have any current plans to issue any shares of preferred stock, it may do so in the future.

Trading of ADGE's common stock is restricted by the SEC's "penny stock" regulations which may limit a stockholder's ability to buy and sell ADGE's stock.

The SEC has adopted regulations which generally define "penny stock" to be any equity security that has a market price less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exceptions. ADGE's securities may be covered by the penny stock rules, which impose additional sales practice requirements on broker-dealers who sell to persons other than established customers and accredited investors. The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document in a form prepared by the SEC that provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with current bid and other quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction and monthly account statement showing the market value of each penny stock held in the customer's account. The bid and offer quotations, and the broker-dealer and salesperson compensation information, must be given to the customer orally or in writing prior to effecting the transaction and must be given to the customer in writing before or with the customer's confirmation. In addition, the penny stock rules require that, prior to a transaction in a penny stock not otherwise exempt from these rules, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. These disclosure and suitability requirements may have the effect of reducing the level of trading activity in the secondary market for a stock that is subject to these penny stock rules. Consequently, these penny stock rules may affect the ability of broker-dealers to trade ADGE's securities. ADGE believes that the penny stock rules discourage investor interest in and limit the marketability of ADGE's capital stock. Trading of ADGE's capital stock may be restricted by the SEC's "penny stock" regulations which may limit a stockholder's ability to buy and sell ADGE's stock.



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CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This joint proxy statement/prospectus, including information included or incorporated by reference into this joint proxy statement/prospectus, includes forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. All statements regarding Tecogen's, or ADGE's expected future financial position, results of operations, cash flows, funds from operations, dividends and dividend plans, financing plans, business strategy, budgets, projected costs, operating metrics, capital expenditures, competitive positions, acquisitions, investment opportunities, merger integration, growth opportunities, and dispositions, and the objectives of management for future operations and statements that include words such as "anticipate," "if," "believe," "plan," "estimate," "expect," "intend," "may," "could," "should," "seek," "target," "goal," "project," "estimate," "will" and other similar expressions in negative form of the same are forward-looking statements. Such forward-looking statements are inherently uncertain, and security holders must recognize that actual results may differ from the companies' expectations.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, most of which are difficult to predict and many of which are beyond Tecogen's and ADGE's control. These include the factors described under "Risk Factors," as well as:

- the possibility that the proposed transactions will not close, including for failure to obtain applicable stockholder approvals or the failure to satisfy other closing conditions under the Merger Agreement or by the termination of the Merger Agreement;
- the possibility that the anticipated benefits from the Merger may not be realized or may take longer to realize than expected;
- unexpected costs or unexpected liabilities that may arise from the transactions contemplated by the Merger Agreement, whether or not completed;
- each company's success in implementing its business strategy and its ability to identify, underwrite, finance, consummate and integrate diversifying acquisitions or investments;
- increases in each company's cost of borrowing as a result of changes in interest rates and other factors;
- each company's ability to pay down, refinance, restructure and/or extend its indebtedness as it becomes due;
- the outcome of any legal proceedings instituted against Tecogen, ADGE or others following announcement or completion of the Merger;
- the nature and extent of future competition; and
- changes in general economic conditions and/or economic conditions in the markets in which each company may, from time to time, compete and the effect of those changes on the company's revenues and its ability to access the capital markets or other sources of funds.

The foregoing list of factors is not exhaustive. Additional information concerning these and other risk factors is contained in the section of this joint proxy statement/prospectus entitled "Risk Factors" as well as other SEC filings, as such filings may be amended from time to time. All subsequent written and oral forward looking statements concerning Tecogen, ADGE and the transactions contemplated by the Merger Agreement or other matters attributable to Tecogen or ADGE or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements above.

All forward looking statements, expressed or implied, included in this joint proxy statement/prospectus are expressly qualified in their entirety by this cautionary statement. This cautionary statement should also be considered in connection with any subsequent written or oral forward looking statements that Tecogen, ADGE or persons acting on their behalf may issue.

Except as otherwise required by applicable law, Tecogen and ADGE disclaim any duty to update any forward looking statements, all of which are expressly qualified by the statements in this section. See "Where You Can Find More Information."

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THE TECOGEN SPECIAL MEETING

Date, Time, Place and Purpose of Tecogen's Special Meeting

The special meeting of the stockholders of Tecogen will be held at Tecogen's principal executive offices at 45 First Avenue, Waltham, MA 02451, on [\*], commencing at [\*], local time. At the Tecogen special meeting, or at any adjournment or postponement thereof, Tecogen stockholders will be asked to approve the Tecogen Share Issuance Proposal.

Recommendation of the Tecogen Board

Tecogen Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously approved the Merger Agreement and the transactions contemplated by the Merger Agreement, including the issuance of the shares of Tecogen common stock in the Merger, and directed that the Share Issuance Proposal be submitted for consideration at the Tecogen special meeting. The Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote "FOR" the Tecogen Share Issuance Proposal. The Merger cannot be completed without the approval by Tecogen stockholders of the Tecogen Share Issuance Proposal. See "[The Merger - Tecogen's Reasons for the Merger: Recommendation by the Tecogen Board of Directors.](#)"

Record Date; Who Can Vote at Tecogen's Special Meeting

The Tecogen Board of Directors has fixed the close of business on [\*], as the record date for the determination of the Tecogen common stockholders entitled to receive notice of, and to vote at, Tecogen's special meeting and any postponements or adjournments of the special meeting. Only holders of record of Tecogen common stock at the close of business on the record date are entitled to receive notice of, and to vote at, Tecogen's special meeting. As of Tecogen's record date, there were [\*] shares of Tecogen common stock outstanding and entitled to be voted at Tecogen's special meeting, held by approximately [\*] holders of record.

Each holder of record of common stock on the record date will be entitled to one vote for each share held on all matters to be voted upon at the Tecogen special meeting.

Vote Required for Approval; Quorum

The approval of the Tecogen Share Issuance Proposal requires the affirmative vote of a majority of the votes cast by the holders of all of the shares of Tecogen common stock present in person or represented by proxy at the special meeting at which a quorum is present. This means the number of shares voted "FOR" the Tecogen Share Issuance Proposal must exceed the number of shares voted "AGAINST" the Tecogen Share Issuance Proposal. Abstentions and broker non-votes are not considered votes cast for the foregoing purpose, and will have no effect on the vote for this proposal.

At the Tecogen special meeting, holders of a majority in voting power of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at the meeting, present in person, or represented by proxy, shall constitute a quorum for the transaction of business. Failures to vote, which include failure to provide instructions to your broker or other nominee if your shares are held in "street name," will not be counted in determining whether a quorum is present.

Manner of Voting

Tecogen stockholders may submit their votes on the proposal to be voted on at the Tecogen special meeting in person or by proxy. Tecogen stockholders can vote in advance in the following ways:

• Internet. Tecogen stockholders may vote over the Internet by going to the website listed on their proxy card or voting instruction form. Once at the website, they should follow the instructions to vote.

• Telephone. Tecogen stockholders may vote using the toll-free number listed on their proxy card or voting instruction form.

• Mail. Tecogen stockholders may vote by completing, signing, dating and returning their proxy card or voting instruction form in the pre-addressed postage paid envelope provided.

Tecogen common stockholders should refer to their proxy cards or the information forwarded by their broker or other nominee to see which options are available to them.

The Internet and telephone voting procedures are designed to authenticate stockholders and to allow them to confirm that their instructions have been properly recorded. If you vote over the Internet or by telephone, then you do not need to return a written proxy card or voting instruction card by mail.

The method by which Tecogen common stockholders vote will in no way limit their right to vote at Tecogen's special meeting if they later decide to attend the meeting and vote in person. If shares of Tecogen common stock are held in the name of a broker or other nominee, Tecogen common stockholders must obtain a "legal proxy," executed in their favor, from the broker or other nominee (which may take several days), to be able to vote in person at Tecogen's special meeting.



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All shares of Tecogen common stock entitled to vote and which are represented by properly completed proxies received prior to the Tecogen special meeting, which are not revoked, will be voted at the Tecogen special meeting as instructed on the proxies. If you properly submit a proxy card, but do not indicate how your shares of Tecogen common stock should be voted on a matter, the shares of Tecogen common stock represented by your proxy card will be voted as Tecogen Board of Directors unanimously recommends and therefore “FOR” the Tecogen Share Issuance Proposal. If you do not provide voting instructions to your broker or other nominee, your shares of Tecogen common stock will NOT be voted at the Tecogen special meeting and will not have an effect on the Tecogen Share Issuance Proposal.

### Shares Held in “Street Name”

If your shares are held in “street name,” the availability of telephone and internet voting will depend on the voting processes of the applicable bank or brokerage firm. Therefore, it is recommended that you follow the voting instructions on the form you receive from your bank or brokerage firm.

### Revocation of Proxies or Voting Instructions

You may revoke your proxy or change your vote at any time before your proxy is voted at the Tecogen special meeting or the ADGE special meeting, as applicable. If you are a holder of record, you can do this in any of the three following ways:

by sending a written notice to the Secretary of Tecogen at 45 First Ave, Waltham, MA 02451 in time to be received before the Tecogen special meeting stating that you would like to revoke your proxy;

by completing, signing and dating another proxy card and returning it by mail in time to be received before the Tecogen special meeting or by completing a later dated proxy over the Internet or by telephone, in which case your later dated proxy will be recorded and your earlier proxy revoked; or

if you are a holder of record, you can attend the Tecogen special meeting and vote in person, which will automatically cancel any proxy previously given, or you may revoke your proxy in person, but your attendance alone at the special meeting will not revoke any proxy that you have previously given.

If you choose either of the first two methods, you must submit your notice of revocation or your new proxy to the Corporate Secretary of Tecogen no later than the beginning of the applicable special meeting. If your shares are held in street name by your broker or nominee, you should contact them to change your vote.

### Tabulation of the Votes

Tecogen will appoint an Inspector of Election for Tecogen’s special meeting to tabulate the votes.

### Stockholder Proposals for the Next Annual Meeting

A stockholder who, in accordance with Rule 14a-8, or Rule 14a-8, under the Securities Exchange Act of 1934, as amended, or the Exchange Act, wants to present a proposal for inclusion in the Company's 2017 Proxy Statement and proxy card relating to the 2017 Annual Meeting of Stockholders must submit the proposal by December 30, 2016. In order for the proposal to be included in the Proxy Statement, the stockholder submitting the proposal must meet certain eligibility standards and comply with certain regulations established by the SEC.

Stockholders who wish to present a business proposal or nominate persons for election as directors at the Company's 2017 Annual Meeting of Stockholders must provide a notice of the business proposal or nomination in accordance with Section 1.11 of our Bylaws, in the case of business proposals, or Section 1.10 of our Bylaws, in the case of director nominations. In order to be properly brought before the 2017 Annual Meeting of Stockholders, Sections 1.10 and 1.11 of our Bylaws require that a notice of the business proposal the stockholder wishes to present (other than a matter brought pursuant to Rule 14a-8), or the person or persons the stockholder wishes to nominate as a director, must be received at our principal executive office not less than 90 days, and not more than 120 days, prior to the first anniversary of the Company's prior year's annual meeting. Therefore, any notice intended to be given by a stockholder with respect to the Company's 2017 Annual Meeting of Stockholders pursuant to our Bylaws must be received at our principal executive office no earlier than February 23, 2017 and no later than March 25, 2017. However, if the date of our 2017 Annual Meeting of Stockholders occurs more than 30 days before or 30 days after June 23, 2016, the anniversary of the 2016 Annual Meeting of Stockholders, a stockholder notice will be timely if it is received at our

principal executive office by the later of (1) the 120th day prior to such annual meeting or (2) the close of business on the tenth day following the day on which public disclosure of the date of the meeting was made. To be in proper form, a stockholder's notice must include the specified information concerning the stockholder and the business proposal or nominee, as described in Sections 1.10 and 1.11 of our Bylaws.

All proposals must be mailed to the Company's principal executive office, at the address stated herein, and should be directed to the attention of the Secretary of the Company.

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PROPOSAL SUBMITTED TO TECOGEN STOCKHOLDERS

Approval of the Tecogen Share Issuance Proposal

Pursuant to the rules of the Nasdaq Capital Market, Tecogen must obtain the approval of its stockholders for the issuance of its common stock to ADGE stockholders in connection with the Merger, which we refer to as the Tecogen Share Issuance Proposal.

As of the record date for the Tecogen special meeting, Tecogen has 20,043,052 shares of common stock issued and outstanding. As discussed elsewhere in this joint proxy statement/prospectus, it is currently estimated that at the effective time of the Merger, Tecogen will be required to issue in the aggregate approximately 5,098,950 shares of Tecogen common stock to stockholders of ADGE, including (i) 165,324 shares of Tecogen common stock that may be issued following the Merger upon exercise of outstanding ADGE stock options, and (ii) 270,689 shares of common stock issuable upon exercise of outstanding warrants to purchase ADGE common stock. See "[The Merger](#)," "[The Merger Agreement](#)," "[Information About ADGE](#)," and "[Information About Tecogen](#)."

It is a condition to the completion of the Merger that the stockholders of Tecogen approve the issuance of Tecogen common stock to security holders of ADGE in connection with the Merger, and therefore completion of the Merger requires approval of this proposal. See "[The Merger Agreement - Conditions to Completion of the Merger](#)."

Required Vote

The approval of the Tecogen Share Issuance Proposal requires the affirmative vote of a majority of the votes cast by the holders of all of the shares of Tecogen common stock present in person or represented by proxy at the special meeting at which a quorum is present. This means the number of shares voted "FOR" the Tecogen Share Issuance Proposal must exceed the number of shares voted "AGAINST" the Tecogen Share Issuance Proposal. Abstentions and broker non-votes are not considered votes cast for the foregoing purpose, and will have no effect on the vote for this proposal.

The Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote "FOR" the Tecogen Share Issuance Proposal.

In considering the recommendation of the Tecogen Board of Directors, Tecogen stockholders should be aware that the directors and executive officers of Tecogen have interests in the proposed Merger that are in addition to, or different from, any interests they might have as stockholders. See "[The Merger - Interests of Tecogen's Directors and Executive Officers in the Merger](#)."

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THE ADGE SPECIAL MEETING

Date, Time, Place and Purpose of ADGE's Special Meeting

The special meeting of the stockholders of ADGE will be held at ADGE's principal executive offices at 45 First Avenue, Waltham, MA 02451, on [\*], commencing at [\*], local time. At the ADGE special meeting, or at any adjournment or postponement thereof, ADGE stockholders will be asked to approve the ADGE Merger Approval Proposal.

Recommendation of ADGE Board

The ADGE Board of Directors has carefully considered the terms of the Merger Agreement and has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of ADGE, and (iii) directed that the foregoing proposals be submitted for consideration at the ADGE special meeting. The ADGE Board of Directors unanimously recommends that ADGE stockholders vote "FOR" the ADGE Merger Approval Proposal. The Merger cannot be completed without the approval by the ADGE stockholders of the ADGE Merger Approval Proposal. See "The Merger - ADGE's Reasons for the Merger: Recommendation by the ADGE Board of Directors."

Record Date; Who Can Vote at ADGE's Special Meeting

The ADGE Board of Directors has fixed the close of business on [\*], as the record date for determination of ADGE common stockholders entitled to receive notice of, and to vote at, ADGE's special meeting and any postponements or adjournments of the special meeting. Only holders of record of ADGE common stock at the close of business on the record date are entitled to receive notice of, and to vote at, ADGE's special meeting. On ADGE record date, there were [\*] shares of ADGE common stock outstanding and entitled to vote at the ADGE special meeting, held by approximately [\*] holders of record.

Each share of ADGE common stock is entitled to one vote on each proposal to be voted on at the ADGE special meeting.

Vote Required for Approval: Quorum

The ADGE Merger Approval Proposal requires the affirmative vote of the holders of a majority of the outstanding common stock of ADGE entitled to vote on such proposal, assuming a quorum is present at the ADGE special meeting. Abstentions and failures to vote, including a failure to instruct your broker, bank or nominee to vote, will have the same effect as a vote against the ADGE Merger Approval Proposal.

At the ADGE special meeting, holders of a majority in voting power of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at the meeting, present in person, or represented by proxy, shall constitute a quorum for the transaction of business. Abstentions will be counted in determining whether a quorum is present at the ADGE special meeting.

Manner of Voting

ADGE stockholders may submit their votes on the proposal to be voted on at the ADGE special meeting in person or by proxy. ADGE stockholders can vote in advance in the following ways:

• Internet. ADGE stockholders may vote over the Internet by going to the website listed on their proxy card or voting instruction form. Once at the website, they should follow the instructions to vote.

• Telephone. ADGE stockholders may vote using the toll-free number listed on their proxy card or voting instruction form.

• Mail. ADGE stockholders may vote by completing, signing, dating and returning their proxy card or voting instruction form in the pre-addressed postage paid envelope provided.

ADGE common stockholders should refer to their proxy cards or the information forwarded by their broker or other nominee to see which options are available to them.

The Internet and telephone voting procedures are designed to authenticate stockholders and to allow them to confirm that their instructions have been properly recorded. If you vote over the Internet or by telephone, then you do not need to return a written proxy card or voting instruction card by mail.

The method by which ADGE common stockholders vote will in no way limit their right to vote at ADGE's special meeting if they later decide to attend the meeting and vote in person. If shares of ADGE common stock are held in the name of a broker or other nominee, ADGE common stockholders must obtain a "legal proxy," executed in their favor, from the broker or other nominee (which may take several days), to be able to vote in person at ADGE's special meeting.

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All shares of ADGE common stock entitled to vote and which are represented by properly completed proxies received prior to the ADGE special meeting, which are not revoked, will be voted at the ADGE special meeting as instructed on the proxies. If you properly submit a proxy card, but do not indicate how your shares of ADGE common stock should be voted on a matter, the shares of ADGE common stock represented by your proxy card will be voted as the ADGE Board of Directors unanimously recommends and therefore "FOR" the ADGE Merger Approval Proposal. If you do not provide voting instructions to your broker or other nominee, your shares of ADGE common stock will NOT be voted at the ADGE special meeting and will have the same effect as a vote "AGAINST" the ADGE Merger Approval Proposal.

### Shares Held in "Street Name"

If your shares are held in "street name," the availability of telephone and internet voting will depend on the voting processes of the applicable bank or brokerage firm. Therefore, it is recommended that you follow the voting instructions on the form you receive from your bank or brokerage firm.

### Revocation of Proxies or Voting Instructions

You may revoke your proxy or change your vote at any time before your proxy is voted at the ADGE special meeting. If you are a holder of record, you can do this in any of the three following ways:

- by sending a written notice to the Secretary of ADGE at 45 First Avenue, Waltham, MA 02451 in time to be received before the ADGE special meeting stating that you would like to revoke your proxy;
- by completing, signing and dating another proxy card and returning it by mail in time to be received before the ADGE special meeting or by completing a later dated proxy over the Internet or by telephone, in which case your later dated proxy will be recorded and your earlier proxy revoked; or
- if you are a holder of record, you can attend the ADGE special meeting and vote in person, which will automatically cancel any proxy previously given, or you may revoke your proxy in person, but your attendance alone at the special meeting will not revoke any proxy that you have previously given.

If you choose either of the first two methods, you must submit your notice of revocation or your new proxy to the Corporate Secretary of ADGE no later than the beginning of the special meeting. If your shares are held in street name by your broker or nominee, you should contact them to change your vote.

### Tabulation of the Votes

ADGE will appoint an Inspector of Election for ADGE's special meeting to tabulate affirmative and negative votes and abstentions.

### Stockholder Proposals for the Next Annual Meeting

A stockholder who, in accordance with Rule 14a-8, or Rule 14a-8, under the Securities Exchange Act of 1934, as amended, or the Exchange Act, wants to present a proposal for inclusion in the Company's 2017 Proxy Statement and proxy card relating to the 2017 Annual Meeting of Stockholders must submit the proposal by December 30, 2016. In order for the proposal to be included in the Proxy Statement, the stockholder submitting the proposal must meet certain eligibility standards and comply with certain regulations established by the SEC.

Stockholders who wish to present a business proposal or nominate persons for election as directors at the Company's 2017 Annual Meeting of Stockholders must provide a notice of the business proposal or nomination in accordance with Section 1.11 of our Bylaws, in the case of business proposals, or Section 1.10 of our Bylaws, in the case of director nominations. In order to be properly brought before the 2017 Annual Meeting of Stockholders, Sections 1.10 and 1.11 of our Bylaws require that a notice of the business proposal the stockholder wishes to present (other than a matter brought pursuant to Rule 14a-8), or the person or persons the stockholder wishes to nominate as a director, must be received at our principal executive office not less than 90 days, and not more than 120 days, prior to the first anniversary of the Company's prior year's annual meeting. Therefore, any notice intended to be given by a stockholder with respect to the Company's 2017 Annual Meeting of Stockholders pursuant to our Bylaws must be received at our principal executive office no earlier than February 28, 2017 and no later than March 30, 2017. However, if the date of our 2017 Annual Meeting of Stockholders occurs more than 30 days before or 30 days after June 28, 2017, the anniversary of the 2016 Annual Meeting of Stockholders, a stockholder notice will be timely if it is received at our

principal executive office by the later of (1) the 120th day prior to such annual meeting or (2) the close of business on the tenth day following the day on which public disclosure of the date of the meeting was made. To be in proper form, a stockholder's notice must include the specified information concerning the stockholder and the business proposal or nominee, as described in Sections 1.10 and 1.11 of our Bylaws.

All proposals must be mailed to the Company's principal executive office, at the address stated herein, and should be directed to the attention of the Secretary of the Company.

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PROPOSAL SUBMITTED TO ADGE STOCKHOLDERS

Adoption of the Merger Agreement

ADGE is asking its stockholders to approve the ADGE Merger Approval Proposal. For a detailed discussion of the terms and conditions of the Merger, see "The Merger" and for a discussion of the Merger Agreement, see "The Merger Agreement." After careful consideration, the ADGE Board of Directors, by a unanimous vote of all directors, unanimously approved the Merger Agreement and the transactions contemplated by the Merger Agreement. It is a condition to the completion of the Merger that the stockholders of ADGE approve the ADGE Merger Approval Proposal in connection with the Merger, and therefore completion of the Merger requires approval of this proposal.

Required Vote

The ADGE Merger Approval Proposal requires the affirmative vote of a majority of the outstanding shares of ADGE common stock entitled to vote on such proposal. For purposes of this proposal, a failure to vote, a failure to instruct your bank, broker or nominee to vote or an abstention from voting will have the same effect as a vote "AGAINST" the ADGE Merger Approval Proposal.

The ADGE Board of Directors unanimously recommends that ADGE stockholders vote "FOR" the ADGE Merger Approval Proposal.

In considering the recommendation of the ADGE Board of Directors, ADGE stockholders should be aware that the directors and executive officers of ADGE have interests in the proposed transaction that are in addition to, or different from, any interests they might have as stockholders. See "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger."



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THE MERGER

The following is a description of the material aspects of the Merger. While Tecogen and ADGE believe that the following description covers the material terms of the Merger, the description may not contain all of the information that may be important to you. You should read this joint proxy statement/prospectus carefully and in its entirety, including the Merger Agreement attached to this joint proxy statement/prospectus as Annex A and incorporated herein by reference, for a more complete understanding of the Merger.

Effects of the Merger

The Merger Agreement provides for the Merger of Merger Sub with and into ADGE. ADGE will thereby become a wholly-owned subsidiary of Tecogen.

In the Merger, each outstanding share of ADGE common stock (other than shares of ADGE common stock owned by ADGE or any wholly-owned subsidiary of ADGE, which will be cancelled) will be exchanged for the right to receive 0.092 of a share, or the Exchange Ratio, of Tecogen common stock. The Exchange Ratio is fixed and will not be adjusted to reflect stock price changes prior to the closing of the Merger. No fractional shares will be issued in the Merger, and cash will be paid in lieu thereof. Tecogen stockholders will continue to own their existing Tecogen shares of common stock following the consummation of the Merger.

Background of the Merger

The terms of the Merger Agreement are the result of negotiations between representatives of Tecogen and ADGE. The following is a brief description of the background of these negotiations, the Merger and related transactions.

In January 2016, John Hatsopoulos and Benjamin Locke, the co-CEOs of Tecogen and ADGE began having informal meetings to discuss a potential transaction between the two companies. The management also met with representatives of Sullivan & Worcester ("S&W"), outside counsel for ADGE and Tecogen, to evaluate the process of a transaction and the form. The management teams of both companies, including David Garrison, the Tecogen CFO, and Bonnie Brown, the ADGE CFO, had informal meetings during the period January to March to discuss the companies' respective businesses, the potential benefits of a combination, and the proposed transaction generally. In March 2016, Mr. Hatsopoulos and Mr. Locke each decided to formally present the strategic option of a business combination to their respective Boards of Directors.

On March 15, 2016, the Tecogen Board of Directors met telephonically, with Robert Panora, the President of Tecogen, Benjamin Locke, the Co-CEO of Tecogen, David Garrison, CFO of Tecogen, and an observer representative of Michaelson Capital Special Finance Fund attending. John Hatsopoulos, a director and Co-CEO of Tecogen, began a discussion of a potential merger between Tecogen and ADGE, and summarized the proposed acquisition of ADGE and the process recommended by counsel. After discussion, the Board of Directors created a special committee (the "Tecogen Special Committee") for the purpose of negotiation with the ADGE Special Committee, if a decision to proceed was made, and appointed independent directors, Earl Lewis and Dr. Joseph Aoun, to serve as its members, with authority to consider, the advisability of the transaction to Tecogen and its stockholders, and to discuss and negotiate a transaction and engage, at Tecogen's expense, investment bankers, financial advisors, attorneys, accountants or other advisors as deemed appropriate.

At a meeting of the ADGE Board of Directors also on March 15, 2016, Mr. Hatsopoulos brought to the Board of Directors' attention that the management teams of ADGE and Tecogen had been discussing a potential merger between ADGE with Tecogen. In addition, the Board discussed the outstanding ADGE convertible debt. Following discussion, the Board of Directors formed a special committee (the "ADGE Special Committee") and appointed independent directors, Deanna Petersen and John Rowe, to serve as its members, with authority to take all actions necessary to evaluate a merger with Tecogen, including retention, at ADGE expense, of an investment banker and counsel for the ADGE Special Committee.

On March 18, 2016, the ADGE Special Committee met telephonically, with representatives of Gennari Aronson, LLP ("Gennari Aronson"), as potential counsel to the ADGE Special Committee, and Cassel Salpeter, as ADGE's potential investment bankers, attending. The discussions included transaction processes, ADGE's business and challenges, as well as the advisors' background, experience and its scope of services and process.

On March 21, 2016, the ADGE Special Committee met telephonically, with representatives of Gennari Aronson, Cassel Salpeter, and S&W. Discussions included a potential transaction that would eliminate the ADGE convertible debt.

On March 23, 2016, the Tecogen Special Committee met telephonically, with representatives of Chu, Ring & Hazel LLP ("CR&H"), as potential counsel to the Tecogen Special Committee, and representatives of Scarsdale Equities ("Scarsdale"), an investment banking firm, as potential financial advisor, to discuss the terms of the proposed merger and the process. The advisors provided an overview of the firm's experience and background and the scope of its proposed representation. After discussion, the Tecogen Special Committee appointed such legal counsel but concluded that further elaboration of Scarsdale's proposed work was needed.

On March 24, 2016, the Tecogen Special Committee met telephonically and discussed the engagement of CR&H and authorized the negotiation and execution of its engagement letter.

On March 25, 2016, the ADGE Special Committee met telephonically, with representatives of Gennari Aronson and Cassel Salpeter, to discuss the terms of Cassel Salpeter's engagement.

On March 30, 2016, the Tecogen Special Committee met telephonically with its counsel to discuss the potential merger, process and due diligence. After discussion, the Tecogen Special Committee determined to continue discussions with Scarsdale, and to request due diligence materials.

On April 1, 2016, the Tecogen Special Committee met telephonically, with its counsel attending, to continue its discussions on process, the investment banker search and due diligence. The Special Committee, at a second telephonic meeting at which Scarsdale was present, continued to discuss Scarsdale's role, qualifications and deliverables.

On April 1, 2016, the ADGE Special Committee met telephonically, with representatives of Gennari Aronson and Cassel Salpeter attending, to further discuss a convertible debt transaction and the terms of Cassel Salpeter's engagement.

On April 5, 2016, the Tecogen Special Committee met telephonically with its counsel to continue the discussions from April 1, to discuss the potential terms of an agreement, the Scarsdale engagement proposals and due diligence materials.

On April 5, 2016, the ADGE Special Committee met telephonically, with representatives of Cassel Salpeter and Gennari Aronson to discuss the proposed process, investment banking services and the proposed convertible debt transaction. The ADGE Special Committee approved Cassel Salpeter as the ADGE Special Committee's advisor.

On April 8, 2016, the ADGE Special Committee met telephonically, with representatives of Cassel Salpeter and Gennari Aronson and discussed the ADGE debt transaction.

On April 12, 2016, the ADGE Special Committee met telephonically, with representatives of Cassel Salpeter and Gennari Aronson to discuss the transaction process and investment banking fees as well as the addition of Christine Klaskin as a member of the ADGE Special Committee. Such request was communicated to the ADGE board of directors.

On April 22, 2016, the members of the Tecogen Board of Directors by written consent formalized the powers of the Tecogen Special Committee, among other things, to consider the advisability of the transaction to Tecogen and its stockholders, to discuss and negotiate a transaction, and to engage, at Tecogen's expense, such additional investment bankers, financial advisors, attorneys, accounts or other advisors as deemed appropriate.

On April 25, 2016, the ADGE Board of Directors met and discussed the ADGE Special Committee's activities, approved a transaction in which the outstanding convertible debt would be exchanged for shares of its subsidiary, EuroSite Power Inc., and appointed Ms. Petersen as the Chairperson of the ADGE Special Committee.

On April 25, 2016, the ADGE Special Committee met, with representatives of Gennari Aronson and Cassel Salpeter. Also joining the meeting were Mr. Hatsopoulos and Ms. Brown. The discussions included a review of a potential transaction timeline, ADGE and its business and prospects, due diligence materials and process. The ADGE Special Committee determined to engage Gennari Aronson and Cassel Salpeter.

On May 10, 2016, the Tecogen Special Committee met telephonically with its counsel to further discuss Scarsdale's retention and due diligence information. The Company determined to retain Scarsdale and to continue its due diligence.

On June 13, 2016, the Tecogen Special Committee met telephonically, with its counsel attending, to discuss the Scarsdale engagement letter and the investment banker search. The Special Committee authorized the signing of the

Scarsdale engagement letter, and determined to continue review of preliminary due diligence information.

On July 1, 2016, the ADGE Special Committee met telephonically, with representatives of Gennari Aronson and Cassel Salpeter, to discuss the status of the transaction and the stock price history of both ADGE and Tecogen.

On July 5, 2016, the Tecogen Special Committee met telephonically, with its counsel and discussed continuing its review of preliminary due diligence materials and requested further due diligence information and analysis.

On August 2, 2016, the Tecogen Special Committee met telephonically, with its counsel attending, to discuss additional information provided to the Committee and the valuation materials and analysis provided by Scarsdale and additional information it believed it required.

On August 4, 2016, the Tecogen Special Committee met telephonically, with its counsel and Mr. Garrison attending, to discuss the Scarsdale valuation analysis, the financial condition of the entities, and the effect on the companies of a merger.

On August 8, 2016, Tecogen and ADGE entered into a Mutual Confidentiality Agreement.

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On August 19, 2016, the Tecogen Special Committee met telephonically, with Mr. Hatsopoulos, its counsel and representatives of S&W to discuss further the process, the review and timing of due diligence information, the Scarsdale valuation analysis, as well as the target timetable for negotiating and signing an agreement.

On August 22, 2016, the Tecogen Special Committee met telephonically, with its counsel attending, to discuss additional due diligence information received.

On August 23, 2016, the Tecogen Special Committee met telephonically on two occasions, with its counsel attending, to review further the status of due diligence and to develop additional information requests for Scarsdale and management. The Tecogen Special Committee determined to review the latest projections and conduct further discussions with Mr. Garrison and Scarsdale.

On August 25, 2016, the Tecogen Special Committee and its counsel met telephonically and determined to suspend further activity until the Tecogen Board meeting later that day.

At the Tecogen Board meeting on August 25, 2016, Mr. Lewis summarized the Tecogen Special Committee's work to date. After discussion, the Board of Directors having been advised of the impending unavailability of the members of the Tecogen Special Committee, determined to appoint Ms. Angelina Galiteva and Dr. Ahmed Ghoniem to the Tecogen Special Committee in place of the two current members.

On August 26, 2016, the reconstituted Tecogen Special Committee met with lawyers from White White & Van Etten PC ("WW&V"), as potential alternative committee counsel, and S&W, Mr. Locke, Mr. Panora, Mr. Garrison and Ms. Brown. After discussion, WW&V was engaged and discussion ensued regarding the pros and cons of a proposed merger, ADGE's financial statements and business model. Scarsdale presented an overview of its analysis including what it considered to be a reasonable price range for the transaction.

On August 29, 2016, the Tecogen Special Committee met telephonically, with representatives of WW&V to review and discuss due diligence materials provided to the Tecogen Special Committee and a preliminary valuation of ADGE based on the Scarsdale presentation.

On September 12, 2016, the Tecogen Special Committee met telephonically, with WW&V and Scarsdale attending, to discuss Scarsdale's financial analysis. After discussion, the Tecogen Special Committee concluded that it would recommend to the Tecogen Board that an offer should be either \$0.29 or \$0.30 per share and that a merger would be desirable on those terms.

On September 14, 2016, the Tecogen Special Committee met telephonically, with WW&V attending, and, after discussion of the proposed transaction, determined to recommend that an offer of \$0.30 per share be made to ADGE's Special Committee to be paid in Tecogen stock, which offer was subsequently communicated to ADGE.

On September 16, 2016, Tecogen presented to representatives of Gennari Aronson, a written offer of \$0.30 per share, which counsel forwarded to the ADGE Special Committee.

On September 21, 2016, the ADGE Special Committee met telephonically, with representatives of Gennari Aronson and Cassel Salpeter, and discussed the proposed transaction and the September 16 written offer from Tecogen and financial information received to date. After discussion, the ADGE Special Committee determined to respond to Tecogen's September 16 offer by requesting additional information and clarification. In connection therewith, it also determined to advise the Tecogen Special Committee that the Tecogen Special Committee was not giving appropriate weight to the recent financial performance of ADGE.

On September 26, 2016, the Tecogen Special Committee, its counsel and Mr. Garrison met telephonically to discuss the ADGE Special Committee's September 21st response to the initial offer as well as updated financial information and projections of ADGE.

On September 27, 2016, the Tecogen Special Committee met telephonically with Mr. Locke, Mr. Panora, and its counsel to discuss the updated ADGE financial information.

On September 30, 2016, the Tecogen Special Committee met telephonically with its counsel, and received and discussed an updated presentation from Scarsdale. After discussion, the Tecogen Special Committee determined to amend the summary of proposed terms, changing the proposed purchase price to \$0.32.

On October 6, 2016, the ADGE Special Committee met telephonically, with representatives of Cassel Salpeter, and Gennari Aronson, to discuss the response of the Tecogen Special Committee to the ADGE Special Committee's

September 21 communication and the terms of the proposed transaction. The Special Committee also reviewed and discussed Cassel Salpeter's preliminary financial analysis with respect to ADGE, Tecogen and the proposed Merger. On October 10, 2016, the ADGE Special Committee met telephonically, with representatives of Cassel Salpeter and Gennari Aronson, and discussed a revised draft term sheet. Also discussed were potential terms of a merger agreement and further

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review of Cassel Salpeter's valuation and initial fairness analysis. It also determined to convey a proposal that the price of the transaction should be \$0.46 per share.

On October 14, 2016, the Tecogen Special Committee met telephonically, with its counsel attending, to discuss the negotiations and the ADGE request of \$0.46 per share. The Tecogen Special Committee, after discussion, determined to offer an increased price of \$0.35 per share. It also discussed that the cash price needed to be converted into a number of shares Tecogen common stock since the proposed transaction was a stock-for-stock merger. Because of the limited trading market of the Tecogen Stock, it suggested that the implicit valuation of Tecogen common stock should be determined by a 20-day "look back" at trading prices and that, given the low trading volume of shares of both companies that the transaction should be structured at a fixed exchange ratio with no so-called caps or collars.

On October 19, 2016, the ADGE Special Committee met telephonically, with representatives of Cassel Salpeter, and Gennari Aronson, and to continued its discussion from the October 10 meeting. It determined to propose a counter-offer of \$0.40 per share.

On October 21, 2016, the Tecogen Special Committee met telephonically, with its counsel attending, to discuss ongoing negotiations between the two Special Committees and both companies' investment banking advisors, ADGE Special Committee's \$0.40 per share offer and, with Scarsdale representatives joining the meeting, the valuation of ADGE. The Tecogen Special Committee determined to continue the discussions.

On October 21, 2016, the ADGE Special Committee met telephonically, with representatives of Gennari Aronson and Cassel Salpeter, and discussed the negotiations to date with respect to price and other terms. The ADGE Special Committee and its advisors also spoke with members of the Tecogen Special Committee and communicated their request for a price of \$0.40 or \$0.41 per share.

On October 24, 2016, the Tecogen Special Committee met telephonically, with its counsel and Scarsdale attending, to discuss further Scarsdale's updated valuation analysis. In addition, Mr. Locke joined the call to discuss the revised ADGE financial materials and the Committee determined to consider further another offer prior to the next meeting.

On October 25, 2016, the Tecogen Special Committee met telephonically, with its counsel attending, to discuss a revised final offer and determined to offer \$0.38 per share to the ADGE Special Committee.

During the period from October 26 through October 31, 2016, the two Special Committees and their legal counsel negotiated the Merger Agreement.

On October 29, 2016, the members of the ADGE Special Committee met telephonically, with representatives of Cassel Salpeter and Gennari attending, to discuss the status of the negotiations.

On October 31, 2016, the ADGE Special Committee met telephonically, with representatives of Gennari Aronson and Cassel Salpeter. At the meeting, representatives of Gennari Aronson reviewed with the ADGE Special Committee the committee's fiduciary duties and other legal matters in connection with the Special Committee's consideration of the transaction, including the proposed terms of the Merger Agreement that had been negotiated between the parties. The ADGE Special Committee also considered, among other things, the terms of the Merger Agreement that would allow ADGE to entertain certain third-party proposals following the execution and announcement of the Merger Agreement. Cassel Salpeter then reviewed its financial analysis with respect to ADGE, Tecogen and the proposed Merger.

Thereafter, at the request of the Special Committee, Cassel Salpeter rendered its oral opinion (which was confirmed in writing by delivery of Cassel Salpeter's written opinion dated the same date) as to, as of October 31, 2016, the fairness, from a financial point of view, to the Unaffiliated ADGE Holders, as defined below, of the exchange ratio in the Merger pursuant to the Merger Agreement. After discussion, the ADGE Special Committee determined to recommend to the ADGE Board of Directors the approval of the Merger and the Merger Agreement.

On November 1, 2016, Tecogen's Board of Directors met with Mr. Locke, Mr. Panora, Mr. Garrison, Michael Rispin, in-house counsel, representatives of each of S&W, WW&V and Scarsdale, and Barbara Ann Bernard and John Michaelson, both investors to discuss the Tecogen Special Committee's activities, and to hear and discuss an analysis of ADGE's business by Messrs. Hatsopoulos and Locke. Representatives of WW&V reviewed the directors' fiduciary duties and other legal matters in connection with the Tecogen Board's consideration of the transaction, including the proposed terms of the Merger Agreement that had been negotiated between the parties. Following discussion, at the request of the members of the Tecogen Special Committee, Scarsdale presented an overview of the transaction and

rendered its oral opinion that the proposed merger terms were fair, from a financial point of view, to the holders of the Tecogen common stock. After discussion, the Tecogen Board of Directors unanimously resolved to approve the Merger Agreement and the transactions contemplated therein and determined the Merger to be fair to and in the best interests of Tecogen and its stockholders.

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On November 1, 2016, the ADGE Board of Directors met with Mr. Locke, Ms. Brown, Michael Rispin, in-house counsel, and representatives of Gennari Aronson, S&W and Cassel Salpeter. Representatives of Gennari Aronson reviewed the directors' fiduciary duties and other legal matters in connection with the ADGE's Board of Directors' consideration of the transaction, including the proposed terms of the Merger Agreement. Following discussion, at the request of the Special Committee, Cassel Salpeter reviewed with the Board its financial analysis with respect to ADGE, Tecogen and the proposed Merger and its oral opinion as to the fairness of the exchange ratio in the Merger pursuant to the Merger Agreement, from a financial point of view, to the Unaffiliated ADGE Holders, as defined below, of the exchange ratio in the Merger pursuant to the Merger Agreement that was previously rendered to the Special Committee. After discussion, the ADGE Board unanimously resolved to approve the Merger Agreement and determined the Merger to be fair to and in the best interests of ADGE and its stockholders.

On November 1, 2016, the Merger Agreement was executed by the parties.

Prior to the opening of the financial markets on November 2, 2016, Tecogen and ADGE issued a press release announcing the execution of the Merger Agreement.

Tecogen's Reasons for the Merger; Recommendation by the Tecogen Board of Directors

After careful consideration and based in part on the recommendation of Tecogen Special Committee, the Tecogen Board of Directors, by a unanimous vote, at a meeting held on November 1, 2016, approved the Merger, the Merger Agreement and the transactions contemplated thereby, and determined to recommend that Tecogen's stockholders approve the Merger. The Tecogen Board, with the assistance of management and Tecogen's legal and financial advisors, considered a number of positive factors in its deliberations, as described below.

The Tecogen Board of Directors believes that the Merger will create value for the existing Tecogen stockholders. It believes that the Merger is important for competitive reasons and will also enhance Tecogen's financial stability and growth prospects. The following factors were considered by Tecogen Special Committee and the Board in coming to their respective decisions:

**Competition.** A number of competitors in the distributed generation and CHP business have recently launched Power Purchase Agreement (PPA) companies, or Yield Co. structured subsidiaries, in an effort to offer in-house financing for their equipment installations. These companies not only expand their potential customer base by eliminating financing impediments, but also tend to operate at attractive margins. Blue Earth Inc. (NASDAQ: BBLU) and Capstone Turbine Corporation (NASDAQ: CPST) are among those who have created PPA companies.

With ADGE as a wholly-owned subsidiary, Tecogen will be able to offer directly, and not through an affiliated company, this same cost-free-installation option to customers with no or limited access to financing or without sufficient capital on hand to purchase the equipment, or for those that may not want to own and maintain the equipment. While Tecogen in the past has offered customer referrals to ADGE, it has not benefited directly from the long-term contracted revenue stream generated by these referred projects. Similarly, Tecogen may have made referrals in the past to ADGE that ADGE (for whatever reason) did not manage to secure as contracted customers, representing a possible loss of business for Tecogen. With ADGE as a wholly-owned subsidiary, Tecogen expects to improve its success rate in securing customers with financing needs.

**Stable Revenue Stream.** ADGE brings a stable, long-term contracted, annuity-like revenue stream to Tecogen. This predictable and reliable stream of revenue is generated from the operation of on-site energy installations, which has generated upwards of \$6 million annually that can be used to fund Tecogen's growth initiatives. When added to Tecogen's stable base of service revenue, more than half of total projected combined company revenue would be generated by stable long-term contracted revenue streams (Tecogen service revenue plus ADGE revenue).

**Expense Elimination.** It is anticipated that the transaction will eliminate significant inter-company expense in consolidation and the financial performance of ADGE's assets will improve in consolidation. In other words, ADGE's history of losses would not directly carry over to the combined company because of pro forma adjustments to duplicative administrative functions, SEC reporting and other expenses that will be eliminated. Also, ADGE's assets are expected to be written down as a result of the Merger. The post-Merger company will benefit from Unfavorable Contract Liability (UCL) accounting methodology which will offset approximately 65% of ADGE's pre-Merger annual depreciation expense (from \$1.7 million to ~\$0.7 million).



For more information regarding the combined company's pro forma financial information please see "Summary - Unaudited Pro Forma Condensed Consolidated Financial Information"

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Negative Considerations to be Considered by Tecogen Stockholders

In considering the Merger, Tecogen stockholders should consider the following potential negative considerations. Potential for Contract Renegotiations. Because ADGE will be the surviving corporation in the Merger, the parties do not believe that the Merger will trigger contractual provisions prohibiting the assignment of ADGE's on-site utility customer contracts. It is possible, however, that some customers may seek to renegotiate their contracts on the basis that the Merger constitutes a prohibited assignment or that the Merger triggers change of control provisions.

EuroSite Installation Guarantees. ADGE has provided an operational and warranty-type guarantee for the seven EuroSite Power Inc., or Eurosite Power, installations that utilize Tecogen equipment. Despite the transfer of ADGE's interest in EuroSite Power, ADGE will still be bound by this guarantee of site performance. An off balance sheet reserve may need to be set up to account for this contingent liability.

EuroSite Convertible Debt Guarantee. ADGE guaranteed on a subordinated basis all amounts payable for EuroSite Power's 4% Senior Unsecured Convertible Notes. These notes, totaling \$300,000, are due in April 2018. Among other things, the guarantees provide that in the event of EuroSite Power's failure to pay principal or interest, the noteholder, subject to the terms and conditions set forth in an Amended Noteholder Agreement, may proceed directly against ADGE, as guarantor, to enforce the guarantee without first proceeding against EuroSite Power. If ADGE were required to pay the debt, however, it would be subrogated to the note holders' rights.

EuroSite Power Project Financing Guarantees. In conjunction with EuroSite Power's project financing agreement with Société Générale Equipment Finance (SGEF), ADGE provided a parent company guarantee of EuroSite Power's repayment obligations. This guarantee is for an initial 12 month term (ending March 2017) and is cancelable by advance notice given by ADGE to SGEF. Such notice has been given to SGEF by ADGE and became effective February 2017. This guarantee would require payment by ADGE only after efforts to collect from EuroSite Power's customer and EuroSite Power itself have failed. Total amount borrowed to date under this financing arrangement is approximately \$280,000. An off balance sheet reserve may be set up to account for the contingent liability.

Relationships and Overlaps

Stockholders considering this proposed transaction should consider the following relationships and overlaps:

Senior Leadership Overlap

John Hatsopoulos is the co-Chief Executive Officer of both Tecogen and ADGE.

Benjamin Locke is the co-Chief Executive Officer of both Tecogen and ADGE.

Robert Panora is the President and Chief Operation Officer of Tecogen and General Manager of ADGE.

Board Overlap

John Hatsopoulos is a member of the Board of Directors for both Tecogen and ADGE

Charles Maxwell is a member of the Board of Directors for Tecogen and Chairman of the Board of Directors of ADGE.

Ownership Overlap

The following directors and executive officers of Tecogen and ADGE own a potentially material amount of both ADGE and Tecogen common stock.

John Hatsopoulos beneficially owns more than approximately 16% of Tecogen and 1% of ADGE.

Charles Maxwell beneficially owns approximately 1% of Tecogen and 2% of ADGE.

Post merger, the beneficial ownership amount of John Hatsopoulos of Tecogen would decrease from 16% to 13.75%.

Charles Maxwell's beneficial ownership of Tecogen would decrease from 1% to 0.90%.

Stock Option Adjustments of ADGE Directors and Executive Officers Due to Merger

See, "The Merger - Interests of Tecogen's Directors and Executive Officers in the Merger", and "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger".

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Contracts and Business Relationship

On August 7, 2015, ADGE entered into a Facilities, Support Services and Business Agreement with Tecogen, or the Facilities Agreement. The Facilities Agreement replaced and amended version of the Facilities and Support Service Agreement, dated as of January 1, 2006 with ADGE. The Facilities Agreement provides that, in exchange for agreed upon fees, Tecogen will provide American DG with, among other things; (1) certain office space; (2) certain business support services; (3) certain rights to purchase cogeneration products directly from the Company at a discounted price; (4) certain rights to purchase Tecogen services at a discounted price; (5) certain rights that allow the ADGE to purchase Tecogen products from Tecogen sales representatives; and (6) the right to certain royalty fees. Absent required notice, the Facilities Agreement will automatically renew for one-month periods. Under this agreement, ADGE leases approximately 2,400 square feet of office space from Tecogen. Under the terms of the Facilities Agreement ADGE pays Tecogen a monthly fee of \$5,122 per month.

Tecogen is the primary supplier of cogeneration equipment and cogeneration maintenance services to ADGE.

Tecogen revenue from sales of cogeneration parts and service to ADGE during the years ended December 31, 2016 and 2015 amounted to \$957,760 and \$1,903,427, respectively.

Tecogen does not believe there are any types of voting agreements or voting arrangements between any shareholders, officers and directors that would make those individuals vote a certain way regarding the merger. Aside from the potential and immaterial conflicts of interests listed in this section and disclosed throughout this Form S-4, Tecogen does not believe there are any material conflict of interests present in this merger. Tecogen believes there are no material conflicts of interests present in this merger due to:

- the low amount of overlapping beneficial ownership of officers and directors of both companies
- the use of the special committee in the transaction who were empowered to independently negotiate the terms of the Merger and recommend to the board the merits of the Merger,
- the presence of shared power in the co-CEO role, and
- the presence and approval of a board of directors made up of a majority of independent members.

Additional Considerations

**Fixed Exchange Ratio.** The Tecogen Board of Directors required that the Exchange Ratio be fixed and that it will not fluctuate as a result of changes in the price of Tecogen common stock or ADGE common stock. A fixed Exchange Ratio limits the impact of external factors on the transaction.

**Opinion of Financial Advisor.** The Tecogen Board of Directors considered the opinion of Scarsdale, dated November 10, 2016, that, as of the date of the Merger Agreement and based upon and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations on the scope of review undertaken by Scarsdale as set forth in its opinion, the Exchange Ratio of 0.092 of a share of Tecogen common stock for one share of ADGE common stock pursuant to the Merger Agreement was fair, from a financial point of view, to the unaffiliated Tecogen stockholders, as more fully described elsewhere in this joint proxy statement/prospectus.

**Familiarity with Business.** The Tecogen Board of Directors considered its knowledge of the business, operations, financial condition, earnings and prospects of Tecogen and ADGE, taking into account the results of Tecogen's due diligence review of ADGE, as well as its knowledge of the current and prospective environment in which Tecogen and ADGE operate, including economic and market conditions.

**High Likelihood of Consummation.** The Tecogen Board of Directors considered the commitment on the part of both parties to complete the business combination between Tecogen and ADGE pursuant to their respective obligations under the terms of the Merger Agreement. Although there are no voting agreements of any Tecogen or ADGE stockholders to vote for the Merger, given the large insider holdings of both companies, it is believed there is a high likelihood of completion of the transaction.

**Cost Savings and Synergies.** The Tecogen Board of Directors considered the management estimates in excess of \$750,000 of synergies to be reasonable. Those cost savings included ADGE's reduced administrative costs from the elimination of SEC filing and listing requirements, duplicate personnel and reduced legal costs with a new combined company. Savings from combined service and maintenance fleets are expected to boost margins in operations.



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The Tecogen Board of Directors also considered a variety of risks and other potentially negative factors concerning the Merger Agreement and the Merger, including the following:

- the risk that failure to complete the Merger may negatively affect the price of Tecogen common stock and future business and financial results of Tecogen;
- the potential risk of diverting management focus and resources from operational matters and other strategic opportunities while working to implement the Merger and related transactions;
- the risk of not capturing all of the anticipated operational synergies and cost savings between Tecogen and ADGE and the risk that other anticipated benefits might not be realized within the expected time frame or at all;
- the substantial costs to be incurred in connection with the Merger and related transactions, including the costs of integrating the businesses of Tecogen and ADGE and the transaction expenses to be incurred in connection with the Merger and related transactions;
- the ability to refinance ADGE's existing indebtedness and the impact of uncertainty in the capital markets; and
- the other factors described under "Risk Factors."

In addition to considering the factors described above, the Tecogen Board of Directors considered the fact that a director of Tecogen may have interests in the transaction that are different from, or in addition to, the interests of Tecogen's stockholders generally. See "Interests of Tecogen's Directors and Executive Officers in the Merger" below. The above discussion of the factors considered by the Tecogen Board of Directors is not intended to be exhaustive, but does set forth the material factors considered by the Tecogen Board of Directors. In reaching its determination, the Tecogen Board of Directors did not quantify or assign any relative weights to the factors considered, and individual directors may have given different weights to different factors. The Tecogen Board of Directors considered all these factors as a whole, including its discussion with, and inquiry of, Tecogen's management and financial and legal advisors, and overall considered these factors to be favorable to, and to support, its determination.

In evaluating the Merger and the other transactions contemplated by the Merger Agreement, the Tecogen Board of Directors consulted with its legal and financial advisors, as well as management and, after careful consideration in light of the above factors, the Tecogen Board of Directors has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of Tecogen and its stockholders, and (iii) directed that the Tecogen Share Issuance Proposal be submitted for consideration at the Tecogen special meeting.

Accordingly, the Tecogen Board of Directors unanimously recommends that Tecogen stockholders vote "FOR" the Tecogen Share Issuance Proposal. The Merger cannot be completed without the approval by Tecogen stockholders of the Tecogen Share Issuance Proposal.

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ADGE's Reasons for the Merger; Recommendation by the ADGE Board of Directors

After careful consideration and based in part on the recommendation of the ADGE Special Committee, the ADGE Board of Directors, by a unanimous vote, at a meeting held on November 1, 2016, declared the Merger to be advisable and in the best interests of ADGE's stockholders, and approved the Merger, the Merger Agreement and the transactions contemplated thereby. In deciding to declare advisable and approve the Merger and the other transactions contemplated by the Merger Agreement and to recommend that ADGE stockholders approve the Merger, the ADGE Board of Directors, with the assistance of management and ADGE's legal and financial advisors, considered a number of factors in its deliberations. These factors, both positive and negative, are substantially the same as the factors described above under "Tecogen's Reasons for the Merger; Recommendation by Tecogen Board of Directors." The decision made by the ADGE Board of Directors was based on an analysis of whether, in its opinion, the value of each ADGE share of common stock on a stand-alone basis would increase after conversion to Tecogen common stock at the Exchange Ratio.

Critical negative factors in evaluating the prospects for ADGE as a stand-alone company were ADGE's uninterrupted history of major operating losses and the overhang of its debt obligations for borrowed money. Without significant additional financing, which is likely not feasible, ADGE would be unable to repay this debt and either would be forced to seek relief under the bankruptcy laws or negotiate the conversion of the debt into ADGE common stock at an unfavorable conversion ratio. The first alternative would likely wipe out the value of the equity of ADGE, and the second alternative would likely significantly dilute the interests of the other ADGE stockholders and largely destroy the value of their equity.

Critical benefits to ADGE stockholders include the following:

**Competitive Advantage.** Bringing ADGE under the Tecogen umbrella would allow a more seamless customer referral process and presents a unified approach to the marketplace in offering clean energy solutions. Tecogen would be able to directly offer customers financing alternatives to an outright equipment purchase. While Tecogen in the past has offered customer referrals to ADGE, the relationship between the two companies was not always clear to customers. With ADGE as a wholly-owned subsidiary, it is expected that Tecogen should be able to eliminate customer concerns related to transparency and potential conflicts-of-interest between the two companies, and verify that every appropriate lead is pursued and closed where possible.

**Financial Advantage.** It is anticipated that the transaction will eliminate significant inter-company expense in consolidation such that the performance of ADGE's assets will improve in consolidation. Financial advantage is based on the following factors:

**Improved Profitability of ADGE Assets.** ADGE's assets are expected to be written down as a result of the Merger. The post-Merger company will benefit from Unfavorable Contract Liability (UCL) accounting methodology which will offset approximately 65% of the annual depreciation expense (from \$1.7 million to ~\$0.7 million).

**Operating cost improvements.** The transaction would create operating cost improvements, as follows:

- Remove duplicative accounting functions;
- Remove duplicative auditing/corporate expenses;
- Reduce duplicative engineering and service efforts;
- More efficient service inventory; and

As wholly-owned subsidiary, ADGE will no longer incur the expenses of being a publicly traded company.

These cost savings include significant cost-savings related to: (a) director and officer liability insurance, (b) public relations and stockholder relations services, (c) transfer agent fees, (d) audit fees, (e) legal fees, (e) state registration fees, and (f) stock exchange listing fees.

- Enhanced ability to pay off remaining debt

Merged company has better prospects of paying remaining debt; and

Merged company has ability to raise money via equity offering to pay off debt.

**More Diversified and Stable Revenue Profile.** It is expected that a significant portion of total combined company revenue would be generated by stable long-term contracted revenue streams (Tecogen service revenue plus ADGE

energy revenue).

**Investment Advantages.** As stockholders of Tecogen, ADGE's stockholders will participate in possible share price appreciation driven by the growth initiatives related to other Tecogen businesses. Among other things, these Tecogen growth initiatives include development and commercialization of Tecogen's vehicle emissions control technology, geographic expansion, sales growth related to newly launched products (including the InVerde e+ and the Ilios line of heat pumps).

**Eliminate Inefficient Organizational Complexities.**

**ADGE and Tecogen Serve the Same Markets and Customers.** The combination of the companies provides a more compelling value proposition to potential customers. The combination of the two companies into a single company will provide a larger, more economically sound company, which will allow the combined entity to compete more effectively against third parties for new business.

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ADGE Purchases Substantially All of its CHP Units from Tecogen. As Tecogen purchases substantially all of its CHP units from ADGE, combining the companies allows the combined entity to operate in a more cost efficient manner and to better compete on a cost basis for potential customers.

ADGE and Tecogen Share a Management Team. John Hatsopoulos and Benjamin Locke serve as co-CEOs of each of Tecogen and ADGE. In addition, Bonnie Brown, ADGE's CFO, previously served as CFO of Tecogen. Several of the directors of ADGE also serve as members of the Board of Directors of Tecogen.

ADGE and Tecogen Share Resources. ADGE and Tecogen entered into a Facilities and Support Services Agreement on July 1, 2012 and share facilities, office and other resources. Thus, there will be little disruption in operations caused by the proposed Merger.

For more information regarding the combined company's pro forma financial information, see "Unaudited Pro Forma Condensed Combined Financial Information." For information on the senior leadership overlap between the two companies and a detailed discussion of the benefits of the Merger to Tecogen, see "The Merger - Interests of Tecogen's Directors and Officers in the Merger". For a detailed discussion of the benefits of the Merger to Tecogen and the senior leadership overlap between the two companies, see "Tecogen's Reasons for the Merger: Recommendation by the Tecogen Board of Directors."

The ADGE Board of Directors also identified and considered various risks and potentially negative factors concerning the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement. These factors included:

that ADGE did not run a competitive auction and weighed against this consideration the views of ADGE's management, advisors and the Board of Directors that it was highly unlikely that other parties would be interested in acquiring ADGE;

that attempting to close the proposed transaction and integrate the two companies may impact ADGE's ability to conduct its business in the ordinary course;

the impact on ADGE if the transaction does not close once announced; and

the interests that directors and management have in the transaction.

The foregoing discussion is not intended to be an exhaustive list of the information and factors considered by the ADGE Board of Directors in its consideration of the Merger and the other transactions contemplated by the Merger Agreement, but is merely a summary of the material positive factors and material drawbacks and risks considered by the ADGE Board of Directors in that regard. In view of the number and variety of factors and the amount of information considered, the ADGE Board of Directors did not find it practicable to, and did not make specific assessments of, quantify or otherwise assign relative weights to, the specific factors considered in reaching its determination. In addition, the ADGE board did not undertake to make any specific determination as to whether any particular factor, or any aspect of any particular factor, was favorable or unfavorable to its ultimate determination, and individual members of the ADGE Board of Directors may have given different weights.

In evaluating the Merger and the other transactions contemplated by the Merger Agreement, the ADGE Board of Directors consulted with ADGE's legal and financial advisors, as well as management and, after careful consideration in light of the above factors, the ADGE Board of Directors has unanimously (i) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, (ii) determined and declared that the Merger and the other transactions contemplated by the Merger are advisable, fair to and in the best interest of ADGE and its stockholders, and (iii) directed that the ADGE Merger Approval Proposal be submitted for consideration at the ADGE special meeting.

Accordingly, the ADGE Board of Directors unanimously recommends that ADGE stockholders vote "FOR" the ADGE Merger Approval Proposal. The Merger cannot be completed without the approval by ADGE stockholders of the ADGE Merger Approval Proposal.

Litigation Relating to the Merger

Massachusetts Superior Court Action

On or about February 6, 2017, ADGE, John Hatsopoulos, George N. Hatsopoulos, Charles T. Maxwell, Deanna M. Petersen, Christine Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen, and Merger Sub were served with a



Verified Complaint by William C. May, individually and on behalf of the other shareholders of ADGE as a class. The complaint alleges the proposed Merger is subject to certain conflicts of interest; that ADGE's board failed to protect its shareholders by failing to conduct an auction or market check; that the Exchange Ratio undervalues ADGE's outstanding shares; that ADGE's directors breached their fiduciary duties in approving the Merger proposal; that the registration statement on Form S-4 contained material omissions; that Tecogen aided and abetted ADGE's board's breaches of its fiduciary duties; and other claims. The plaintiff is seeking preliminary and permanent injunctions related to the Merger, rescissory damages, compensatory damages, accounting, and other relief.

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United States District Court Action

On or about February 15, 2017, a lawsuit was filed in the United States District Court for the District of Massachusetts by Lee Vardakas (“Vardakas”), individually and on behalf of other shareholders of ADGE, naming ADGE, John N. Hatsopoulos, George N. Hatsopoulos, Benjamin Locke, Charles T. Maxwell, Deanne M. Petersen, Christine M. Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen Inc., Tecogen.ADGE Acquisition Corp., and Cassel Salpeter & Co., LLC, as defendants. Among other things, the complaint alleges that (1) the merger is the result of a flawed and conflicted sales process and that the Exchange Ratio undervalues ADGE’s outstanding shares and (2) the registration statement on Form S-4 contains materially incomplete and misleading information concerning: (a) the financial analyses performed by ADGE’s financial advisor, (b) financial projections for ADGE and Tecogen, and (c) conflicts of interest in the sales process. The complaint asserts that defendants violated Section 14(a)(1) of the Securities Exchange Act of 1934, as amended (“Exchange Act”), and Rule 14a-9 thereunder, as a result of the alleged materially incomplete and misleading information; that the directors and officers of ADGE have control person liability for the alleged material misstatements and omissions pursuant to Section 20(a) of the Exchange Act; that the directors of ADGE breached their fiduciary duties to ADGE’s stockholders related to the merger, including that they failed to take steps to obtain the highest possible consideration for ADGE shareholders in the transaction; that Mr. John Hatsopoulos and Mr. George Hatsopoulos, acting in concert and as a group, as controlling shareholders of ADGE, violated their fiduciary duties to the shareholders of ADGE; and that Mr. George Hatsopoulos, Tecogen.ADGE Acquisition Corp., and ADGE’s financial advisor aided and abetted breaches of fiduciary duties by the directors and officers of ADGE. Vardakas is seeking to certify a class action, a preliminary injunction, damages, costs and disbursements, including reasonable attorneys’ fees, and such other relief as the court deems just and proper. As of the date of this report, none of the defendants in this action have been served with the complaint in the matter.

Opinion of Tecogen’s Financial Advisor

Tecogen retained Scarsdale to provide it with services in connection with the proposed Merger. Tecogen selected Scarsdale based on Scarsdale’s qualifications, expertise and reputation, and its knowledge of the business and affairs of Tecogen. As part of this engagement, the Tecogen Board requested that Scarsdale evaluate the fairness to Tecogen, from a financial point of view, of the Exchange Ratio pursuant to the Merger Agreement. On November 1, 2016, at a meeting of the Tecogen Board of Directors, Scarsdale rendered its oral opinion, later confirmed by delivery of a written opinion, that, based upon and subject to the various assumptions made, procedures followed, matters considered and qualifications and limitations on the scope of review undertaken by Scarsdale as set forth in its written opinion, the Exchange Ratio of 0.092 of a share of Tecogen common stock for one share of ADGE common stock pursuant to the Merger Agreement was fair to Tecogen from a financial point of view.

The full text of the written opinion of Scarsdale (the “Scarsdale Opinion”), is attached to this proxy statement/prospectus as [Annex B](#) and is incorporated herein by reference. The summary of the Scarsdale Opinion in this proxy statement/prospectus is qualified in its entirety by reference to the full text of the opinion, and you should read the opinion in its entirety for a discussion of the assumptions made, procedures followed, matters considered and qualifications and limitations upon the review undertaken by Scarsdale in rendering its opinion. Scarsdale’s opinion addresses only the fairness to Tecogen from a financial point of view of the exchange ratio pursuant to the Merger Agreement as of the date of such opinion and does not address any other aspect of the Merger. The opinion did not in any manner address the prices at which Tecogen common stock will trade following consummation of the Merger or at any time. Scarsdale’s opinion does not constitute a recommendation to any holder of Tecogen common stock or ADGE common stock as to how to vote at the special meetings to be held in connection with the Merger.

In connection with rendering its opinion, Scarsdale, among other things:

- reviewed a draft of the Merger Agreement dated November 1, 2016;
- reviewed certain publicly available business and financial information concerning Tecogen, ADGE, and the industries in which they operate;
- compared the proposed financial terms of the Merger with the publicly available financial terms of certain transactions involving companies we deemed relevant and the consideration paid for such companies;
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compared the financial and operating performance of Tecogen and ADGE with publicly available information concerning certain other companies we deemed relevant and reviewed the current and historical market prices of Tecogen and ADGE common stock and certain publicly traded securities of such other companies; reviewed certain internal financial analyses and forecasts prepared by or at the direction of the managements of Tecogen and ADGE relating to their respective businesses, as well as the expected amount and timing of the cost savings, related expenses, and synergies expected to result from the Merger; and performed such other financial studies and analyses and considered other information we deemed appropriate for the purposes of this opinion.

In addition, Scarsdale held discussions with certain members of the management of Tecogen and ADGE with respect to certain aspects of the Merger, the past and current business operations of Tecogen and ADGE, the financial condition and future prospects and operations of Tecogen and ADGE, the effects of the Merger on the financial condition and future prospects of Tecogen and ADGE, and certain other matters it believed necessary or appropriate to its inquiry.

In giving its opinion, Scarsdale relied upon and assumed the accuracy and completeness of all information that was publicly available or was furnished to or discussed with Scarsdale by Tecogen and ADGE or otherwise reviewed by or for it, and Scarsdale did not independently verify (nor did it assume responsibility or liability for independently verifying) any such information or its accuracy or completeness. Scarsdale did not conduct and did not provide any valuation or appraisal of any assets or liabilities, nor did it evaluate the solvency of Tecogen and ADGE under any state or federal laws relating to bankruptcy, insolvency, or similar matters. In relying on financial analyses and forecasts provided to it or derived therefrom, Scarsdale assumed that they had been reasonably prepared based on assumptions reflecting the best currently available estimates and judgments by management as to the expected future results of operations and financial condition of Tecogen and ADGE to which such analyses or forecasts relate. Scarsdale expressed no view as to such analyses or forecasts or the assumptions on which they were based. Scarsdale also assumed that the Merger and other transactions contemplated by the Merger Agreement will qualify as a tax-free reorganization for United States federal income tax purposes, and will be consummated as described in the Merger Agreement, and that the definitive Merger Agreement would not differ in any material respect from the draft Merger Agreement furnished to it. In addition, Scarsdale assumed that in connection with the receipt of all the necessary approvals of the proposed Merger, if any, no delays, limitations, conditions, or restrictions would be imposed that could have an adverse effect on the transaction. Scarsdale is not a legal, regulatory, or tax expert and relied on the assessments made by advisors to Tecogen with respect to such issues. Scarsdale further assumed that all material governmental, regulatory, or other consents and approvals necessary for the consummation of the Merger would be obtained without any adverse effect on Tecogen, ADGE, or on the contemplated benefits of the Merger.

The Scarsdale Opinion is necessarily based on economic, market, and other conditions as in effect on, and the information made available to it as of, the date thereof. It should be understood that subsequent developments may affect the opinion and that Scarsdale does not have any obligation to update, revise, or reaffirm its opinion. The Scarsdale Opinion is limited to the fairness, from a financial point of view, to the holders of Tecogen common stock of the exchange ratio in the proposed Merger, and Scarsdale expressed no opinion as to the fairness of any consideration to be paid in connection with the Merger to the holders of any other class of securities, creditors, or other constituencies of Tecogen or as to the underlying decision by Tecogen to engage in the Merger. Scarsdale was not been asked to, nor has it, offered any opinion with respect to the amount or nature of any compensation to any officers, directors, or employees of any party to the Merger, or any class of such persons relative to the exchange ratio applicable to the holders of Tecogen common stock in the Merger, or with respect to the fairness of any such compensation. Scarsdale expressed no opinion as to the price at which Tecogen or ADGE common stock would trade at any future time, if at all. Scarsdale also expressed no opinion as to the impact of the Merger on the solvency or viability of Tecogen or ADGE, or the ability of Tecogen or ADGE to pay their respective obligations when they come due.

The Scarsdale Opinion does not address the underlying business decision of Tecogen to enter into the Merger or the relative merits of the Merger as compared with any other strategic alternative that might be available to Tecogen. Scarsdale was not authorized to and did not solicit any expressions of interest from any other parties with respect to any other alternative transaction, sale, or business combination.

In relation to the proposed Merger, Scarsdale was engaged by Tecogen only to the extent of preparing its opinion and presenting and discussing the analysis outlined herein with a Special Committee of the Board of Directors of Tecogen. Scarsdale has received fees for these services. In addition, Tecogen has agreed to indemnify Scarsdale for certain liabilities arising out of Scarsdale's engagement. In the ordinary course of our business activities, Scarsdale and its affiliates may trade or otherwise effect transactions in the debt and equity securities of Tecogen and ADGE for their own account or for the accounts of customers or clients and, accordingly, Scarsdale may at any time hold long or short positions in such securities.

The Scarsdale Opinion was provided to the Board of Directors of Tecogen in connection with and solely for the purposes of its evaluation of the Merger. The Scarsdale Opinion does not constitute a recommendation to any shareholder of Tecogen as to how such shareholder should vote with respect to the Merger or any other matter, if applicable.

#### Summary of Financial Analyses of Scarsdale

In accordance with customary investment banking practice, Scarsdale employed generally accepted valuation methods in reaching its opinion. The following is a summary of the material financial analyses utilized by Scarsdale in connection with providing its opinion. The financial analyses summarized below include information presented in tabular format. The tables are not intended to stand alone, and in order to more fully understand the financial analyses used by Scarsdale, the tables must be read together with the full text of this summary of Scarsdale's financial analyses. Considering the data set forth herein without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of Scarsdale's financial analyses.

For each of the analyses performed, Scarsdale utilized the treasury stock method to calculate fully diluted shares outstanding, treating ADGE's restricted stock and outstanding options with a strike price of \$0.38 or lower as if they had been converted to ADGE common stock.

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## Selected Publicly Traded Company Analysis

Using publicly available information, Scarsdale compared selected financial data of ADGE with similar data for selected publicly traded companies engaged in businesses that Scarsdale judged to be similar to those of ADGE. Although none of the selected companies used in this analysis was either identical or directly comparable to ADGE, these companies were selected, among other reasons, because they are publicly traded companies with operations and businesses that, for purposes of analysis, may be considered similar to those of ADGE based on business sector participation, form of operations, and, in certain instances, inclusion in the Competition section of ADGE's Form 10-K for the fiscal year ended December 31, 2015.

Using publicly available information, Scarsdale calculated for each of the companies: (1) the enterprise value as of October 28, 2016, as a multiple of revenue for the last twelve months (EV/LTM Revenue), (2) the enterprise value as of October 28, 2016, as a multiple of Adjusted Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA) for the last twelve months (EV/LTM EBITDA), (3) the enterprise value as of October 28, 2016, as a multiple of estimated revenue for calendar year 2017 (EV/2017 Revenue), and (4) the enterprise value as of October 28, 2016, as a multiple of projected Adjusted EBITDA for calendar year 2017 (EV/2017 EBITDA), based on such company's public filings with the SEC, publicly available equity research estimates, and Thomson Reuters data. The analysis indicated the following trading multiples:

Company	EV / Revenue		EV / EBITDA	
	LTMCY 2017E		LTMCY 2017E	
<b>Independent Power</b>				
Ameresco	0.5	0.5	7.3	6.1
Atlantic Power	3.5	3.0	9.0	6.5
EnerNOC	0.4	0.5	NM	NA
Genie Energy	0.6	NA	11.1	NA
Spark Energy	0.6	0.4	4.1	2.9
Median	0.6	0.5	8.2	6.1
Mean	1.1	1.1	7.9	5.2
<b>Utilities</b>				
Avangrid	3.0	2.7	9.5	8.2
Consolidated Edison	2.1	2.0	7.2	6.3
Eversource Energy	3.9	3.5	11.9	10.7
Exelon	2.2	2.3	8.0	8.6
National Grid	3.9	4.3	10.4	12.2
NRG Energy	1.8	1.8	8.1	8.7
Public Service Enterprise Group	3.3	3.1	8.4	7.8
Unitil	2.7	2.3	9.3	8.2
Median	3.0	2.7	8.4	8.6
Mean	2.9	2.8	9.1	8.9

Based on the selected public market multiples described above and other factors deemed appropriate, Scarsdale applied the following range of multiples for purposes of calculating the equity value per share of ADGE: 6.0x to 9.0x projected 2017 Adjusted EBITDA, resulting in an implied per share equity range for ADGE of \$0.18 to \$0.27, or an implied exchange ratio of 0.0436 to 0.0654 share of Tecogen common stock for each share of ADGE common stock.

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## Selected Precedent Transaction Analysis

Using publicly available information, Scarsdale reviewed the following precedent transactions involving companies that engaged in businesses judged to be reasonably similar to those of ADGE. Scarsdale selected these transactions, among other reasons, because the businesses involved in these transactions share similar business characteristics to ADGE based on business sector participation, operational characteristics, and financial metrics. It should be emphasized that none of the companies involved in the selected transactions is either identical or directly comparable to ADGE and none of the selected transactions is either identical or directly comparable to the proposed transaction. The transactions considered and the date each transaction was announced are as follows:

Announcement Date	Target Company Name	Acquirer Company Name	EV/ Revenue	EV / EBITDA
6/15/2016	Atlas Power (Fossil Fuel JV)	Dynegy	NA	4.7
6/3/2016	Talen Energy	Riverstone Holdings	1.6	8.1
5/16/2016	ENER-G Cogen	Centrica	NA	NA
4/26/2016	EnergySouth	Spire	NA	12.8
2/24/2016	PowerSecure	Southern Company	1.0	19.3
2/9/2016	Empire District Electric	Liberty Utilities	3.9	10.7
1/21/2016	Prairie State Energy Campus Mgmt.	Wabash Valley Power Ass'n	NA	NA
5/12/2015	Oasis Power*	Nudevco Partners Holdings	NA	2.5
2/26/2015	UIL Holdings	Iberdrola SA	2.6	10.5
10/20/2014	Cleco	Macquarie; BC Inv. Mgmt.; et al.	4.0	10.8
7/29/2014	Wheelabrator Technologies	Energy Capital Partners	2.3	NA
6/23/2014	Integrus Energy Group	Wisconsin Energy	1.3	12.5
12/11/2013	UNS Energy	Fortis (Canada)	2.9	9.4
10/23/2013	GE Power & Water (Power Rental Bus.)	APR Energy	NA	NA
7/12/2013	Bounce Energy	Direct Energy	0.5	NA
3/25/2013	Blythe Energy	Altogas Power Holdings	NA	NA
* Forward estimates for EV and EBITDA				
	Median		2.3	10.7
	Mean		2.2	10.7

Based on this analysis and other factors that Scarsdale considered appropriate, Scarsdale applied a multiple range of 8.0x to 10.0x to ADGE's estimated 2017 Adjusted EBITDA and arrived at an estimated range of equity values per share for ADGE common stock of \$0.24 to \$0.30, or an implied exchange ratio of 0.0581 to 0.0726 share of Tecogen common stock for each share of ADGE common stock.

## Discounted Cash Flow Analysis

Scarsdale calculated ranges of implied equity value per share for ADGE common stock by performing a discounted cash flow, or "DCF," analysis. The discounted cash flow analysis assumed a valuation date of January 1, 2017. Scarsdale performed its DCF analysis of ADGE based primarily on a set of assumptions originally provided by ADGE management relating to ADGE's business, and subsequently modified by Tecogen management to reflect Tecogen management's assessment of ADGE's business and the potential synergies that might be realized in a merger. Using these Tecogen management projections, Scarsdale calculated the unlevered free cash flows that Tecogen management expects ADGE to generate during fiscal years 2017 through 2020. Scarsdale also calculated a range of terminal values for ADGE as of December 31, 2020, by applying a range of terminal EBITDA multiples of 7.0x to 10.0x projected 2020 Adjusted EBITDA. The unlevered free cash flows and the range of terminal values were then discounted to present values using a range of discount rates from 15.5% to 17.0% and added together in order to derive the implied enterprise value of ADGE.

The range of discount rates used derived from traditional investment banking methodology, including the analysis of selected publicly traded companies engaged in businesses that Scarsdale deemed relevant to ADGE's businesses. Scarsdale analyzed these publicly traded companies to determine the appropriate beta (an estimate of systematic risk) and target debt/total capital ratio to use in calculating the range of discount rates described above. Based on the assumptions set forth above, this analysis implied an estimated equity value range of \$0.38 to \$0.51 per share of ADGE common stock, or an implied exchange ratio of 0.092 to 0.1235 share of Tecogen common stock for each share of ADGE common stock.

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## Other Information

## Implied Premiums and Multiples

Based on the Merger Agreement, the Exchange Ratio is 0.092 shares of Tecogen common stock for each share of ADGE common stock. Based on the closing price of Tecogen common stock of \$4.24 on October 28, 2016, the implied value of the merger consideration to be paid to ADGE stockholders was approximately \$0.3864. This implied value represented an approximately 27% premium to ADGE's closing price of \$0.2999 per share on October 28, 2016. The implied enterprise value as a multiple of estimated revenue for fiscal year 2017 was 3.1x, and the implied enterprise value as a multiple of estimated Adjusted EBITDA for fiscal year 2017 was 10.6x.

## Historical Exchange Ratio Analysis

Scarsdale reviewed the per share daily closing market price of ADGE common stock and Tecogen common stock and calculated the implied historical exchange ratios by dividing the volume-weighted average prices per share of ADGE common stock by those of Tecogen common stock for the dates and over the periods described in the table below. The analysis resulted in the following implied exchange ratios for the periods indicated:

Range	TGEN Average Price	Implied Offer Value	ADGE Average Price	TGEN/ADGE Price Ratio	Implied Premium to ADGE Average Price
1 Day (October 28)	\$4.24	\$0.39	\$0.30	0.071	29%
20 Trading Days	\$4.13	\$0.38	\$0.25	0.060	53%
1 Calendar Month	\$4.13	\$0.38	\$0.25	0.061	50%
3 Calendar Months	\$4.40	\$0.40	\$0.27	0.062	48%
6 Calendar Months	\$4.48	\$0.41	\$0.31	0.068	34%
1 Calendar Year	\$4.19	\$0.38	\$0.32	0.077	19%
2 Calendar Years	\$4.65	\$0.42	\$0.41	0.089	3%

Because such a historical exchange ratio analysis is not a valuation methodology, it was presented merely for informational purposes.

The foregoing summary of certain material financial analyses does not purport to be a complete description of the analyses or data presented by Scarsdale, and is qualified in its entirety by reference to the written opinion of Scarsdale. The preparation of a fairness opinion is a complex process and is not necessarily susceptible to partial analysis or summary description. In reaching its opinion, Scarsdale considered the results of its analyses as a whole. Selecting portions of the foregoing summary and these analyses, without considering all of these analyses as a whole, could create an incomplete view of the processes underlying the analyses and Scarsdale's opinion. In addition, Scarsdale may have given various analyses and factors more or less weight than other analyses and factors, and may have deemed various assumptions more or less probable than other assumptions. As a result, the ranges of valuations resulting from any particular analysis described above should not be taken to be Scarsdale's view of the actual value of ADGE.

## Other Matters Relating to Scarsdale's Opinion

Under the terms of its engagement letter, Tecogen paid Scarsdale an aggregate fee of \$85,000, which was paid in two installments - \$35,000 was paid upon engagement, and \$50,000 was paid in conjunction with the delivery of the fairness opinion. Scarsdale also received an additional fee of \$40,000 to conduct numerous additional interim financial analyses and discussed them with the Tecogen special committee. All fees have been paid, and no part of any fee was contingent on the closing of the Merger. Tecogen has also agreed to reimburse Scarsdale for its expenses, including fees of outside counsel and other professional advisors, incurred in performing its services. In addition, Tecogen has agreed to indemnify Scarsdale and its affiliates, their respective officers, directors, employees and agents and each



person, if any, controlling Scarsdale or any of its affiliates against certain liabilities and expenses, including certain liabilities under the federal securities laws, relating to or arising out of Scarsdale's engagement.

In the two years preceding the date of the opinion, Scarsdale provided a fairness opinion in conjunction with Tecogen's acquisition of the minority interest in its affiliate, Ilios Inc., in March 2016, for which Scarsdale received a fee of \$40,000. Scarsdale did not provide any other financing services to either Tecogen or ADGE in such two-year period.

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Opinion of ADGE's Financial Advisor

On October 31, 2016, Cassel Salpeter rendered its oral opinion to the ADGE Special Committee (which was confirmed in writing by delivery of Cassel Salpeter's written opinion dated the same date), as to, as of October 31, 2016, the fairness, from a financial point of view, to the holders of ADGE common stock other than John Hatsopoulos, George Hatsopoulos and their respective affiliates, or the Unaffiliated ADGE Holders, of the Exchange Ratio in the Merger pursuant to the Merger Agreement.

The summary of the opinion in this proxy statement/prospectus is qualified in its entirety by reference to the full text of the written opinion, which is included as Annex C to this proxy statement/prospectus and sets forth the procedures followed, assumptions made, qualifications and limitations on the review undertaken and other matters considered by Cassel Salpeter in preparing its opinion. Neither Cassel Salpeter's written opinion nor the summary of its opinion and the related analyses set forth in this proxy statement/prospectus, however, is intended to be or constitutes advice or a recommendation to any security holder as to how such security holder should act or vote with respect to any matter relating to the proposed Merger or otherwise.

The opinion was addressed to the ADGE Special Committee for the use and benefit of the members of the ADGE Special Committee (in their capacities as such) and, with the consent of the ADGE Special Committee, the members of the ADGE Board of Directors, in connection with the ADGE Special Committee's and, as applicable, the ADGE Board's, evaluation of the Merger. Cassel Salpeter's opinion should not be construed as creating any fiduciary duty on Cassel Salpeter's part to ADGE or any other party to the Merger Agreement, any security holder of ADGE or such other party, any creditor of ADGE or such other party, or any other person. Cassel Salpeter's opinion was just one of the several factors the ADGE Special Committee took into account in making its recommendation to the ADGE Board of Directors to approve the Merger.

Cassel Salpeter's opinion only addressed whether, as of the date of the opinion, the Exchange Ratio in the Merger pursuant to the Merger Agreement was fair, from a financial point of view, to the Unaffiliated ADGE Holders and did not address any other terms, aspects, or implications of the Merger or the Merger Agreement, including, without limitation, any term or aspect of the Merger that was not susceptible to financial analyses, the fairness of the Merger or all or any portion of the Exchange Ratio to any other security holders of ADGE, Tecogen or any other person or any creditors or other constituencies of ADGE, Tecogen or any other person, nor the fairness of the amount or nature, or any other aspect, of any compensation or consideration payable to or received by any officers, directors, or employees of any parties to the Merger, or any class of such persons, relative to the Exchange Ratio in the Merger pursuant to the Merger Agreement, or otherwise. Cassel Salpeter did not express any opinion as to what the value of the shares of Tecogen common stock actually would be when issued to the holders of ADGE common stock in the Merger or the prices at which shares of ADGE common stock or Tecogen common stock may trade, be purchased or sold at any time. Cassel Salpeter assumed that the shares of Tecogen common stock to be issued in the Merger to the holders of ADGE common stock would be listed on the Nasdaq Capital Market.

Cassel Salpeter's opinion did not address the relative merits of the Merger as compared to any alternative transaction or business strategy that may have existed for ADGE, or the merits of the underlying decision by the ADGE Special Committee, the ADGE Board or ADGE to engage in or consummate the Merger. The financial and other terms of the Merger were determined pursuant to negotiations between the parties to the Merger Agreement and were not determined by or pursuant to any recommendation from Cassel Salpeter. In addition, Cassel Salpeter was not authorized to, and did not, solicit indications of interest from third parties regarding a potential transaction involving ADGE.

Cassel Salpeter's analysis and opinion were necessarily based upon market, economic, and other conditions as they existed on, and could be evaluated as of, the date of the opinion. Accordingly, although subsequent developments could arise that would otherwise affect its opinion, Cassel Salpeter did not assume any obligation to update, review, or reaffirm its opinion to the ADGE committee or any other person or otherwise to comment on or consider events occurring or coming to Cassel Salpeter's attention after the date of the opinion.

In arriving at its opinion, Cassel Salpeter made such reviews, analyses, and inquiries as Cassel Salpeter deemed necessary and appropriate under the circumstances. Among other things, Cassel Salpeter:

Reviewed a draft, received on October 31, 2016, of the Merger Agreement.

Reviewed certain publicly available financial information and other data with respect to ADGE and Tecogen that Cassel Salpeter deemed relevant.

Reviewed certain other information and data with respect to ADGE made available to Cassel Salpeter by ADGE, including financial projections with respect to the future financial performance of ADGE for the years ending December 31, 2016 through December 31, 2020, prepared by management of ADGE or the ADGE Projections, estimates of ADGE's net operating loss tax carryforwards or the ADGE NOLs, and the potential tax savings available to ADGE based on the ADGE NOLs or the ADGE Estimated NOL Tax Savings, prepared by management of ADGE, and other internal financial information furnished to Cassel Salpeter by or on behalf of ADGE.

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Reviewed certain other information and data with respect to Tecogen made available to Cassel Salpeter by Tecogen, including financial projections with respect to the future financial performance of Tecogen, excluding Tecogen's interest in the joint venture Ultra Emissions Technologies Inc. or Ultratek, for the years ending December 31, 2016 through December 31, 2018, prepared by management of Tecogen or the Tecogen Projections, estimates of Tecogen's net operating loss tax carryforwards or the Tecogen NOLs, and the potential tax savings available to Tecogen based on Tecogen NOLs or the Tecogen Estimated NOL Tax Savings, prepared by management of Tecogen, pricing information or the Ultratek Pricing Information, for a recent equity financing effected by Ultratek, and other internal financial information furnished to Cassel Salpeter by or on behalf of Tecogen.

Considered and compared the financial and operating performance of ADGE and Tecogen with that of companies with publicly traded equity securities that Cassel Salpeter deemed relevant.

Considered the publicly available financial terms of certain transactions that Cassel Salpeter deemed relevant.

Discussed the business, operations, and prospects of ADGE, Tecogen and the proposed Merger with ADGE's and Tecogen's management and certain of ADGE's and Tecogen's representatives.

Conducted such other analyses and inquiries, and considered such other information and factors, as Cassel Salpeter deemed appropriate.

In arriving at its opinion, Cassel Salpeter, with the ADGE Special Committee's consent, relied upon and assumed, without independently verifying, the accuracy and completeness of all of the financial and other information that was supplied or otherwise made available to Cassel Salpeter or available from public sources, and Cassel Salpeter further relied upon the assurances of ADGE's and Tecogen's management that they were not aware of any facts or circumstances that would make any such information inaccurate or misleading. Cassel Salpeter also relied upon, without independent verification, the assessments of the management of ADGE and Tecogen as to ADGE's and Tecogen's existing and future technology, products and services and the validity and marketability of, and risks associated with, such technology, products and services (including, without limitation, the development, testing and marketing of such technology, products and services; the receipt of all necessary governmental and other regulatory approvals for the development, testing and marketing thereof; and the life of all relevant patents and other intellectual and other property rights associated with such technology, products and services), and Cassel Salpeter assumed, at the ADGE Special Committee's direction, that there would be no developments with respect to any such matters that would adversely affect its analyses or opinion. Cassel Salpeter is not legal, tax, accounting, environmental, or regulatory advisors, and Cassel Salpeter did not express any views or opinions as to any legal, tax, accounting, environmental, or regulatory matters relating to ADGE, Tecogen, the Merger, or otherwise. Cassel Salpeter understood and assumed that ADGE had obtained or would obtain such advice as it deemed necessary or appropriate from qualified legal, tax, accounting, environmental, regulatory, and other professionals.

The ADGE Special Committee advised Cassel Salpeter, and Cassel Salpeter assumed, that (i) the ADGE Projections were reasonably prepared on a basis reflecting the best currently available estimates and judgments of management of ADGE with respect to the future financial performance of ADGE, (ii) the ADGE NOLs were reasonably prepared in good faith on bases reflecting the best currently available estimates and judgments of ADGE's management as to the amount of such ADGE NOLs, (iii) the ADGE Estimated NOL Tax Savings were a reasonable basis on which to evaluate such ADGE NOLs, and (iv) the ADGE Projections, the ADGE NOLs, and the ADGE Estimated NOL Tax Savings provided a reasonable basis upon which to analyze and evaluate ADGE and form an opinion. The ADGE Special Committee also advised Cassel Salpeter, and Cassel Salpeter assumed, that (i) the Tecogen Projections were reasonably prepared in good faith on bases reflecting the best currently available estimates and judgments of management of Tecogen with respect to the future financial performance of Tecogen, (ii) the Tecogen NOLs were reasonably prepared in good faith on bases reflecting the best currently available estimates and judgments of Tecogen's management as to the amount of such Tecogen NOLs and (iii) the Tecogen Estimated NOL Tax Savings were a reasonable basis on which to evaluate such Tecogen NOLs, (iv) the Ultratek Pricing Information was a reasonable basis on which to evaluate Tecogen's investment in Ultratek, and (v) the Tecogen Projections, the Tecogen NOLs, the Tecogen Estimated NOL Tax Savings and the Ultratek Pricing Information provided a reasonable basis upon which to analyze and evaluate Tecogen and form an opinion. Cassel Salpeter expressed no view with respect to the ADGE

Projections, the ADGE NOLs, the ADGE Estimated NOL Tax Savings, the Tecogen Projections, the Tecogen NOLs, the Tecogen Estimated NOL Tax Savings, the Ultratek Pricing Information or the assumptions on which they were based.

Cassel Salpeter did not evaluate the solvency or creditworthiness of ADGE, Tecogen or any other party to the Merger, the fair value of ADGE, Tecogen or any of their respective assets or liabilities, or whether ADGE, Tecogen or any other party to the Merger is paying or receiving reasonably equivalent value in the Merger under any applicable foreign, state, or federal laws relating to bankruptcy, insolvency, fraudulent transfer, or similar matters, nor did Cassel Salpeter evaluate, in any way, the ability of ADGE, Tecogen or any other party to the Merger to pay its obligations when they come due. Cassel Salpeter did not physically inspect ADGE's or Tecogen's properties or facilities and did not make or obtain any evaluations or appraisals of ADGE's or Tecogen's assets or liabilities (including any contingent, derivative, or off-balance-sheet assets and liabilities). Cassel Salpeter did not attempt to confirm whether ADGE or Tecogen had good title to their respective assets. Cassel Salpeter's role in reviewing any information was limited solely to performing such reviews as it deemed necessary to support its own advice and analysis and was not on behalf of the ADGE Special Committee, the ADGE Board of Directors, ADGE or any other party.

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Cassel Salpeter assumed, with the ADGE Special Committee's consent, that the Merger would be consummated in a manner that complies in all respects with applicable foreign, federal, state, and local laws, rules, and regulations and that, in the course of obtaining any regulatory or third party consents, approvals, or agreements in connection with the Merger, no delay, limitation, restriction, or condition would be imposed that would have an adverse effect on ADGE, Tecogen or the Merger. Cassel Salpeter also assumed, with the ADGE Special Committee's consent, that the final executed form of the Merger Agreement would not differ in any material respect from the draft Cassel Salpeter reviewed and that the Merger would be consummated on the terms set forth in the Merger Agreement, without waiver, modification, or amendment of any term, condition, or agreement thereof material to Cassel Salpeter's analyses or opinion. Cassel Salpeter also assumed that the representations and warranties of the parties to the Merger Agreement contained therein were true and correct and that each such party would perform all of the covenants and agreements to be performed by it under the Merger Agreement. Cassel Salpeter offered no opinion as to the contractual terms of the Merger Agreement or the likelihood that the conditions to the consummation of the Merger set forth in the Merger Agreement would be satisfied. Cassel Salpeter further assumed that for U.S. federal tax income purposes that the Merger would qualify as a plan of reorganization within the meaning of Section 368 of the Internal Revenue Code of 1986, as amended.

Summary of Financial Analyses

In connection with preparing its opinion, Cassel Salpeter performed a variety of financial analyses. The following is a summary of the material financial analyses performed by Cassel Salpeter in connection with the preparation of its opinion. It is not a complete description of all analyses underlying such opinion. The preparation of an opinion is a complex process involving various determinations as to the most appropriate and relevant methods of financial analysis and the application of those methods to the particular circumstances. As a consequence, neither Cassel Salpeter's opinion nor the respective analyses underlying its opinion is readily susceptible to partial analysis or summary description. In arriving at its opinion, Cassel Salpeter assessed as a whole the results of all analyses undertaken by it with respect to the opinion. While it took into account the results of each analysis in reaching its overall conclusions, Cassel Salpeter did not make separate or quantifiable judgments regarding individual analyses and did not draw, in isolation, conclusions from or with regard to any individual analysis or factor. Therefore, Cassel Salpeter believes that the analyses underlying the opinion must be considered as a whole and that selecting portions of its analyses or the factors it considered, without considering all analyses and factors underlying the opinion collectively, could create a misleading or incomplete view of the analyses performed by Cassel Salpeter in preparing the opinion.

The multiple ranges and implied value reference ranges indicated by Cassel Salpeter's analyses are not necessarily indicative of actual values nor predictive of future results, which may be significantly more or less favorable than those suggested by such analyses. Much of the information used in, and accordingly the results of, Cassel Salpeter's analyses are inherently subject to substantial uncertainty.

The following summary of the material financial analyses performed by Cassel Salpeter in connection with the preparation of its opinion includes information presented in tabular format. The tables alone do not constitute a complete description of these analyses. Considering the data in the tables below without considering the full narrative description of the analyses, as well as the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of the financial analyses Cassel Salpeter performed.

For purposes of its analyses, Cassel Salpeter reviewed a number of financial metrics, including the following:  
EBITDA - generally the amount of the relevant company's earnings before interest, taxes, depreciation and amortization for a specified time period.

Enterprise Value - generally the value as of a specified date of the relevant company's outstanding equity securities (taking into account its options and other outstanding convertible securities) plus the value as of such date of its net debt (the value of its outstanding indebtedness, preferred stock and minority interests less the amount of cash on its balance sheet).

Unless the context indicates otherwise, (1) share prices for the selected companies used in the selected companies analysis described below were as of October 28, 2016, (2) the relevant values for the selected transactions analysis

described below were calculated on an enterprise value basis based on the consideration proposed to be paid in the selected transactions, (3) estimates of future financial performance of ADGE were based on the ADGE Projections, (4) estimates of future financial performance of Tecogen, excluding Tecogen's interest in Ultratek, were based on the Tecogen Projections, (5) the value of Tecogen's interest in Ultratek was calculated, based on the Ultratek Pricing Information, to be \$25,026,000, and (6) estimates of financial performance for the selected companies listed below were based on publicly available research analyst estimates for those companies.

#### Discounted Cash Flows Analysis

Cassel Salpeter performed a discounted cash flow analysis of ADGE using the ADGE Projections, the ADGE NOLs, the ADGE Estimated NOL Tax Savings and a discounted cash flow analysis of Tecogen using the Tecogen Projections, the Tecogen NOLs, the Tecogen Estimated NOL Tax Savings and the Ultratek Pricing Information. In performing this analysis, Cassel Salpeter applied, with respect to ADGE, discount rates ranging from 10.70% to 11.70% and terminal multiples of ADGE's projected 2020 P EBITDA ranging from 7.5x to 8.5x and, with respect to Tecogen, discount rates ranging from 13.30% to 14.30% and terminal

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multiples of Tecogen's projected 2018 P revenue ranging from 2.25x to 2.75x. The discounted cash flow analysis indicated an implied enterprise value reference range for ADGE of \$16,800,000 to \$19,100,000, and, together with the Ultratek Pricing Information, an implied enterprise value reference range for Tecogen of \$77,700,000 to \$90,000,000 and an implied exchange ratio reference range of 0.0719x to 0.0942x of a share of Tecogen common stock per share of ADGE common stock, as compared to the Exchange Ratio in the Merger of 0.092x of a share of Tecogen common stock per share of ADGE common stock.

## Selected Companies Analysis

Cassel Salpeter considered certain financial data for selected companies with publicly traded equity securities Cassel Salpeter deemed relevant. The financial data reviewed included:

• Enterprise Value as multiple of revenue for the last twelve months, or "LTM Revenue";

• Enterprise Value as a multiple of projected revenue for the year ending December 31, 2016, or "2016 P Revenue"; and

• Enterprise Value as a multiple of projected revenue for the year ending December 31, 2017, or "2017 P Revenue."

With respect to ADGE, the selected companies with publicly traded equity securities and resulting financial data were:

• FuelCell Energy Inc.

• Maxim Power Corp.

• Polaris Infrastructure Inc.

• U.S. Geothermal Inc.

• EuroSite Power Inc.

	High	Mean	Median	Low
Enterprise Value as a Multiple of LTM Revenue	11.87x	5.69x	6.42x	1.12x
Enterprise Value as a Multiple of 2016 P Revenue	6.24x	4.50x	6.16x	1.11x
Enterprise Value as a Multiple of 2017 P Revenue	5.82x	3.85x	4.97x	0.76x

Taking into account the results of the selected companies analysis for ADGE, Cassel Salpeter applied multiples of 2.50x to 3.00x to ADGE's LTM Revenue, 2.50x to 3.00x to ADGE's projected 2016 P Revenue and 2.25x to 2.75x to ADGE's projected 2017 P Revenue.

The selected companies analysis indicated an implied enterprise value reference range for ADGE of \$15,800,000 to \$18,900,000.

With respect to Tecogen, the selected companies with publicly traded equity securities and resulting financial data were:

Alternative Energy/Cogeneration

• Plug Power Inc.

• Ballard Power Systems Inc.

• Advanced Emissions Solutions, Inc.

• FuelCell Energy Inc.

• Hydrogenics Corporation

• Capstone Turbine Corp.

Heating/Cooling

• Ingersoll-Rand Plc

• Pentair Plc.

• AO Smith Corp.

• Lennox International, Inc.

• Watts Water Technologies, Inc.

• AAON Inc.

	High	Mean	Median	Low
Enterprise Value as a Multiple of LTM Revenue	4.03x	2.25x	2.09x	0.24x
Enterprise Value as a Multiple of 2016 P Revenue	3.87x	2.16x	2.05x	0.25x
Enterprise Value as a Multiple of 2017 P Revenue	3.53x	1.83x	1.73x	0.18x



Taking into account the results of the selected companies analysis for Tecogen, Cassel Salpeter applied multiples of 2.25x to 2.75x to Tecogen's LTM Revenue, 2.25x to 2.75x to Tecogen's projected 2016 P Revenue and 2.25x to 2.75x to Tecogen's projected 2017 P Revenue. The selected companies analysis for Tecogen and the Ultratek Pricing Information indicated an implied enterprise value reference range for Tecogen of \$76,900,000 to \$88,400,000.

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The selected companies analysis indicated an implied exchange ratio reference range of 0.0686x to 0.0940x of a share of Tecogen common stock per share of ADGE common stock, as compared to the Exchange Ratio in the Merger of 0.092x of a share of Tecogen common stock per share of ADGE common stock.

None of the selected companies have characteristics identical to ADGE or Tecogen. An analysis of selected publicly traded companies is not mathematical; rather, it involves complex consideration and judgments concerning differences in financial and operating characteristics of the selected companies and other factors that could affect the public trading values of the companies reviewed.

## Selected Transactions Analysis

Cassel Salpeter considered certain financial terms of business transactions Cassel Salpeter deemed relevant. The financial data reviewed included Enterprise Value as a multiple of trailing twelve months revenue, or "TTM Revenue."

With respect to ADGE, the selected transactions and resulting financial data were:

Target	Acquiror
COMAX France S.A.S. (a subsidiary of Maxim Power Corp.)	Vine Luxembourg SARL
PowerSecure International	Southern Company
Capstone Infrastructure Corp.	Irving Infrastructure Corp.
	Acon Equity Management LLC, Acon Investments, Albright Capital Management, Fairfax Financial Holdings
APR Energy PLC	Fortisar LLC, John Hancock Life Insurance, Prudential Capital
Primary Energy Recycling Corp.	Exelon Energy Delivery Company, LLC
Pepco Holdings, Inc.	Horizon Acquisition Company PLC
APR Energy PLC	

	High	Mean	Median	Low
Enterprise Value as a Multiple of TTM Revenue	6.80x	3.82x	2.98x	0.98x

Taking into account the results of the selected transactions analysis for ADGE, Cassel Salpeter applied multiples of 2.50x to 3.00x to ADGE's LTM Revenue. The selected companies analysis indicated an implied enterprise value reference range for ADGE of \$15,400,000 to \$18,400,000.

With respect to ADGE, the selected transactions and resulting financial data were:

Target	Acquiror
Alternative Energy/Cogeneration	
PowerSecure International	Southern Company
Protonex Technology Corporation	Ballard Power Systems, Inc.
ClearEdge Power, Inc.	Doosan Corporation
Professional Power Products, Inc.	Power Solutions International, Inc.
Alteris Renewables, Inc.	Real Goods Solar
SunPower Corporation	Total Gas & Power USA, SAS
Heating & Cooling	
The Climate Control Group, Inc.	NIBE Energy Systems Inc.
Ilios Dynamics, Inc.	Tecogen, Inc.

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AERCO International, Inc.	Watts Regulator Company
Change' Air Products and Services Ltd.	Systemair AB
Lochinvar, LLC	AO Smith Corp.
	High MeanMedianLow
Enterprise Value as a Multiple of LTM Revenue	5.86x 1.92x 1.77x 0.61x

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Taking into account the results of the selected transactions analysis for Tecogen, Cassel Salpeter applied multiples of 2.25x to 2.75x to Tecogen's LTM Revenue. The selected transactions analysis for Tecogen and the Ultratek Pricing Information indicated an implied enterprise value reference range for Tecogen of \$73,700,000 to \$84,600,000. The selected transactions analysis indicated an implied exchange ratio reference range of 0.0695x to 0.0951x of a share of Tecogen common stock per share of ADGE common stock, as compared to the Exchange Ratio in the Merger of 0.092x of a share of Tecogen common stock per share of ADGE common stock.

None of the target companies or transactions in the selected transactions have characteristics identical to ADGE, Tecogen or the proposed Merger. Accordingly, an analysis of selected business combinations is not mathematical; rather it involves complex considerations and judgments concerning differences in financial and operating characteristics of the target companies in the selected transactions and other factors that could affect the respective acquisition values of the transactions reviewed.

**Other Matters Relating to Cassel Salpeter's Opinion**

As part of its investment banking business, Cassel Salpeter regularly is engaged in the evaluation of businesses and their securities in connection with mergers, acquisitions, corporate restructurings, private placements and other purposes. Cassel Salpeter is a recognized investment banking firm that has substantial experience in providing financial advice in connection with mergers, acquisitions, sales of companies, businesses and other assets and other transactions. Cassel Salpeter received a fee of \$120,000 for rendering its opinion, no portion of which was contingent upon the completion of the Merger. In addition, ADGE agreed to reimburse Cassel Salpeter for certain expenses incurred by it in connection with its engagement and to indemnify Cassel Salpeter and its related parties for certain liabilities that may arise out of its engagement or the rendering of its opinion. In accordance with Cassel Salpeter's policies and procedures, a fairness committee was not required to, and did not, approve the issuance of the opinion.

**Certain Unaudited Prospective Financial Information of Tecogen**

Tecogen does not as a matter of course make public long-term projections as to future revenues, earnings, funds from operations or other results due to, among other reasons, the uncertainty of the underlying assumptions and estimates. However, Tecogen is including below certain unaudited prospective financial information of Tecogen that was prepared by Tecogen management and made available to the Tecogen Board of Directors and ADGE in connection with the evaluation of the Merger. This information also was provided to Tecogen's financial advisor and ADGE's financial advisor. The inclusion of this information should not be regarded as an indication that any of Tecogen, ADGE, their respective financial advisors or any other recipient of this information considered, or now considers, it to be necessarily predictive of actual future results.

The unaudited prospective financial information was, in general, prepared solely for internal use and is subjective in many respects. As a result, the prospective results may not be realized and actual results may be significantly higher or lower than estimated. Since the unaudited prospective financial information covers multiple years, that information by its nature becomes less predictive with each successive year.

You should review the description of risk factors with respect to the business of Tecogen and ADGE, respectively. See "Risk Factors," "Cautionary Statement Concerning Forward Looking Statements" and "Where you Can Find More Information" The unaudited prospective financial information was not prepared with a view toward public disclosure, nor was it prepared with a view toward compliance with GAAP, published guidelines of the SEC or the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of prospective financial information. In addition, the unaudited prospective financial information requires significant estimates and assumptions that make it inherently less comparable to the similarly titled GAAP measures in Tecogen's or ADGE's historical GAAP financial statements.

Neither the independent registered public accounting firm of Tecogen or ADGE nor any other independent accountants have compiled, examined or performed any audit or other procedures with respect to the unaudited prospective financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information or its achievability. The report of the independent registered public accounting firm of Tecogen contained elsewhere in this joint proxy statement/prospectus, relates to the historical financial information of Tecogen and does not extend to the unaudited prospective financial information and should not be read to do so.

Furthermore, the unaudited prospective financial information does not take into account any circumstances or events occurring after the date on which it was prepared. The following table presents selected unaudited prospective financial data on a twelve month run rate basis as of December 31, 2016 through December 31, 2018 for Tecogen. It does not give effect to the Merger.

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Tecogen Prospective Financial Information (in thousands)	2016E	2017E	2018E
Revenues	\$24,485	\$26,676	\$28,836
Cost of sales	15,708	16,817	17,800
Gross profit	8,777	9,859	11,036
Operating expenses	9,872	9,600	9,600
Operating income (loss)	(1,095)	259	1,436
Other income (loss)	(11)	(234)	351
Net income (loss)	\$(1,106)	\$25	\$1,787
Adjusted EBITDA	\$(679)	\$692	\$1,879

Adjusted EBITDA is defined as earnings before interest, taxes, depreciation and amortization, and stock compensation expense. Tecogen believes that the presentation of Adjusted EBITDA provides useful information regarding its ability to service debt and provide useful information to investors regarding its results of operations because these measures are useful for trending, analyzing and benchmarking the performance and value of its business.

In preparing the foregoing unaudited prospective financial information, Tecogen made a number of assumptions and estimates regarding, among other things, interest rates, corporate financing activities, including Tecogen's ability to finance its operations and investments and refinance certain of its outstanding indebtedness and the terms of any such financing or refinancing and leverage ratios, the amount and timing of investments by Tecogen and the yield to be achieved on such investments, the amount and timing of capital expenditures, distribution rates, occupancy and customer retention levels, changes in rent, the amount of income taxes paid and the amount of general and administrative costs.

The assumptions made in preparing the above unaudited prospective financial information may not accurately reflect future conditions. The estimates and assumptions underlying the unaudited prospective financial information involve judgments with respect to, among other things, future economic, competitive, regulatory and financial market conditions and future business decisions which may not be realized and that are inherently subject to significant business, economic, competitive and regulatory uncertainties and contingencies, including, among others, risks and uncertainties described under "Risk Factors" and "Cautionary Statement Concerning Forward Looking Statements," as well as the risks described in the periodic reports of Tecogen filed with the SEC, all of which are difficult to predict and many of which are beyond the control of Tecogen and/or ADGE and will be beyond the control of the combined company. Accordingly, the projected results may not be realized, and actual results likely will differ, and may differ materially, from those reflected in the unaudited prospective financial information, whether or not the Merger is completed.

You should not place undue reliance on the unaudited prospective financial information set forth above. No representation is made by Tecogen, ADGE or any other person to any Tecogen stockholder, ADGE stockholder or other person regarding the ultimate performance of Tecogen compared to the information included in the above unaudited prospective financial information. The inclusion of unaudited prospective financial information in this joint proxy statement/prospectus should not be regarded as an indication that the prospective financial information will be necessarily predictive of actual future events, and such information should not be relied on as such. You should review the description of Tecogen's reported results of operations and financial condition and capital resources during 2016, including in "Management's Discussion and Analysis of Financial Condition and Results of Operations of Tecogen" included elsewhere in this joint proxy statement/prospectus.

TECOGEN DOES NOT INTEND TO UPDATE OR OTHERWISE REVISE THE ABOVE UNAUDITED PROSPECTIVE FINANCIAL RESULTS TO REFLECT CIRCUMSTANCES EXISTING AFTER THE DATE WHEN MADE OR TO REFLECT THE OCCURRENCE OF FUTURE EVENTS, EVEN IN THE EVENT THAT ANY OR ALL OF THE ASSUMPTIONS UNDERLYING SUCH UNAUDITED PROSPECTIVE FINANCIAL RESULTS ARE NO LONGER APPROPRIATE, EXCEPT AS MAY BE REQUIRED BY APPLICABLE LAW.  
Certain Unaudited Prospective Financial Information of ADGE

Below is certain unaudited prospective financial information of ADGE that was prepared by ADGE management and made available to the ADGE Board of Directors in connection with the evaluation of the Merger. This information also was provided to ADGE's financial advisors and Tecogen's financial advisor. The inclusion of this information should not be regarded as an indication that any of ADGE, Tecogen, their respective financial advisors or any other recipient of this information considered, or now considers, it to be necessarily predictive of actual future results.

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The unaudited prospective financial information was, in general, prepared solely for internal use and is subjective in many respects. As a result, the prospective results may not be realized and actual results may be significantly higher or lower than estimated. Since the unaudited prospective financial information covers multiple years, such information by its nature becomes less predictive with each successive year.

You should review the description of risk factors with respect to the business of ADGE and Tecogen, respectively. See “Risk Factors,” “Cautionary Statement Concerning Forward Looking Statements” and “Where You Can Find More Information.” The unaudited prospective financial information was not prepared with a view toward public disclosure, nor was it prepared with a view toward compliance with GAAP, published guidelines of the SEC or the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of prospective financial information. In addition, the unaudited prospective financial information requires significant estimates and assumptions that make it inherently less comparable to the similarly titled GAAP measures in ADGE’s or Tecogen’s historical GAAP financial statements.

Neither the independent registered public accounting firm of ADGE nor Tecogen, nor any other independent accountants have compiled, examined or performed any audit or other procedures with respect to the unaudited prospective financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information or its achievability. The report of the independent registered public accounting firm of ADGE contained elsewhere herein relates to the historical financial information of ADGE and do not extend to the unaudited prospective financial information and should not be read to do so. Furthermore, the unaudited prospective financial information does not take into account any circumstances or events occurring after the date on which it was prepared.

The following table presents selected unaudited prospective financial data on a twelve month run rate basis as of December 31, 2016 through December 31, 2020 for ADGE. It does not give effect to the Merger:

ADGE Prospective Financial Information (in thousands)	2016E	2017E	2018E	2019E	2020E
Revenues	\$6,107	\$6,787	\$7,595	\$8,491	\$9,075
Cost of sales	5,390	5,520	5,748	5,890	6,125
Gross profit	717	1,267	1,847	2,601	2,950
Operating expenses	2,159	2,022	2,081	2,142	2,205
Operating income (loss)	(1,442)	(755)	(234)	459	745
Other income (loss)	3,132	(229)	(93)	13	24
Provision for income taxes	(60)	—	—	—	—
Income attributable to the noncontrolling interest	(15)	—	—	—	—
Net income (loss)	\$1,615	\$(984)	\$(327)	\$472	\$769

## Non-GAAP Financial Disclosure

Operating Income (loss)	\$(1,442)	\$(755)	\$(234)	\$459	\$745
Depreciation expense	\$1,817	\$1,797	\$1,690	\$1,508	\$1,510
Stock based compensation	\$144	\$141	\$141	\$142	\$140
Adjusted EBITDA	\$519	\$1,183	\$1,597	\$2,109	\$2,395

## Other Financial Information

Capital expenditures	\$2,406	\$510	\$250	\$263	\$276
Interest expense	\$804	\$246	\$108	\$—	\$—
Working capital	\$2,843	\$4,406	\$2,349	\$4,067	\$6,069
Change in working capital	\$(1,683)	\$1,563	\$(2,057)	\$1,718	\$2,002

Adjusted EBITDA is defined as earnings before interest, taxes, depreciation and amortization, and stock compensation expense. ADGE believes that the presentation of Adjusted EBITDA provides useful information regarding its ability to service debt and provide useful information to investors regarding its results of operations because these measures



are useful for trending, analyzing and benchmarking the performance and value of its business.

In preparing the foregoing unaudited prospective financial information, ADGE made a number of assumptions and estimates regarding, among other things, interest rates, corporate financing activities, including ADGE's ability to finance its operations and investments and refinance certain of its outstanding indebtedness and the terms of any such financing or refinancing

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and leverage ratios, the amount and timing of investments by ADGE and the yield to be achieved on such investments, the amount and timing of capital expenditures, distribution rates, occupancy and customer retention levels, changes in rent, the amount of income taxes paid and the amount of general and administrative costs.

The assumptions made in preparing the above unaudited prospective financial information may not accurately reflect future conditions. The estimates and assumptions underlying the unaudited prospective financial information involve judgments with respect to, among other things, future economic, competitive, regulatory and financial market conditions and future business decisions which may not be realized and that are inherently subject to significant business, economic, competitive and regulatory uncertainties and contingencies, including, among others, risks and uncertainties described under “Risk Factors” and “Cautionary Statement Concerning Forward Looking Statements,” as well as the risks described in the periodic reports of ADGE filed with the SEC, all of which are difficult to predict and many of which are beyond the control of ADGE and/or Tecogen and will be beyond the control of the combined company. Accordingly, the projected results may not be realized, and actual results likely will differ, and may differ materially, from those reflected in the unaudited prospective financial information, whether or not the Merger is completed.

You should not place undue reliance on the unaudited prospective financial information set forth above. No representation is made by ADGE, Tecogen or any other person to any ADGE stockholder, Tecogen stockholder or other person regarding the ultimate performance of ADGE compared to the information included in the above unaudited prospective financial information. The inclusion of unaudited prospective financial information in this joint proxy statement/prospectus should not be regarded as an indication that the prospective financial information will be necessarily predictive of actual future events, and such information should not be relied on as such. You should review the description of ADGE’s reported results of operations and financial condition and capital resources during 2016, including in “Management’s Discussion and Analysis of Financial Condition and Results of Operations of ADGE” included in this joint proxy statement/prospectus.

ADGE DOES NOT INTEND TO UPDATE OR OTHERWISE REVISE THE ABOVE UNAUDITED PROSPECTIVE FINANCIAL RESULTS TO REFLECT CIRCUMSTANCES EXISTING AFTER THE DATE WHEN MADE OR TO REFLECT THE OCCURRENCE OF FUTURE EVENTS, EVEN IN THE EVENT THAT ANY OR ALL OF THE ASSUMPTIONS UNDERLYING SUCH UNAUDITED PROSPECTIVE FINANCIAL RESULTS ARE NO LONGER APPROPRIATE, EXCEPT AS MAY BE REQUIRED BY APPLICABLE LAW.

**Interests of Tecogen’s Directors and Executive Officers in the Merger**

In considering the recommendation of Tecogen’s Board of Directors to approve the Tecogen Share Issuance Proposal, Tecogen’s stockholders should be aware that Tecogen's directors and executive officers have interests in the Merger that are different from, or in addition to, the interests of Tecogen stockholders generally as summarized below.

**Board and Executive Officers**

The following Tecogen directors and executive officers also serve as directors and/or officers of ADGE:

John Hatsopoulos serves as Tecogen's and ADGE's co-chief executive officer and director;

Benjamin Locke serves as Tecogen's and ADGE's co-chief executive officer and director; and

Charles Maxwell serves as a director of Tecogen and ADGE.

Following the Merger, the directors and executive officers of ADGE are expected to resign. The directors and executive officers of Tecogen are expected to remain the same except that it is expected that Bonnie Brown, the current Chief Financial Officer of ADGE, will also serve as the Principal Accounting Officer of Tecogen in place of the current Tecogen Chief Financial Officer. See "Directors and Executive Officers of Tecogen", "Directors and Executive Officers of ADGE," "Executive Compensation of Tecogen" and "Executive Compensation of ADGE."

**Stock Ownership**

The following directors and executive officers of Tecogen own shares of ADGE common stock pre-Merger which are convertible, in accordance with the Exchange Ratio, upon consummation of the Merger into shares of Tecogen common stock (without giving effect to the exercise of outstanding options to acquire common stock) as follows:

John Hatsopoulos owns 514,546 shares of ADGE common stock convertible to 47,338 shares of Tecogen common stock;

Benjamin Locke owns 15,418 shares of ADGE common stock convertible to 1,418 shares of Tecogen common stock; and

Charles Maxwell owns 1,275,232 shares of ADGE common stock convertible to 117,321 shares of Tecogen common stock.

#### Stock Options

The following table indicates as of March 17, 2017, the directors and executive officers of Tecogen who own stock options to purchase ADGE common stock pre-Merger which will become, upon consummation of the Merger, vested options to acquire shares of Tecogen common stock, with adjustments to the number of shares to reflect the Exchange Ratio, as follows:

Name	Vested/unvested Options to Acquire ADGE common stock pre-Merger	Vested Options to Acquire Tecogen common stock post-Merger
Charles Maxwell	200,000/0	18,400
Benjamin Locke	287,500/262,500	50,600

See "Interests of ADGE's Directors and Executive Officers in the Merger - Treatment of Outstanding Equity Awards" for further information.

#### Indemnification

Each of the current directors and executive officers of Tecogen and ADGE will be entitled pursuant to the Merger Agreement to continued indemnification by Tecogen and the purchase of a "tail" or "runoff" insurance policy of directors' and officers' liability insurance after the Merger.

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The Tecogen Board of Directors was aware of and considered these interests, among other matters, in evaluating and negotiating the Merger Agreement and the Merger, approving the Merger Agreement, and recommending that Tecogen stockholders approve the Tecogen Share Issuance Proposal.

## Interests of ADGE's Directors and Executive Officers in the Merger

In considering the recommendation of ADGE's Board of Directors to approve the ADGE Merger Approval Proposal, ADGE's stockholders should be aware that ADGE's directors and executive officers have financial interests in the Merger that are different from, or in addition to, the interests of ADGE stockholders generally as set forth below.

## Board and Executive Officers

The following ADGE directors and executive officers also serve as directors and/or officers of Tecogen:

John Hatsopoulos serves as ADGE's and Tecogen's co-chief executive officer and director;

Benjamin Locke serves as ADGE's and Tecogen's co-chief executive officer and director; and

Charles Maxwell serves as a director of ADGE and Tecogen.

Following the Merger, the directors and executive officers of ADGE are expected to resign. The directors and executive officers of Tecogen are expected to remain the same except that it is expected that Bonnie Brown, the current Chief Financial Officer of ADGE, will also serve as the Principal Accounting Officer of Tecogen in place of the current Tecogen Chief Financial Officer. See "Information Directors and Executive Officers of ADGE", "Directors and Executive Officers of Tecogen," "Executive Compensation of ADGE," "Executive Compensation of Tecogen."

## Stock Options

The following table indicates as of March 17, 2017, the ADGE director and/or executive officer who owns vested and unvested options to acquire ADGE common stock pre-Merger which will become, upon consummation of the Merger, vested options to acquire shares of Tecogen common stock, with adjustments to the number of shares to reflect the Exchange Ratio, as follows:

Name	Vested/unvested Options to Acquire ADGE common stock pre-Merger	Vested Options to Acquire Tecogen common stock post-Merger
Bonnie Brown	25,000/75,000	9,200
Christine Klaskin	100,000/100,000	18,400
Benjamin Locke	287,500/262,500	50,600
Charles Maxwell	200,000/0	18,400
Deanna Petersen	0/100,000	9,200
John Rowe	70,000/30,000	9,200
Elias Samaras	0/100,000	9,200

See "Interests of ADGE's Directors and Executive Officers in the Merger - Treatment of Outstanding Equity Awards" for further information.

## Indemnification

In addition, the Merger Agreement provides for the continued indemnification of current directors and executive officers of ADGE and Tecogen and the purchase of a "tail" or "runoff" insurance policy of directors' and officers' liability insurance after the Merger. See "The Merger - Interests of ADGE's Directors and Executive Officers in the Merger." The ADGE Board of Directors was aware of and considered these interests, among other matters, in evaluating and negotiating the Merger Agreement and the Merger, approving the Merger Agreement and recommending that ADGE stockholders approve the ADGE Merger Approval Proposal.

## Treatment of Outstanding Equity Awards

Pursuant to the terms and subject to the conditions set forth in the Merger Agreement, upon the completion of the Merger, each issued and outstanding share of ADGE common stock (other than shares held by ADGE or its

wholly-owned subsidiaries, which shares will be canceled) will be exchanged for the right to receive the Merger consideration. See “The Merger Agreement - Consideration to be Received in the Merger - Merger Consideration.” Upon completion of the Merger, each outstanding equity award with respect to ADGE common stock granted before the completion of the Merger under an ADGE equity plan to an ADGE participant that is in effect as of the completion of the Merger will remain in effect until such award expires, is terminated, is forfeited or is settled in accordance with its terms; provided, that (i) the number of shares of common stock subject to such awards will be adjusted to relate to Tecogen common stock based on the Exchange Ratio, (ii) each option and restricted stock award granted to any individual who has the required Business Relationship, as defined in their option agreement with ADGE, prior to the completion of the Merger will be 100% vested upon the completion of the Merger, and (iii) the exercise price of each outstanding stock option will be adjusted based on the Exchange Ratio. The following tables sets forth these effects on the unexpired ADGE stock option grants held by ADGE directors and executive officers as of March 21, 2017. All share numbers have been rounded to the nearest whole number.

## Effect of the Merger on ADGE Director &amp; Executive Officer Equity Compensation Awards

Name of Director or Executive Officer	Number of vested ADGE options owned pre-Merger	Number of unvested ADGE options owned pre-Merger	ADGE option exercise price pre-Merger	Number of shares of Tecogen common stock issuable upon exercise of vested ADGE options upon completion of Merger	Exercise price of options upon completion of Merger	Intrinsic value of vested option pre-merger*	Intrinsic value of vested options post-merger*
Bonnie Brown	25,000	75,000	\$ 0.29	9,200	\$ 3.15	\$ 2,250	\$ 9,000
Christine M. Klaskin	—	100,000	0.32	9,200	3.48	—	6,000
Benjamin Locke	112,500	37,500	1.67	13,800	18.15	—	—
Benjamin Locke	50,000	50,000	0.95	9,200	10.33	—	—
Benjamin Locke	100,000	100,000	0.52	18,400	5.65	—	—
Benjamin Locke	25,000	75,000	0.52	9,200	5.65	—	—
Charles T. Maxwell	200,000	—	2.79	18,400	30.33	—	—
Deanna M. Petersen	—	100,000	0.32	9,200	3.48	—	6,000
John Rowe	60,000	20,000	1.54	7,360	16.74	—	—
John Rowe	10,000	10,000	0.75	1,840	8.15	—	—
Elias Samaras	—	100,000	0.38	9,200	4.13	—	—
John N. Hatsopoulos	—	—	—	—	—	—	—

\*Assumes an ADGE stock price of \$0.38.

## Regulatory Approvals in Connection with the Merger

It is a condition to closing of the Merger that the Tecogen common stock to be issued in the Merger be listed on the Nasdaq Capital Market; however, neither Tecogen nor ADGE is aware of any regulatory approvals that are expected to prevent the completion of the Merger.

## Accounting Treatment

Tecogen will account for the Merger as a business combination with Tecogen treated as the acquirer of ADGE for accounting purposes. Under business combination accounting rules, the ADGE assets acquired and liabilities assumed will be recorded as of the Merger effective time, at their respective fair value, and added to those of Tecogen. Any excess of purchase



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price over the fair values will be recorded as goodwill. Tecogen's consolidated financial statements issued after the Merger will include ADGE assets acquired and retained by Tecogen in the Merger from the Merger effective time, but not for periods prior to the completion of the Merger.

**Listing of Tecogen Common Stock**

Tecogen will cause the shares of Tecogen common stock to be issued in the Merger to be approved for listing on the Nasdaq Capital Market prior to the Merger effective time, as a condition to closing, subject only to official notice of issuance.

**Deregistration of ADGE Common Stock**

If the Merger is completed, shares of ADGE common stock will cease to exist and will be deregistered under the Exchange Act.

**Restrictions on Sales of Shares of Tecogen Common Stock Received in the Merger**

Shares of Tecogen common stock issued upon consummation of the Merger will not be subject to any restrictions on transfer arising under the Securities Act, except for shares of Tecogen common stock issued to any ADGE stockholder that may be deemed to be an affiliate of Tecogen after the completion of the Merger. This joint proxy statement/prospectus does not cover resales of Tecogen common stock received by any person upon the completion of the Merger, and no person is authorized to make any use of this joint proxy statement/prospectus in connection with any resale.

**No Appraisal Rights**

Neither the holders of ADGE common stock nor the holders of Tecogen common stock will have appraisal rights related to the Merger as provided in the DGCL.

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THE MERGER AGREEMENT

The following is a summary of the material terms and conditions of the Merger Agreement. This summary does not purport to be complete and may not contain all of the information about the Merger Agreement that is important to you. This summary is qualified in its entirety by reference to the Merger Agreement, a copy of which is attached as Annex A to, and incorporated by reference into, this joint proxy statement/prospectus. The rights and obligations of the parties are governed by the express terms and conditions of the Merger Agreement and not by this summary or any other information contained in this joint proxy statement/prospectus. You are urged to read the Merger Agreement carefully and in its entirety before making any decisions regarding the Merger.

Explanatory Note Regarding the Merger Agreement and the Summary of the Merger Agreement: Representations, warranties and covenants in the Merger Agreement are not intended to function as public disclosures.

The Merger Agreement and the summary of its terms in this joint proxy statement/prospectus have been included only to provide you with information about the terms and conditions of the Merger Agreement. The terms and information in the Merger Agreement are not intended to provide any other public disclosure of factual information about Tecogen, ADGE or any of their respective subsidiaries, affiliates or businesses. The representations, warranties and covenants contained in the Merger Agreement are made by Tecogen and ADGE only for purposes of the Merger Agreement and as of specific dates, and were qualified and subject to certain limitations and exceptions agreed to by the parties to the Merger Agreement in connection with negotiating the terms of the Merger Agreement. In particular, in your review of the representations and warranties contained in the Merger Agreement and described in this summary, it is important to note that the representations and warranties were made solely for the benefit of the parties to the Merger Agreement and were negotiated for the purpose of allocating contractual risk among the parties to the Merger Agreement rather than to establish matters as facts. The representations and warranties may also be subject to a contractual standard of materiality or material adverse effect different from those generally applicable to stockholders and reports and documents filed with the SEC, and, in some cases, they may be qualified by disclosures made by one party to the other, which are not necessarily reflected in the Merger Agreement or other public disclosures made by Tecogen or ADGE. The representations and warranties contained in the Merger Agreement do not survive the effective time of the Merger. Moreover, information concerning the subject matter of the representations, warranties and covenants, which do not purport to be accurate as of the date of this joint proxy statement/prospectus, may have changed since the date of the Merger Agreement, and subsequent developments or new information may not be fully reflected in public disclosures of Tecogen or ADGE.

For the foregoing reasons, the representations, warranties and covenants or any descriptions of those provisions should not be read alone or relied upon as characterizations of the actual state of facts or condition of Tecogen or ADGE or any of their respective subsidiaries or affiliates. Instead, such provisions or descriptions should be read only in conjunction with the other information provided elsewhere in this joint proxy statement/prospectus. See “Where You Can Find More Information.”

Form, Effective Time and Closing

The Merger Agreement provides for the merger of Merger Sub with and into ADGE upon the terms and conditions set forth in the Merger Agreement. ADGE will be the surviving entity of the Merger and, following completion of the Merger, will continue to exist as a wholly-owned subsidiary of Tecogen.

The closing of the Merger will take place as soon as practicable following the date on which the last of the conditions to closing of the Merger described under “- Conditions to Completion of the Merger” below have been satisfied or waived (other than the conditions that by their nature are to be satisfied at the closing, but subject to the satisfaction or waiver of such conditions at the closing), or such other date as agreed to by ADGE and Tecogen in writing.

The Merger will become effective at such time as a Certificate of Merger is accepted for recording by the Delaware Secretary of State or on such later date and time agreed to by ADGE and Tecogen.

Organizational Documents, Directors and Officers of the Surviving Entity

At the Merger effective time, the certificate of incorporation and bylaws of Merger Sub as in effect immediately prior to the Merger effective time, in a form mutually agreed to by Tecogen and ADGE, will be the certificate of incorporation and bylaws of ADGE as the surviving entity. The directors of ADGE immediately prior to the Merger



effective time are expected to resign. The executive officers of ADGE will continue to be the directors and officers of the surviving entity. See "Information About ADGE -- Management of ADGE."

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Consideration to be Received in the Merger

Merger Consideration

Subject to the terms and conditions set forth in the Merger Agreement, at the effective time of the Merger, each of ADGE's shares of common stock, \$.001 par value per share, issued and outstanding immediately prior to the effective time of the Merger will be converted into the right to receive 0.092 shares (the "Exchange Ratio") of common stock, \$.001 par value per share, of Tecogen. The Exchange Ratio is obtained by dividing \$0.38 by the aggregate volume weighted-average per share closing price, rounded to two decimal points of Tecogen common stock on the Nasdaq Capital Market for the 20 consecutive trading days ending October 28, 2016, subject to adjustment. No fractional shares of Tecogen common stock will be issued in the Merger, and cash will be paid in lieu thereof, as described in "- Fractional Shares" below.

Adjustment of Merger Consideration

The number of shares of Tecogen common stock may be subject to adjustment in the event of any stock split, reverse stock split, stock dividend, recapitalization, reclassification, combination, exchange of shares or other similar event with respect to the number of ADGE's or Tecogen's shares outstanding after the date of the Merger Agreement and prior to the effective time of the Merger.

Procedures for Exchange of ADGE Shares

Prior to the Merger effective time, Tecogen will deposit, or cause Merger Sub to deposit, with an exchange agent (i) evidence of Tecogen common stock in book-entry form equal to the aggregate number of shares of Tecogen common stock to be issued as merger consideration, excluding any fractional share consideration, and (ii) cash in an amount sufficient to pay the aggregate fractional share consideration payable under the Merger Agreement.

Promptly after the Merger effective time, but in no event later than five business days after the Merger effective time, Tecogen shall cause the exchange agent to mail to each holder of record of shares of ADGE common stock immediately prior to the Merger effective time, a letter of transmittal and instructions for effecting the surrender of the certificates representing such shares or uncertificated (i.e. "book-entry") shares in exchange for the Merger consideration.

Each ADGE stockholder that properly surrenders its stock certificate (or affidavit of loss, as appropriate) or book-entry shares to the exchange agent for cancellation together with a duly completed and validly executed letter of transmittal will receive the merger consideration due to such stockholder. After the Merger effective time and until surrendered, each certificated or book entry share that previously represented shares of ADGE common stock will only represent the right to receive the Merger consideration payable under the Merger Agreement and the right, if any, to receive cash in lieu of fractional shares into which such shares have been converted. Shares of Tecogen common stock deliverable in exchange for shares of ADGE common stock will be in book-entry form.

Withholding

All amounts payable with respect to securities pursuant to the Merger Agreement will be paid without interest (unless otherwise noted) and be net of all applicable withholding taxes that are required to be deducted and withheld under applicable law.

Fractional Shares

Fractional shares of Tecogen common stock will not be issued upon the surrender for exchange of shares of ADGE common stock. In lieu thereof, upon surrender of certificates representing shares or book-entry shares of ADGE common stock, Tecogen will pay ADGE stockholders an amount in cash equal to the product obtained by multiplying (i) the fractional share interest to which the holder would otherwise be entitled by (ii) the Nasdaq Capital Market closing price for a share of Tecogen common stock on the last trading day immediately preceding the Merger effective time.

Treatment of Stock Options and Restricted Stock Awards

Each outstanding option and restricted stock award with respect to ADGE common stock granted before the Merger effective time under an ADGE equity plan or otherwise to a participant that is in effect as of the Merger effective time will remain in effect until such option or restricted stock award expires, is terminated, is forfeited or settled in accordance with the terms of the applicable ADGE equity plan or underlying award or option agreement governing

such option or restricted stock award, provided that upon and following the Merger effective time, (i) such options and restricted stock awards will cease to be exercisable for or relate to shares of ADGE common stock and will instead be exercisable for or relate to a number of shares of Tecogen common stock (rounded down to the closest whole share) equal to the number of shares of ADGE common stock underlying the options and restricted stock awards immediately prior to the Merger effective time multiplied by the Exchange Ratio, (ii) restricted stock awards for any individual who is a non-employee director of ADGE immediately prior to the Merger effective time will be 100% vested, and (iii) the exercise price per share of each ADGE stock option will be equal to the exercise price per share of

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ADGE common stock immediately before the Merger effective time divided by the Exchange Ratio, rounded down to the closest whole cent.

As of the Merger effective time, Tecogen shall assume any ADGE stock incentive plans or stock option plans and any award thereunder as to which any obligation remains outstanding or with respect to which shares remain available for issuance.

**Vesting of Options**

As a result of the Merger, all option agreements that are in effect as of the closing date for any participant who has the required Business Relationship, as defined in their option agreement, with ADGE will, if such award has not previously expired or been forfeited, vest 100% because the Merger triggers an accelerated vesting provision in ADGE's standard option agreement. The Merger Agreement by its terms will not affect provisions currently in effect for awards granted under ADGE's equity plan before the Merger closing date except as set forth above.

**Treatment of Outstanding Warrants**

Each common stock purchase warrant to purchase or acquire ADGE Common Stock, whether vested or unvested, each, an ADGE Warrant, granted and issued and outstanding immediately before the Merger effective time, each holder thereof, a Warrantholder, and that is in effect immediately before the Merger effective time, shall remain in effect after the Merger effective Time and until such ADGE Warrant expires, is terminated, is forfeited or settled in accordance with the terms thereof; provided, however, that, upon and immediately following the Merger effective time (i) each such ADGE Warrant shall cease to be exercisable for or relate to shares of ADGE common stock but instead shall be exercisable for 0.092 shares of Tecogen common stock, subject to adjustment as provided in the Merger Agreement, multiplied by the number of shares of ADGE common stock as to which each such ADGE Warrant related immediately before the Merger effective time (rounded down to the closest whole share), and (ii) the exercise price per share of each ADGE Warrant shall be equal to the exercise price per share of such ADGE Warrant immediately before the Merger effective time divided by 0.092, subject to adjustment, rounded down to the closest whole cent.

**Representations and Warranties**

The Merger Agreement contains a number of parallel representations and warranties made by Tecogen and ADGE. These representations and warranties are substantially identical and are summarized below. The representations and warranties were made by the parties as of the date of the Merger Agreement and do not survive the Merger effective time. See "Where You Can Find More Information."

The representations and warranties made by ADGE and Tecogen to each other in the Merger Agreement relate to: corporate organization, valid existence, good standing, corporate power and authority, qualification to do business, and organizational documents;

capitalization;

due authorization of the Merger Agreement and the Merger;

validity and binding effect of the Merger Agreement;

Board approval of the Merger Agreement, the Merger and other transactions; Board recommendation to stockholders;

the absence of a breach or violation of, or a default under, government documents or filing by or obtaining of a permit, authorization, consent or approval of governmental authorities (except as specifically provided);

compliance with SEC regulations for periodic reporting;

absence of certain changes in the business;

absence of material litigation;

filing of tax returns and payment of taxes;

compliance with law, stock exchange listing and accounting requirements;

no undisclosed material liabilities;

material compliance with environmental laws and regulations;

enforceability and lack of breach of material contracts;

absence of material disputes with customers and suppliers;

accuracy of the information included herein regarding the company;

inapplicability of state anti-takeover statutes; and  
no appraisal/dissenters' rights with respect to the Merger.

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Covenants and Agreements

Conduct of Business by ADGE and Tecogen Pending the Closing.

ADGE and Tecogen each agreed that pending consummation of the Merger and except as expressly permitted by the Merger Agreement, as may be required by Law or as consented to in writing by the other party (which consent shall not be unreasonably withheld, delayed or conditioned), it shall conduct its business in all material respects in the ordinary course of business consistent with past practice and use commercially reasonable efforts, in all material respects, to maintain its assets and properties in their current condition, preserve its business organizations, and maintain existing relations with customers, lenders and employees.

Form S-4 and Joint Proxy Statement; Stockholders Meetings.

ADGE and Tecogen each agreed to prepare and cause to be filed with the SEC the joint proxy statement included in this joint proxy statement/prospectus, and Tecogen agreed to prepare and cause to be filed with the SEC the registration statement on Form S-4 with respect to the common stock to be issued in the Merger, which will include this joint proxy statement/prospectus, as promptly as reasonably practicable. Each of ADGE and Tecogen agreed to use its reasonable best efforts to (i) have the Form S-4 declared effective under the Securities Act as promptly as practicable after such filing; (ii) ensure that the Form S-4 complies in all material respects with the applicable provisions of the Exchange Act and the Securities Act; and (iii) keep the Form S-4 effective for so long as necessary to complete the Merger and the transactions contemplated in the Merger Agreement.

ADGE and Tecogen each agreed to use its reasonable best efforts to cause the joint proxy statement to be mailed to its stockholders that are entitled to vote at its stockholder meeting and to hold its stockholder meeting as soon as practicable after the Form S-4 is declared effective. ADGE agreed to include in the joint proxy statement/prospectus the recommendation of the ADGE Board of Directors that ADGE stockholders approve the Merger and the other transactions contemplated by the Merger Agreement, include such recommendation in this joint proxy statement and solicit and use its reasonable best efforts to obtain the approval by its stockholders of the Merger and the other transactions contemplated by the Merger Agreement. Tecogen agreed to include in this joint proxy statement/prospectus the recommendation of the Tecogen Board of Directors to Tecogen stockholders that they approve the Tecogen Share Issuance Proposal, and solicit and use its reasonable best efforts to obtain the approval of the Tecogen Share Issuance Proposal.

Access to Information; Notice of Certain Events

The Merger Agreement requires ADGE, on the one hand, and Tecogen, on the other, to provide, with limited exceptions, to the other party and its representatives reasonable access during normal business hours and upon reasonable advance notice to all of their respective properties, offices, books, contracts, commitments, personnel and records, and to furnish all other information in its possession (financial or otherwise) concerning its business, properties and personnel as such other party or its representatives may reasonably request.

Each of ADGE and Tecogen will hold, and will cause its representatives and affiliates to hold, any nonpublic information in confidence to the extent required by and in accordance with, and will otherwise comply with, the terms of their existing confidentiality agreement, or any law or duty.

ADGE, on the one hand, and Tecogen, on the other, have agreed to give prompt notice to the other of any notice or other communication received by such party (i) from any governmental entity in connection with the Merger Agreement, the Merger or the other transactions contemplated by the Merger Agreement, (ii) from any person alleging that the consent of such person (or another person) is or may be required in connection with the Merger or the other transactions contemplated by the Merger Agreement, or (iii) of any written notice received from any person in connection with (a) any material violation or default under or notice to terminate, not renew or challenge the validity or enforceability of any material contract or lease of such party or (b) any event or circumstance that would give rise to any option to purchase, right of first refusal or first offer, or any other right to purchase in favor of any person under any material contract or lease of such party.

In addition, ADGE, on the one hand, and Tecogen, on the other, have agreed to give prompt notice to the other (i) of any legal proceeding commenced or, to the party's knowledge, threatened against or otherwise affecting such party or any of its subsidiaries or affiliates, in each case in connection with, arising from or otherwise relating to the Merger or

any other transaction contemplated by the Merger Agreement, and (ii) upon becoming aware of the occurrence or impending occurrence of any event, change, development or circumstance relating to it or any of its respective subsidiaries that makes or is reasonably likely to make any of the conditions set forth in Merger Agreement to not be satisfied.

The failure to deliver any notices described above, in and of itself, will not result in the failure of, or otherwise affect, any of the conditions set forth in the Merger Agreement.

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Consents and Approvals

Each of ADGE and Tecogen have agreed to use their reasonable best efforts to take all actions, and to do, and to assist and cooperate with the other party in doing, all things necessary, proper or advisable under applicable law or pursuant to any contract to consummate, as promptly as practicable, the Merger and the other transactions contemplated by the Merger Agreement, including (i) the taking of all actions necessary to cause the closing conditions set forth in the Merger Agreement to be satisfied, (ii) preparing and filing all documentation to effect all filings, notices, registrations, applications and approvals and the taking of all reasonable steps as may be necessary to obtain an approval or waiver from, or to avoid legal proceeding by, any governmental entity or other persons necessary in connection with the consummation of the Merger and the other transactions contemplated by the Merger Agreement, (iii) the defending of any legal proceedings, whether judicial or administrative, challenging the Merger Agreement or the consummation of the Merger or the other transactions contemplated by the Merger Agreement, and (iv) the execution and delivery of any additional instruments necessary to consummate the Merger and the other transactions contemplated by the Merger Agreement.

Each of Tecogen and ADGE have agreed to give any notices to any person, and each of Tecogen and ADGE will use its reasonable best efforts to obtain any consents from any person, that are necessary, proper or advisable to consummate the Merger. Each of the parties will furnish to the other such necessary information and reasonable assistance as the other may request in connection with the preparation of any required governmental filings or submissions and will cooperate in responding to any inquiry from a governmental entity. To the extent reasonably practicable, the parties or their representatives will have the right to review in advance and each of the parties will consult with the others on, all the information relating to the other and each of its affiliates that appears in any filing made with, or written materials submitted to, any governmental entity in connection with the Merger and the other transactions contemplated by the Merger Agreement, except that confidential, competitively sensitive business information may be redacted from such exchanges. To the extent reasonably practicable, neither ADGE nor Tecogen may, nor may they permit their respective representatives to, participate independently in any meeting or engage in any substantive conversation with any governmental entity without giving the other party prior notice of such meeting or conversation and, to the extent permitted by applicable law, without giving the other party the opportunity to attend such meeting.

In connection with obtaining any approval or consent from any person (other than any governmental entity) with respect to the Merger, neither ADGE nor Tecogen will be obligated to pay or commit to pay to such person whose approval or consent is being solicited any cash or other consideration, or make any accommodation or commitment or incur any liability or other obligation to such person, in each case that is not conditioned upon the occurrence of the closing of the Merger. Otherwise, the parties will cooperate with respect to reasonable accommodations that may be required or appropriate to obtain such consents. No approval or consent of any such person is a condition to the obligations of any party to effect the Merger.

Publicity

ADGE and Tecogen have agreed, subject to certain exceptions, that they and their respective affiliates will receive consent from each other before issuing any press release or other announcement with respect to the Merger or the Merger Agreement, except as may be required by applicable law, duties under applicable law or by obligations pursuant to any listing agreement with a national securities exchange.

Directors' and Officers' Insurance and Indemnification

Tecogen has agreed to cause the surviving entity to honor and fulfill in all respects to the fullest extent permissible under applicable law ADGE's obligations under its existing governing documents and indemnification agreements to the individuals covered by such documents or agreements, or the covered persons, arising out of or relating to actions or omissions in their capacity as such occurring at or prior to the Merger effective time, including in connection with the approval of the Merger Agreement and the transactions contemplated by the Merger Agreement.

For a period of six years after the Merger effective time, pursuant to the terms of the Merger Agreement and subject to certain limitations, Tecogen (but only to the extent covered persons would be permitted to be indemnified by ADGE or any of its subsidiaries under their respective governing documents and applicable law) and the surviving entity will,



and Tecogen will cause the surviving entity to, (i) indemnify and hold harmless each covered person against and from any costs or expenses (including attorney's fees), judgments, fines, losses, claims, damages, liabilities and amounts paid in settlement in connection with any claim, action, suit, proceeding or investigation, to the extent such claim, action, suit, proceeding or investigation arises out of or pertains to any action or omission in such covered person's capacity as such or the Merger Agreement and any of the transactions contemplated by the Merger Agreement, and (ii) pay the expenses (including attorney's fees) of any covered person in advance of the final disposition of any such claim, action, suit, proceeding or investigation if such covered person agrees to repay such amount if it is ultimately determined that such covered person is not entitled to be indemnified.

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For a period of six years after the Merger effective time, Tecogen will cause to be maintained in effect the current policies of directors' and officers' liability insurance maintained by ADGE with respect to claims arising from or related to facts or events which occurred at or before the Merger effective time, provided that Tecogen will not be obligated to make annual premium payments for such insurance to the extent such premiums exceed 300% of the annual premiums paid by ADGE as of the date of the Merger Agreement. At ADGE's election, in lieu of the foregoing insurance and effective as of the Merger effective time, ADGE may purchase a directors' and officers' liability insurance "tail" or "runoff" insurance program for a period of six years after the Merger effective time with terms, conditions, retentions and limits of liability that are at least as favorable as provided in ADGE's existing policies.

### Absence of Lock-up Provisions

The Merger Agreement does not contain any so-called "deal protection devices" such as a no-shop provision or a termination fee. Prior to obtaining stockholder approval, both ADGE and Tecogen may withdraw or modify its recommendation to stockholders with respect to the Merger, terminate the Merger Agreement and, with respect to ADGE, enter into an agreement with respect to a competing acquisition proposal with a third party. In addition, Tecogen and ADGE may mutually agree to terminate the Merger Agreement at any time prior to the Merger effective time, regardless of whether Tecogen or ADGE stockholder approval has been obtained.

### ADGE Go-Shop Right

ADGE, its affiliates, and their respective officers, directors, employees, consultants, agents, financial advisors, investment bankers, attorneys, accountants, other advisors, affiliates and other representatives have the right to directly or indirectly: (i) initiate, solicit and encourage, whether publicly or otherwise, any inquiries, proposals or offers that could constitute competing proposals to the Merger, including by way of providing access to non-public information (provided that such information is also given to Tecogen); and (ii) enter into, engage in, and maintain discussions or negotiations with respect to any inquiries, proposals or offers that could constitute competing proposals (or engage in other efforts or otherwise cooperate with or assist or participate in, or facilitate any such inquiries, proposals, offers, efforts, attempts, discussions or negotiations. In certain circumstances, Tecogen would be given an opportunity to improve its acquisition proposal. See "Termination of the Merger Agreement by Either Tecogen or ADGE."

### No Requirement of Minority Stockholder Approval

After due consideration, the Board of Directors of each of Tecogen and ADGE determined not to require approval of a "majority of the minority" of stockholders of each company as a condition to closing of the Merger due to a number of factors, including but not limited to: (a) a historical pattern of a significant percentage of stockholders of each of Tecogen and ADGE not voting in prior annual meetings, making it difficult to achieve a majority of the minority of all eligible shares for each such company, particularly in light of the significant equity ownership of officers and directors and their families of each company; (b) the establishment of independent special committees of the Boards of Directors of each of Tecogen and ADGE; (c) the retention of independent financial advisors for each such special committee; and (d) the significant and nearly equivalent equity ownership in each company by the same principal stockholders.

### Takeover Statutes

The parties and their respective boards of directors (or equivalent) shall use their respective reasonable best efforts (a) to take all action necessary so that no state takeover statute is or becomes applicable to the Merger or any of the other transactions and (b) if any such takeover statute is or becomes applicable to any of the foregoing, to take all action necessary to minimize the impact of such takeover statute.

### Employee Benefits

Tecogen has agreed to honor all ADGE benefit plans, other than any plan being terminated as described below. However, the Merger Agreement does not restrict Tecogen's or the surviving entity's ability to amend or terminate any ADGE benefit plan or require Tecogen or the surviving entity to offer to continue the employment of any employee or independent contractor or, other than as required by its terms, any written employment contract.

With respect to each employee benefit plan in which an ADGE employee becomes a participant, Tecogen will (i) fully credit each participating ADGE employee for his or her service with ADGE for eligibility and vesting purposes

(unless that would result in a duplication of benefits), (ii) fully credit each participating ADGE employee for any coinsurance, copayments and deductibles paid and for amounts paid toward any out-of-pocket maximums for the year the employee's participation commence, and (iii) waive all limitations as to pre-existing conditions and exclusions with respect to participation and coverage requirements applicable to such ADGE employees.

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The ADGE Board of Directors will adopt resolutions authorizing the termination of any ADGE benefit plan that is intended to be qualified under Section 401(a) of the Internal Revenue Code, to be effective no later than the day before the Merger effective time. All participants and former participants with account balances in an ADGE 401(k) plan will become fully vested in their account balances.

Other Covenants and Agreements

The Merger Agreement contains certain other covenants and agreements, including covenants related to: Tecogen taking all action necessary to cause Merger Sub and the surviving entity to perform their respective obligations under the Merger Agreement and to consummate the Merger and the other transactions contemplated by the Merger Agreement;

ADGE taking such steps as may be reasonably necessary or advisable to cause dispositions of ADGE equity securities and the acquisition of Tecogen equity securities pursuant to the transactions contemplated by the Merger Agreement by each ADGE director or officer or who will become a director or officer of Tecogen to be exempt under Rule 16b-3 promulgated under the Exchange Act;

ADGE promptly notifying Tecogen of any legal proceeding related to the Merger Agreement the Merger or the other transactions contemplated by the Merger Agreement that is brought against ADGE and/or its officers, directors and/or representatives by security holders of ADGE, keeping Tecogen informed on a current basis with respect to the status of any such legal proceeding and providing Tecogen with the opportunity to participate in the defense and settlement of any such legal proceeding, with no settlement thereof being agreed to without Tecogen's written consent;

ADGE using commercially reasonable efforts to cause to be delivered to Tecogen resignations executed by each director of ADGE and its wholly-owned subsidiaries in office immediately prior to the Merger effective time, such resignations to be effective as of the Merger effective time;

the parties agreeing to reasonably cooperate in the preparation, execution and filing of all returns, questionnaires, applications or other documents relating to transfer taxes that become payable in connection with the transactions contemplated by the Merger Agreement and to cooperate in attempting to minimize the amount of such transfer taxes;

the parties agreeing to use their respective reasonable best efforts to cause the Merger to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code; and

restrictions on both ADGE and Tecogen from declaring a dividend to their respective stockholders after the date of the Merger Agreement, except to the extent consented to in writing by the other party.

Conditions to Completion of the Merger

Mutual Closing Conditions

The obligation of each of ADGE, Tecogen, and Merger Sub to complete the Merger is subject to the satisfaction or waiver, on or prior to the closing date, of the following conditions:

adoption of the Merger Agreement and approval of the Merger by ADGE common stockholders;

approval of the issuance of the shares of Tecogen common stock to be issued in the Merger as contemplated by the Merger Agreement by Tecogen common stockholders;

the absence of any law or order by any governmental entity prohibiting, restraining, enjoining or making illegal the consummation of the Merger or the other transactions contemplated by the Merger Agreement;

the Form S-4 of which this joint proxy statement/prospectus is a part shall have been declared effective and no stop order suspending the effectiveness of the Form S-4 shall have been issued by the SEC and shall remain in effect and no proceeding to that effect shall have been commenced; and

the shares of Tecogen common stock to be issued in connection with the Merger shall have been approved for listing on the Nasdaq Capital Market, subject only to official notice of issuance.

Reciprocal Closing Conditions

The obligation of each of Tecogen and ADGE to effect the Merger is subject to the satisfaction or waiver, on or prior to the closing date, of customary conditions related to the continuing accuracy of the other party's representations and warranties contained in the Merger Agreement and to the compliance of the other party with its pre-closing obligations set forth in the Merger Agreement.



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Termination of the Merger Agreement by Either Tecogen or ADGE

Abandonment Prior to Stockholder Approval

Prior to the approval of the Merger by ADGE's stockholders or the stockholders of Tecogen, the Merger Agreement and Merger may be abandoned by either ADGE or Tecogen pursuant to a resolution of the respective board of directors of such companies to withdraw or fail to make when required under the Merger Agreement or fail to include in the joint proxy statement/prospectus for the Merger, a recommendation that the stockholders of such company vote in favor of the Merger. The Merger Agreement does not provide for the payment by ADGE of a breakup or termination fee in the event of such a termination.

Competing Proposal

Also, ADGE may terminate the Merger Agreement, prior to the approval by the stockholders of Tecogen and ADGE, in the event the ADGE board approves, recommends or declares advisable, or proposes publicly to approve, recommend or declare advisable a competing proposal or offer by a third party to purchase 20% or more of the assets or outstanding capital stock, other equity securities, or voting power, of ADGE, or any merger, business combination, consolidation, share exchange, recapitalization or similar transaction as a result of which the holders of ADGE's common stock immediately prior to the transaction do not own at least 80% of the outstanding voting power of the surviving or resulting entity in such transaction after the consummation of the transaction ("competing proposal"). The foregoing is subject to compliance with written notice of termination and the furnishing of the reasons for such termination. In the event of a termination, there shall be no liability on the part of the terminating party to the other party or parties except in the case of fraud, gross negligence, or willful misconduct.

Fiduciary Duty Termination Right

Further, the Merger Agreement provides that at any time before the closing of the Merger, either ADGE's or Tecogen's board of directors may terminate the Merger Agreement if such board (or a committee of such board) has determined in good faith, after consultation with its financial advisors and legal counsel ("advisors"), that there is a reasonable probability the failure to take such action would cause the board of ADGE or Tecogen, as the case may be, to violate its fiduciary duties to its stockholders under applicable law. The Merger Agreement requires the terminating company to provide ten days' prior written notice; the terminating company (or its representative) is required to negotiate in good faith with the other party during the five day business day period after giving such notice to the extent such other party wishes to negotiate and, in the case of a termination by ADGE's board, and to the extent Tecogen wishes to negotiate, to enable Tecogen to propose in writing a binding offer to effect revisions to the terms of the Merger Agreement that would obviate the need for a termination by ADGE, and, in the case of a termination by the board of Tecogen, to enable both companies to agree to revisions to the terms of the Merger Agreement that would obviate the need for a termination by Tecogen. At the end of the notice period, the terminating company's board (or committee), is required to have considered in good faith any such binding offer, and to have determined in good faith, after consultation with its advisors, that there is a reasonable probability the failure to effect the termination would cause such board to violate its fiduciary duties to its stockholders under applicable law. In the event of such a termination by either party there shall be no liability on the part of the terminating party to the other party or parties except in the case of fraud, gross negligence, or willful misconduct.

Miscellaneous Provisions

Amendment

Subject to applicable law and except as otherwise provided in the Merger Agreement, the parties may amend, modify and supplement the Merger Agreement, whether before or after receipt of ADGE stockholders' approval of the Merger and the other transactions contemplated by the Merger Agreement or by Tecogen stockholders' approval of the Merger or related Tecogen Charter Amendment, by written agreement of ADGE and Tecogen (by action taken by their respective boards of directors), provided that, after receipt of ADGE stockholders' approval of the Merger and the other transactions contemplated by the Merger Agreement or receipt of Tecogen stockholder approval of the Merger, no amendment will be made which by law requires further approval by such stockholders without obtaining such further approval.

Waiver

Prior to the Merger effective time, any party or parties may extend the time for performance of any obligation or other acts of the other party or parties, or waive any inaccuracy in the representations and warranties of the other party or their compliance with any agreement or condition for the benefit of such party contained in the Merger Agreement, to the extent permitted by law.

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Payment of Expenses

All expenses incurred in connection with the Merger Agreement and the transactions contemplated by the Merger Agreement will be paid by the party incurring such expenses, except that the parties will each pay 50% of the expenses of any financial printer or EDGAR filing agent (other than printing and mailing expenses relating to sending communications to their own respective stockholders, which each party will bear separately). ADGE, as the surviving entity following the Merger, will pay any transfer taxes incurred in connection with the Merger Agreement and the transactions contemplated by the Merger Agreement.

Governing Law

The Merger Agreement is governed by and shall be construed in accordance with, the laws of the State of Delaware without giving effect to conflicts of laws principles thereof.

Specific Performance

The parties are entitled to injunctions, specific performance and other equitable relief to prevent breaches of the Merger Agreement prior to termination of the Merger Agreement and to enforce specifically the terms and provisions of the Merger Agreement in addition to any and all other remedies at law or in equity.



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**MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER**

The following discussion is a general summary of the U.S. federal income tax consequences of the Merger to U.S. holders (as defined below) of ADGE common stock.

This discussion addresses only holders of ADGE common stock who hold their stock as a capital asset within the meaning of Section 1221 of the Internal Revenue Code (generally, property held for investment). This discussion does not address any non-income taxes or any foreign, state or local tax consequences of the Merger. This discussion does not address all aspects of U.S. federal income taxation that may be relevant to holders of ADGE common stock in light of their particular circumstances or to holders subject to special rules (including controlled foreign corporations, passive foreign investment companies, companies that accumulate earnings to avoid U.S. federal income tax, tax-exempt organizations, financial institutions, brokers or dealers in securities, insurance companies, regulated investment companies, real estate investment trusts, persons who hold ADGE common stock as part of a hedging or conversion transaction or as part of a short-sale or straddle, certain U.S. expatriates, persons whose functional currency is not the U.S. dollar, partnerships or other pass-through entities for U.S. federal income tax purposes or persons who acquired ADGE common stock pursuant to the exercise of options or otherwise as compensation). In addition, this discussion does not address any alternative minimum tax nor does it address any tax consequences arising under the unearned income Medicare contribution tax pursuant to the Health Care and Education Reconciliation Act of 2010. This discussion is based on the Internal Revenue Code, applicable Treasury regulations, administrative interpretations and court decisions, each as in effect as of the date of this joint proxy statement/prospectus and all of which are subject to change, possibly with retroactive effect. Any such change could affect the validity of this discussion.

For purposes of this discussion, a “U.S. holder” is a beneficial owner of ADGE common stock that is:

- an individual citizen or resident of the United States;
- a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust (i) that is subject to the primary supervision of a court within the United States and all the substantial decisions of which are controlled by one or more U.S. persons or (ii) that has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

If a partnership (or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds ADGE common stock, the tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partners of partnerships holding ADGE common stock should consult their own tax advisors.

**THE FOLLOWING DISCUSSION DOES NOT PURPORT TO BE A COMPLETE ANALYSIS OR DISCUSSION OF ALL OF THE POTENTIAL TAX CONSEQUENCES OF THE MERGER. PLEASE CONSULT YOUR OWN TAX ADVISORS AS TO THE SPECIFIC TAX CONSEQUENCES TO YOU OF THE MERGER, INCLUDING TAX RETURN REPORTING REQUIREMENTS AND THE APPLICABILITY AND EFFECT OF U.S. FEDERAL, STATE, LOCAL AND FOREIGN INCOME AND OTHER TAX LAWS IN LIGHT OF YOUR PARTICULAR CIRCUMSTANCES.**

**General**

Tecogen and ADGE intend that the Merger qualify as a “reorganization” within the meaning of Section 368(a) of the Internal Revenue Code.

Neither Tecogen nor ADGE intends to obtain a ruling from the IRS regarding the qualification of either Merger as a “reorganization” within the meaning of Section 368(a) of the Internal Revenue Code. If the IRS were to successfully challenge the “reorganization” status of the Merger, the tax consequences could differ from those described in this joint proxy statement/prospectus. An opinion of our tax counsel, Sullivan & Worcester, LLP, related to certain tax aspects of the Merger is incorporated as an exhibit to the registration statement of which this joint proxy statement/prospectus forms a part. The following discussion represents the opinion of our tax counsel as to the material United States federal income tax consequences of the Merger to U.S. holders of Tecogen and ADGE common stock.



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U.S. Federal Income Tax Consequences of the Merger to U.S. Holders of ADGE Common Stock

Exchange of ADGE common stock for Tecogen common stock

Subject to the discussion below relating to the receipt of cash in lieu of fractional shares, a U.S. holder of ADGE common stock that receives shares of Tecogen common stock in the Merger:

- will not recognize any gain or loss upon the exchange of shares of ADGE common stock for shares of Tecogen common stock in the Merger;
- will have a tax basis in Tecogen common stock received in the Merger (including fractional shares for which cash is received) equal to the tax basis of ADGE common stock surrendered in exchange therefore; and
- will have a holding period for shares of Tecogen common stock received in the Merger (including fractional shares for which cash is received) that includes its holding period for its shares of ADGE common stock surrendered in exchange therefore.

Cash in Lieu of Fractional Shares

No fractional shares of Tecogen common stock will be distributed to ADGE stockholders in connection with the Merger. A U.S. holder that receives cash in lieu of a fractional share of Tecogen common stock as a part of the Merger will generally recognize capital gain or loss measured by the difference between the cash received for such fractional share and the portion of the U.S. holder's tax basis in the shares of ADGE common stock allocable to the fractional share. Such capital gain or loss will generally be long term capital gain or loss if the holding period for such fractional shares of Tecogen common stock is more than one year. Long term capital gain of certain non-corporate taxpayers, including individuals, is generally taxed at preferential rates. The deductibility of capital losses is subject to limitations.

U.S. holders that acquired different blocks of ADGE common stock at different times or different prices should consult their tax advisor regarding the manner in which gain or loss should be determined in their specific circumstances.

Backup Withholding

Backup withholding at the applicable rate (currently 28%) may apply with respect to certain cash payments unless the holder of ADGE common stock receiving such payments:

- (i) is an exempt holder (generally, corporations, tax-exempt organizations, qualified pension and profit-sharing trusts, individual retirement accounts, or nonresident aliens who, when required, provide certification as to their status); or
- (ii) provides a certificate containing the holder's name, address, correct federal taxpayer identification number and a statement that the holder is exempt from backup withholding. Backup withholding does not constitute an additional tax, and any amounts withheld from payments to a holder under the backup withholding rules will be allowed as a refund or credit against the holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

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INFORMATION ABOUT TECOGEN

Business

The Company

Tecogen® Inc. (“Tecogen,” the “Company,” “we,” “our,” or “us”) was incorporated in the State of Delaware on September 15, 2000. Our principal executive offices are located at 45 First Avenue, Waltham, Massachusetts 02451 and our telephone number is (781) 446-6400. The Company designs, manufactures, markets, and maintains high efficiency, ultra-clean cogeneration products including natural gas engine-driven combined heat and power, air conditioning systems, and water heaters for residential, commercial, recreational and industrial use. The Company is known for cost efficient, environmentally friendly and reliable products for distributed power generation that, through patented technology, nearly eliminate criteria pollutants and significantly reduce a customer’s carbon footprint.

The Company’s history dates to the early 1960s when it served as the Research and Development New Business Center of Thermo Electron Corporation, now Thermo Fisher Scientific Inc. For the two decades, this group performed fundamental and applied research in many energy-related fields to develop new technologies. In 1982, the Research and Development group released its first major product, a 60-kilowatt (kW) cogenerator. In the late 1980s and early 1990s, air-conditioning and refrigeration products using the same gas engine-driven technology were introduced. In 1987, Tecogen was spun out as a separate entity by Thermo Electron and, in 1992, became a division of the newly formed Thermo Power Corporation. In 2000, Thermo Power Corporation was dissolved, and Tecogen was sold to a group of private investors including the Company’s Co-CEO John N. Hatsopoulos.

In 2009, Tecogen created a subsidiary, Ilios® Inc., a Delaware corporation (“Ilios”), to develop and distribute a line of high-efficiency heating products, starting with a water heater. We believe that these products are much more efficient than the conventional boilers traditionally used in commercial buildings and industrial processes (see “Our Products” below).

In December 2015, the Company entered into a joint venture agreement with a group of European strategic investors relating to the formation of Ultra Emissions Technologies Ltd. (“Ultra Emissions”), organized under the laws of the Island of Jersey, Channel Islands, a joint venture company. Ultra Emissions was organized to develop and commercialize Tecogen’s patented technology, Ultera®, for the automotive market. The technology is designed to reduce harmful emissions generated by engines using fossil fuels. Tecogen contributed an exclusive license for use of Ultera in the automotive space to the joint venture, and the strategic partners have committed to financing the initial research, development and testing of a viable product. Although Tecogen originally owned 50% of the joint venture, due to investment by outside investors, as of December 31, 2016, Tecogen’s ownership interest is 43%. See “Our Products - Ultera Low-Emissions Technology” below for a more in depth discussion of the Ultra emissions opportunity.

Recent Developments

In April 2016 pursuant to share exchange agreements, holders of the non-controlling interest in Ilios agreed to exchange every 7.86 of their restricted Ilios shares of common stock for 1 share of the Company’s common stock. In addition, the Company granted each exchanging shareholder registration rights with respect to the Company’s common stock such shareholder received in exchange for such shareholder’s Ilios shares. Thereafter, the Company effected a statutory merger of Tecogen and Ilios. Ilios remains a brand name for our line of heat pump products. In May 2016, Tecogen entered into a joint venture agreement, (the “JV Agreement”) with Tedom a.s., a European combined heat and power product manufacturer incorporated in the Czech Republic (“Tedom”) and Tedom’s subsidiary, Tedom USA, Inc., a Delaware corporation. Pursuant to the JV Agreement, the parties formed TTcogen LLC, a Delaware limited liability company (“TTcogen”), through which the joint venture is operated. TTcogen offers Tedom’s line of Combined Heat and Power (“CHP”) products to the United States via Tecogen’s nationwide sales and service network consisting of 27 CHP modules ranging in size from 35 kW up to 4 MW and fully capable of running on a variety of fuel feedstocks (including natural gas, propane, and biofuel).

On November 1, 2016, Tecogen and Merger Sub entered into a Merger Agreement with ADGE. Pursuant to the Merger Agreement, the Merger Sub will be merged with and into ADGE, with ADGE continuing as the surviving company in the Merger. Following the Merger, ADGE will become a wholly-owned subsidiary of Tecogen. The

Merger Agreement sets forth the terms and conditions of the proposed acquisition of ADGE. See "The Merger" and "The Merger Agreement". For a description of litigation related to the proposed Merger, see "The Merger - Litigation Relating to the Merger."

#### Business Overview

Tecogen designs, manufactures, markets, and maintains high efficiency, ultra-clean cogeneration products including natural gas engine-driven combined heat and power, air conditioning systems, and water heaters for residential, commercial, recreational and industrial use. The company is known for cost efficient, environmentally friendly and reliable products for distributed power generation that, through patented technology, nearly eliminate criteria pollutants and significantly reduce a customer's carbon footprint.

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Tecogen's natural gas powered cogeneration systems (also known as combined heat and power or "CHP") are efficient because they drive electric generators or compressors, which reduce the amount of electricity purchased from the utility while recovering the engine's waste heat for water heating, space heating, and/or air conditioning at the customer's building.

Tecogen manufactures three types of CHP products:

- Cogeneration units that supply electricity and hot water including the InVerd® 100, InVerde e+®, CM-75 and CM-60;
- Chillers that provide air-conditioning and hot water marketed under the TECOCHILE® brand name; and
- Ilio® branded high-efficiency water heaters.

All of these are standardized, modular, CHP products that reduce energy costs, carbon emissions, and dependence on the electric grid. Tecogen's products allow customers to produce power on-site in parallel with the electric grid, or stand alone when no utility grid is available via inverter-based black-start capability. Because our CHP systems also produce clean, usable heat energy, they provide economic advantages to customers who can benefit from the use of hot water, chilled water, air conditioning and heating.

Traditional customers for our cogeneration and chiller systems include hospitals and nursing homes, schools and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations; however, the economic feasibility of using our systems is not limited to these customer types. Market drivers include the price of natural gas, local electricity rates, environmental regulations, and governmental energy policies, as well as customers' desire to become more environmentally responsible.

Through our factory service centers in California, Connecticut, Massachusetts, Michigan, New Jersey, and New York our specialized technical staff maintain our products via long-term service contracts. The Company has shipped over 2,500 units, some of which have been operating for almost 25 years.

Our CHP technology uses low-cost, mass-produced engines, which we modify to run on natural gas. In the case of our mainstay cogeneration and chiller products, the engines have proven to be cost-effective and reliable. In 2009, in response to the changing regulatory requirements for stationary engines, our research team developed an economically feasible process for removing air pollutants from the engine exhaust. This technology's U.S. and foreign patents were granted beginning in October 2013 with other domestic and foreign patents granted or applications pending. Branded Ultera®, the ultra clean emissions technology, repositions our engine driven products in the marketplace, making them comparable environmentally with other technologies such as fuel cells, but at a much lower cost and greater efficiency. Because of this breakthrough design for emission control, our natural gas-fueled CHP modules fitted with the patented Ultera control technology are certified by the California Air Resources Board ("CARB") as meeting its stringent 2007 emissions requirements, the same emissions standard used to certify fuel cells, and the same emissions levels as a state-of-the-art central power plant. We now offer our Ultera emissions control technology as an option on all our products or as a stand-alone application for the retrofitting of other rich-burn spark-ignited reciprocating internal combustion engines.

Tecogen products are designed as compact modular units that are intended to be installed in multiples when utilized in larger CHP plants. The majority of our CHP modules are installed in multi-unit sites with applications ranging up to 12 units. This approach has significant advantages over utilizing single larger units, allowing building placement in constrained urban settings and redundancy to mitigate service outages. Redundancy is particularly relevant in regions where the electric utility has formulated tariff structures that include high "peak demand" charges. Such tariffs are common in many areas of the country, and are applied by such utilities as Southern California Edison, Pacific Gas and Electric, Consolidated Edison of New York, and National Grid of Massachusetts. Because these tariffs are assessed based on customers' peak monthly demand charge over a very short interval, typically only 15 minutes, a brief service outage for a system comprised of a single unit can create a high demand charge, and therefore be highly detrimental to the monthly savings of the system. For multiple unit sites, the likelihood of a full system outage that would result in a high demand charge is dramatically reduced, so consequently, these customers have a greater probability of capturing peak demand savings.

Our CHP products are sold directly to customers by our in-house marketing team, and by established sales agents and representatives, including ADGE.

#### Our Products

We manufacture natural gas engine-driven cogeneration systems, heat pumps, and chillers, all of which are CHP products that deliver more than one form of energy. Our cogeneration products are all standard, modular units that come pre-packaged from the Company's factory for ease of installation at a customer's site. The package incorporates the engine, generator, heat-recovery equipment, system controls, electrical switchgear, emission controls, and a data controller for remote monitoring and data transmission; minimizing the cost and complexity of installing the equipment at a site. This packaged, modular system simplifies CHP technology for small to mid-sized customers who typically are less experienced with the implementation and benefits of a CHP system.

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All of our cogeneration systems and most of our chillers use the same engine, the TecoDrive 7400 model. This is an engine modified by us to use natural gas fuel. The small 25-ton chiller uses a similar engine, the 3000 model. We worked closely with the engine manufacturers and the gas industry (including the Gas Research Institute) in the 1980s and 1990s to modify the engine and validate its durability. For the Ilios water heater, we introduced a technologically advanced Ford engine that is enhanced for industrial applications.

Our commercial product line includes:

- the InVerde®, InVerde e+®, TECOGEN® and TTcogen cogeneration units;
- TECOCHILL® chillers;
- Ilio® high-efficiency water heaters; and
- Ultra® emissions control technology.

### InVerde Cogeneration Units

Our premier cogeneration product is the InVerde, a 100-kW CHP system that not only provides electricity and hot water, but also satisfies the growing customer demand for operation during a utility outage, commonly referred to as “black-start” capability. Our exclusively licensed microgrid technology (see “Intellectual Property” below) enables our InVerde CHP products to provide backup power in the event of power outages that may be experienced by local, regional, or national grids.

The InVerde incorporates an inverter, which converts direct current, or DC, electricity to alternating current, or AC. With an inverter, the engine and generator can run at variable speeds, which maximizes efficiency at varying loads. The inverter then converts the generator’s variable output to the constant-frequency power required by customers in 50 or 60 Hertz.

This inverter technology was developed originally for solar and wind power generation. The Company believes that the InVerde is the first commercial engine-based CHP system to use an inverter. Electric utilities accept inverter technology as “safe” by virtue of its certification to the Underwriters Laboratory interconnection standard 1741. InVerde earned this certification. This qualifies our product for a much simpler permitting process nationwide and is mandatory in some areas such as New York City and California, a feature we consider to be a competitive advantage. The inverter also improves the CHP system’s efficiency at partial load, when less heat and power are needed by the customer.

The InVerde’s black-start feature addresses a crucial demand from commercial and institutional customers who are increasingly concerned about utility grid blackouts and brownouts, natural disasters, security threats, and antiquated utility infrastructure. Multiple InVerde units can operate collectively as a stand-alone microgrid, which is a group of interconnected loads served by one or more power sources. The InVerde is equipped with software that allows a cluster of units to seamlessly share the microgrid load without complex controls; a proprietary cost advantage for multiple modules at a single location.

The InVerde CHP system was developed in 2007 and began shipping in 2008. Our largest InVerde installation utilizes 12 units, which supply 1.2 MW of on-site power and about 8.5 million Btu/hr of heat (700,000 Btu/hr per unit). In January 2016, the Company launched its newest edition to the InVerde line, the InVerde e+. The e+ builds on the success of the first generation InVerde and reinforces our goal to be at the forefront of the industry, providing our customers with the most advanced clean energy technologies available in the marketplace. Among the most differentiating features when compared to competitive CHP technology are that the InVerde e+ offers: best in class electrical efficiency; a DC input option for solar or battery array integration; rapid 10 second black-start; and requires just 4 inches of water column gas pressure which eliminated the need for additional costly pressure boosting equipment, unlike its competitors.

### TECOGEN Cogeneration Units

The TECOGEN cogeneration system is the original model introduced in the 1980s; available in sizes of 60 kW and 75 kW and capable of producing up to 500,000 Btu/hr of hot water. This technology is based on a conventional single-speed generator. It is meant only for grid-connected operation and is not universally accepted by utilities for interconnection, in contrast to the InVerde. Although this cogeneration product has the longest legacy and largest installed population, much of its production volume has been supplanted by the InVerde and its broader array of



product features.

**TECOCHILL Chillers**

Our TECOCHILL natural gas engine-driven chillers are available in capacities ranging from 25 to 400 tons, with the smaller units air-cooled and the larger ones water-cooled. Using technology first developed in 1987, the engine drives a compressor that makes chilled water, while the engine's free waste heat can be recovered to satisfy the building's needs for heat or hot water. This process is sometimes referred to as "mechanical" cogeneration, as it generates no electrical power, and the equipment does not have to be connected to the utility grid.

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A gas-fueled chiller provides enough air conditioning to avoid most of the utility's seasonal peak charges for electric usage and capacity. In summer when electric rates are at their highest, natural gas is "off-peak" and quite affordable, allowing TECOCHILL customers to avoid typically higher summer-time "peak-usage" electric rates. Gas-fueled chillers also free up the building's existing electrical capacity to use for other loads and can operate on minimal electric load in case of electric grid blackout; a key feature for customers concerned about load demand on backup power generators.

### Ilios High-Efficiency Water Heaters

Tecogen has developed several heat pumps under the Ilios brand name including a High Efficiency ("HE") Air-Source Water Heater, HE Water-Sourced Water Heater, and HE Air-Sourced "Split System" Water Heater. Our water heater products operate like an electric heat pump but use a natural gas engine instead of an electric motor to power the system. The Ilios high-efficiency water heater uses a heat pump, which captures warmth from outdoor air even if it is moderately cool outside. Heat pumps work somewhat like a refrigerator, but in reverse. Refrigerators extract heat from inside the refrigerator and move it outside the refrigerator while heat pumps extract heat from outside and move it indoors.

The gas engine's waste heat is recovered and used in the process, unlike its electric counterpart, which runs on power that has already lost its waste heat. This means that the heat being captured from outdoors is supplemented by the engine's waste heat, which increases the efficiency of the process. The net effect is that an Ilios heat pump's efficiency far surpasses that of conventional boilers for water heating; gas engine heat pumps can deliver efficiencies in excess of 200%.

Similarly, if used for space heating, the engine-powered heat pump is more efficient than an electric heat pump, again because heat is recovered and used for other building processes. The product's higher efficiency translates directly to lower fuel consumption and, for heavy use customers, significantly lowers operating costs when compared with conventional equipment.

In 2013, a water-sourced model of the heat pump was added to our product line. This heat pump captures heat from a water source such as a geothermal well or from a pre-existing chilled water loop in the facility; the latter configuration provides simultaneous heating and cooling benefits, doubling the effect.

Following on the success of the water-sourced model, in early 2015 a 'split system' Ilios model was introduced. The new split system offers increased flexibility because its air-source evaporator package can be installed remotely. The engine driven heat pump, which is contained in a small acoustic enclosure, can be located with a building's mechanical space while the quiet air-source evaporator package can be installed on a roof, or in any outdoor space. The outdoor evaporator component is connected to the indoor heat pump via refrigerant lines, therefore eliminating all freeze protection issues in colder climates. All of the water being heated remains inside the conditioned space, eliminating the need for a costly isolation heat exchanger and additional pumps, which simplifies installation and increases efficiency by being able to operate at a lower delivery temperature.

The heat pump water heater serves as a boiler, producing hot water for drinking and washing, for space heating, swimming pools, or other building loads. Energy cost savings to the customer depend on the climate. Heat pumps in general, whether gas or electric, perform best in moderate weather conditions although the performance of the Ilios water-source heat pump is not impacted by weather or climate conditions. In a typical building, the Ilios heat pump would be added on to an existing heating or water heating system, and would operate as many hours as possible. The conventional boiler would be left in place, but would serve mainly as a backup when the heat pump's engine is down for maintenance or when the heat pump cannot meet the building's peak heating load. In areas where low electric rates make CHP less economical, the Ilios heat pump could be a financially attractive alternative because its economics depend only on natural gas rates. In some areas with high electric rates, the Ilios option could have advantages over CHP; for example where it is hard to connect to the utility grid or where the building's need for electricity is too low for CHP to be economically sound.

### Ultra Low-Emissions Technology

All of our CHP products are available with the patented Ultra low-emissions technology as an equipment option. This breakthrough technology was developed in 2009 and 2010 as part of a research effort partially funded by the California Energy Commission and Southern California Gas Company. The objective was to bring our natural-gas

engines into compliance with California's stringent air quality standards.

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The chart below shows that, as of December 31, 2016, our Ultera CHP and fuel cell technologies are the only technologies that we know of which comply with California's air quality standards for CO and NOx, represented in the chart by the colored horizontal lines, shown as the world's strictest air quality standards on the lower right of the chart.

(5) (2) (4) (4) (3) (1)

- (1) California has the strictest air quality standards for engines in the world
- (2) Conventional Energy Source is U.S. powerplant and gas boiler. Average U.S. powerplant NOx emission rate of 0.9461 lb/MWh from (USEPA eGrid 2012), CO data not available. Gas boiler efficiency of 78% (www.eia.gov) with emissions of 20 ppm NOx @ 3% O<sub>2</sub> (California Regulation SCAQMD Rule 1146.2 and <50 ppmv CO @ 3% O<sub>2</sub> (California Regulation SCAQMD BACT).
- (3) Tecogen emissions based upon actual third party source test data.
- (4) Microturbine and Fuel Cell emissions from EPA CHP Partnership - Catalog of CHP Technologies- March 2015.
- (5) Stationary Engine BACT as defined by SCAQMD.

Through development of a two stage catalyst emission treatment system, the Company was able to meet or exceed the strict air quality regulations with a solution that is cost-effective, robust, and reliable. Inclusion of the patent-protected Ultera low-emissions technology as an option keeps our CHP systems compliant with air quality regulations. The first commercial CHP units equipped with Ultera low-emissions technology shipped to a California utility in 2011. We conducted three validation programs for this technology:

Third-party laboratory verification. The AVL California Technology Center, a long-standing research and technology partner with the international automotive industry, confirmed our results in their state-of-the-art dynamometer test cell, which was outfitted with sophisticated emissions measurement equipment.

Verifying longevity and reliability in the field. By equipping one of our 75 kW units, already operating at a customer location in Southern California with the Ultera low-emissions technology and a device to continuously monitor emissions we verified longevity and reliability. The Ultera low-emissions system operated successfully for more than 25,000 hours, approximately 3.5 years, and consistently complied with California's stringent emission standards over the entire field testing period.

Additional independent tests. During the field test, two companies licensed in California to test emissions each verified our results at different times. The results from one of these tests, obtained in August 2011, enabled us to qualify for New Jersey's fast-track permitting. Virtually every state nationwide requires some kind of permit related to local air quality, but New Jersey allows an exemption for systems such as ours that demonstrate superior emissions performance. This certification was granted in November 2011, and since then we have sold Ultera low-emissions systems to customers in this territory.

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In 2012, a 75 kW CHP unit equipped with the Ultera system became our first unit to obtain a conditional air permit (i.e., pending a third party source test to verify compliance) in Southern California since the strict regulations went into effect in 2009. A state-certified source test, administered in January 2013, verified that our emissions levels were well below the new permitting requirements, and the final permit version was approved in August 2013.

### Standby Generators

After successfully developing the Ultera technology for our own equipment, the Tecogen research and development team began exploring other possible emissions control applications in an effort to expand the market for the ultra-clean emissions system. Retrofit kits were developed in 2014 for other stationary engines and in 2015 the Ultera Retrofit Kit was applied successfully to natural gas stand-by generators from other manufacturers, including Generac and Caterpillar.

Historically, standby generators have not been subjected to the strict air quality emissions standards of traditional power generation. However, generators which run for more than 200 hours per year or run for non-emergency purposes (other than routine scheduled maintenance) in some territories are subject to compliance with the same stringent regulations applied to a typical electric utility. As demand response programs become more economically attractive and air quality regulations continue to become more stringent, there could be strong demand for retrofitting of standby generators with our Ultera emissions control technology, thus providing a cost-effective solution to keeping the installed base of standby generators operational and in compliance.

### Biogas

The Ultera emissions control technology developed by our engineering team applies specifically to rich-burn, spark-ignited, internal combustion engines. While it was originally intended for natural gas powered engines, there is reason to believe the technology may be adapted for other fuel types as long as the engine meets the rich-burn criteria. In 2015 the Ultera system was applied to a biogas powered engine operating at the Eastern Municipal Water District's (EMWD) Moreno Valley Region Water Reclamation Facility in Perris, California. The demonstration project was a result of an ongoing collaboration between Tecogen, the EMWD and various other partners. This project successfully applied an Ultera retrofit kit to a 50 liter Caterpillar engine fueled by biogas extracted from an anaerobic digester. Biogas is a significant byproduct of wastewater treatment plants. Considered to be a renewable source of fuel, it is becoming an increasingly important resource for power generation. According to the American Biogas Council, nationwide there are over 1,100 engines fueled by wastewater-derived biogas, over 600 fueled by landfill-generated biogas, and over 100 running on biogas from agricultural waste. This represents a significant potential market for Ultera retrofit kit application as these biogas engines become subject to the same air quality standards as traditional power generation sources.

### Gasoline Vehicles

In October 2015, following revelations of wide-scale problems with vehicle emissions compliance and testing, Tecogen formed an Emissions Advisory Committee to examine the potential application of Ultera to the automotive gasoline market. According to the U.S. EPA, 50 percent of nitrogen oxides (NOx) and 60 percent of all carbon monoxide (CO) emissions in the United States comes from vehicle exhaust. These are precisely the two pollutants Tecogen's Ultera emission control system is designed to target. After a thorough investigative process on the part of the Emissions Advisory Committee and various industry expert consultants, the group recommended Tecogen pursue a funded initiative to develop the technology for gasoline vehicles.

In December 2015, the Company and a group of strategic investors formed a joint venture company Ultra Emissions to advance Tecogen's near-zero emissions technology for adaptation to transportation applications powered by spark-ignited rich-burn engines in the automobile and truck categories. Tecogen has granted Ultra Emissions an exclusive license for the development of its patented, emissions-related, intellectual property for the vehicle market. Initially Ultra Emissions' focus was on preliminary research, testing, and verification that the Ultera technology can in fact be applied to gasoline engines while maintaining similar near-zero emission results as have been demonstrated in other use cases. Having completed multiple phases of testing at AVL's California Technology Center, the Ultra Emissions team has verified the Ultera technology for gasoline automotive use and is moving forward with their development work.

If successfully developed, the market for automotive emissions control could be a source of future growth for the Company; although that potential could take several years to be realized and there is no guarantee we will be successful.

**Propane Fork Trucks**

In October 2016, the Company was awarded a Propane Education & Research Council (PERC) research grant funding for the Company's proposal to develop the Ultra ultra-clean emissions control technology for the propane powered fork truck market.

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Electric fork trucks have been making significant in-roads in the fork truck industry, in part, because of their green image and indoor air quality benefit. The primary benefit of the Ultera-equipped ultra-clean propane fork truck will be fuel cell like emissions and a propane-green brand that offers a robust indoor air quality advantage without compromising vehicle performance. The project will assess the adaptation of Tecogen's near-zero emissions technology for the fork truck category and demonstrate the technical performance on popular propane fork truck models. Select industry-leading fork truck manufacturers are also participating in the research initiative.

Management believes that approximately 70,000 propane powered fork trucks are sold annually in the United States. Successful completion of this project could open a new emissions control market to Tecogen.

### Other Ultera Applications

According to a 2013 Massachusetts Institute of Technology study, the U.S. experiences 200,000 early deaths each year due to emissions from heavy industry, transportation, and commercial and residential heating. As climate change and air quality continue to develop as areas of focus by government regulators, emissions restrictions are expected to become increasingly stringent around the world. These tightening regulations could open up new markets and applications for the Ultera near-zero emissions control technology. Some of these opportunities may include:

• Commercial and industrial natural gas fueled engines from other manufacturers

• Natural gas and biogas powered vehicle fleets - such as municipal bus fleets

### TTcogen LLC

In May 2016, the Company and Tedom entered into a joint venture, of which a 50% interest is held by each of the Company and Tedom. As part of the joint venture, the parties agreed to create a Delaware limited liability company, TTcogen LLC, to carry out the business of the venture. Tedom granted TTcogen the sole and exclusive right to market, sell, offer for sale, and distribute certain products as agreed to by the parties throughout the United States. The product offerings of the joint venture expand the current Tecogen product offerings from small-scale MicroCHP of 35 kW up to large 4,000 kW (4 MW) custom plants. Tecogen agreed to refer all appropriate sale leads to TTcogen regarding the products agreed to by the parties and Tecogen shall have the first right to install, repair and maintain the products sold by TTcogen.

### Product Service

We provide long-term maintenance contracts, parts sales, and turnkey installation through a network of nine well-established field service centers in California, the Midwest, and the Northeast. These centers are staffed by full-time Tecogen technicians, working from local leased facilities. The facilities provide offices and warehouse space for inventory. We encourage our customers to provide internet or phone connections to our units so that we may maintain remote communications with the installed equipment. For connected installations, the machines are contacted daily, download their status, and provide regular operational reports (daily, monthly, and quarterly) to our service managers. This communication link is used to support the diagnosis effort of our service staff and to send messages to preprogrammed phones if a unit has experienced an unscheduled shutdown. In many cases, communications received by service technicians from connected devices allow for proactive maintenance; minimizing equipment downtime and improving operating efficiency for the customer.

The work of our service managers, supervisors, and technicians focuses on our products. Because we manufacture our own equipment, our service technicians bring hands-on experience and competence to their jobs. They are trained at our corporate headquarters and primary manufacturing facility in Waltham, Massachusetts.

Most of our service revenue is in the form of annual service contracts, which are typically of an all-inclusive "bumper-to-bumper" type, with billing amounts proportional to the equipment's achieved operating hours for the period. Customers are thus invoiced in level, predictable amounts without unforeseen add-ons for such items as unscheduled repairs or engine replacements. We strive to maintain these contracts for many years, assuring the integrity and performance of our equipment is maintained.

Our products have a long history of reliable operation. Since 1995, we have had a remote monitoring system in place that connects to hundreds of units daily and reports their "availability," which is the amount of time a unit is running or is ready to run in hours. More than 80% of them operate above 90% availability, with the average being 93.8%. Our factory service agreements have directly impacted these positive results and represent an important, long-term,

annuity-like stream of revenue for the Company.

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In early 2016, we announced the selection of General Electric Company's (NYSE: GE) Equipment Insight solution for new equipment sold beginning in 2016 and for select upgrades to the existing installed equipment fleet. With GE's technology, Tecogen is able to collect, analyze, and manage valuable asset data continuously and in real-time, providing the service team with improved insight into the functionality of our installed CHP fleet. GE Equipment Insight allows Tecogen to provide a more seamless and proactive maintenance approach while also ensuring peak performance of installed equipment and improving the equipment payback period for our customers. This industrial internet solution enables the service department to perform remote monitoring and diagnostics and to view system results in real time via a computer, smart phone or tablet. The solution enables users to better utilize monitoring data, ensuring customers are capturing maximum possible savings and efficiencies from their installation. Through constant monitoring and analysis of equipment data, Tecogen expects to enhance the performance of installed equipment by ensuring machinery consistently operates at peak performance and is available to deliver maximum potential value for customers.

## Contributions to Revenue

The following table summarizes net revenue by product line and services for the years ended December 31, 2016 and 2015:

	2016	2015
Products:		
Cogeneration	\$7,794,575	\$7,882,838
Chiller & Heat Pump	2,927,710	2,172,399
Total product revenue	10,722,285	10,055,237
Service & Parts	8,541,047	7,832,181
Installation Services	5,227,054	3,555,239
Total service revenue	13,768,101	11,387,420
Total revenue	\$24,490,386	\$21,442,657

All of the Company's long lived assets reside in the United States. Currently, some revenue is generated outside the United States, including from sales in United Kingdom, Mexico, Ireland, and others.

## Sales &amp; Distribution

Our products are sold directly to end-users by our sales team and by established sales agents and representatives. Various agreements are in place with distributors and outside sales representatives, who are compensated by commissions for certain territories and product lines. Sales through our in-house team or sales that are not covered by a representative's territory carry no or nominal commissions. For the fiscal years ended 2016 and 2015, no distribution partner or customer relationship accounted for more than 10% of total combined company revenue.

Our product sales cycle exhibits typical seasonality for the HVAC industry with sales of chillers generally stronger in the warmer months while heat pump sales are stronger in the cooler months.

Total product and installation backlog as of December 31, 2016 was \$11.1 million compared to year end 2015 backlog of \$11.6 million. Please see "Management's Discussion and Analysis of Financial Condition and Results of Operations" and related Risk Factors below for additional information about the Company's backlog.

## Markets and Customers

Worldwide, stationary power generation applications vary from huge central stationary generating facilities (traditional electric utility providers) to back-up generators as small as 2 kW. Historically, power generation in most developed countries such as the United States has been part of a regulated central utility system utilizing high-temperature steam turbines powered by fossil-fuels. This turbine technology, though steadily refined over the years, reached a maximum efficiency (where efficiency means electrical energy output per unit of fuel energy input) of approximately 40%.

A number of developments related primarily to the deregulation of the utility industry as well as significant technological advances have now broadened the range of power supply choices available to all types of customers. CHP, which harnesses waste energy from power generation processes and puts it to work for other uses on-site, can boost the energy conversion efficiency to nearly 90%, a better than two-fold improvement over the average efficiency

of a fossil fuel plant. This distributed generation, or power generated on-site at the point of consumption rather than power generated centrally, eliminates the cost, complexity, and inefficiency associated with electric transmission and distribution. The implications of the CHP distributed generation approach are significant. If CHP were applied on a large scale, global fuel usage might be dramatically curtailed and the utility grid made far more resilient.

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Our CHP products address the inherent efficiency limitation of central power plants by siting generation close to the loads being served. This allows customers with energy-intensive buildings or processes to reduce energy costs and operate with a lower carbon footprint. Furthermore, with technology we have introduced, like the Ultera low-emissions technology, our products can now contribute to better air quality at the local level while complying with the strictest air quality regulations in the United States.

Cogeneration and chiller products can often reduce the customer's operating costs (for the portion of the facility loads to which they are applied) by approximately 30% to 60% based on Company estimates, which provides an excellent rate of return on the equipment's capital cost in many areas of the country with high electricity rates. Our chillers are especially suited to regions where utilities impose extra charges during times of peak usage, commonly called "demand" charges. In these cases, the gas-fueled chiller reduces the use of electricity during the summer, the most costly time of year.

On-site CHP not only eliminates the loss of electric power during transmission, but also offsets the capital expense of upgrading or expanding the utility infrastructure. The national electric grids of many developed countries are already challenged to keep up with existing power demand. In addition, the transmission and distribution network is operating at capacity in a majority of urban areas. Decentralizing power generation by installing equipment at customer sites not only relieves the capacity burden on existing power plants, but also lessens the burden on transmission and distribution lines. This ultimately improves the grid's reliability and reduces the need for costly upgrades.

Increasingly favorable economic conditions could improve our business prospects domestically and abroad.

Specifically, we believe that natural gas prices might increase from their current depressed values, but only modestly, while electric rates would continue to rise over the long-term as utilities pay for grid expansion, better emission controls, efficiency improvements, and the integration of renewable power sources.

The largest numbers of potential new customers in the U.S. require less than 1 MW of electric power and less than 1,200 tons of cooling capacity. We are targeting customers in states with high electricity rates in the commercial sector, such as California, Connecticut, Massachusetts, New Hampshire, New Jersey, and New York. These regions also have high peak demand rates, which favor utilization of our modular units in groups so as to assure redundancy and peak demand savings. Some of these regions also have generous rebates that improve the economic viability of our systems.

We aggressively market to both potential domestic and international customers where utility pricing aligns with our advantages. These areas include regions that have strict emissions regulations, such as California, or those that reward CHP systems that are especially non-polluting, such as New Jersey. There are currently 23 states that recognize CHP as part of their Renewable Portfolio Standards or Energy Efficiency Resource Standards and several of them, including New York, California, Massachusetts, New Jersey, and North Carolina, have initiated specific incentive programs for CHP.

The traditional markets for CHP systems are buildings with long hours of operation and with corresponding demand for electricity and heat. Traditional customers for our cogeneration systems include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations.

Traditional customers for our chillers and heat pumps overlap with those for our cogeneration systems. Engine-driven chillers are often used as replacements for aging electric chillers because they both occupy similar amounts of floor space and require similar maintenance schedules.

### Competition

Although we believe Tecogen offers customers a suite of premier best-in-class clean energy and thermal solutions, the market for our products is highly competitive. Our cogeneration products compete with the utility grid, existing technologies such as other reciprocating engine and microturbine CHP systems, and other emerging distributed generation technologies including solar power, wind-powered systems, and fuel cells. We believe that Capstone Turbine Corporation is the only microturbine manufacturer with a commercial presence in CHP.

Although solar and wind powered systems produce no emissions, the main drawbacks to these renewable powered systems are their dependence on weather conditions, their reliance on backup utility grid-provided power, and high capital costs that can often make these systems uneconomical without government subsidies. Similarly, while the market for fuel cells is still developing, a number of companies are focused on markets similar to ours. Fuel cells, like solar and wind powered systems, have received higher levels of incentives for the same type of applications as CHP systems in many territories. Management believes that, absent these higher government incentives, our CHP solutions provide a better value and more robust solution to end users in most applications.

Additionally, our patents relating to the Ultera ultra-low emissions technology give Tecogen products a strong competitive advantage in markets where severe emissions limits are imposed or where very clean power is favored, such as New Jersey, California, and Massachusetts.

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Our products fall into the broad market category of distributed generation systems that produce electric power on-site to mitigate the drawbacks of traditional central power and the low efficiency of conventional heating processes.

Overall, we compete with end users' other options for electrical power, heating and cooling on the basis of our clean technology's ability to:

- Provide power when a utility grid is not available or goes out of service;
- Reduce the customer's total cost of purchasing electricity and other fuel;
- Reduce emissions of criteria pollutants (NO<sub>x</sub> and CO) to near-zero levels and cut the emission of greenhouse gas such as carbon dioxide;
- Provide reliable on-site power generation, heating and cooling services; and
- Control maintenance costs and ensure optimal peak equipment performance.

### **InVerde CHP**

We believe that no other company has developed a product that competes with our inverter-based InVerde, which offers UL-certified grid connection, black-start capability, and patented variable-speed operation. An inverter-based product with at least some of these features has been introduced by others, but we believe that they face serious challenges in duplicating all the unique features of the InVerde. Product development time and costs could be significant, and we expect that our patents and license for Microgrid software will keep others from offering certain important functions.

Similarly, in the growing Microgrid segment, neither fuel cells nor microturbines can respond to changing energy loads when the system is disconnected from the utility grid. Engines such as those used in Tecogen's equipment inherently have a fast dynamic response to step load changes, which is why they are the primary choice for emergency generators. Fuel cells and microturbines would require an additional energy storage device to be utilized in off-grid operation, giving our engine-driven solutions an advantage for Microgrid and resiliency applications.

### **TECOCHILL Chillers**

The Company's TECOCHILL line of chiller is the only gas-engine-driven chiller available on the market. Natural gas can also fuel absorption chillers, which use fluids to transfer heat without an engine drive. However, engine chillers continue to have an efficiency advantage over absorption machines, TECOCHILL products reach efficiencies well above levels achieved by similarly sized absorption systems. Today's low natural gas prices in the United States improve the economics of gas-fueled chillers while their minimal electric demand on back up power systems make them ideal for facilities requiring critical precision climate control.

### **Ilios Heat Pump**

There are a few companies manufacturing gas-engine heat pumps, including Yanmar and Tedom. The Ilios water heater and other heat pump products compete in both the high-efficiency water heating market and the CHP market.

### **Research & Development**

Tecogen has a long, rich, research and development tradition and sustained programs have allowed us to cultivate deep engineering expertise. We have strong core technical knowledge that is critical to product support and continuous product improvement efforts. Our TecoDrive engine, permanent magnet generator, cogeneration and chiller products, InVerde, Ilios heat pumps, and most recently the Ultera emissions control system were all created and optimized in-house with both public and private funding support.

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We continue to seek to forge alliances with utilities, government agencies, universities, research facilities, and manufacturers. The Company has already succeeded in developing new technologies and products in collaboration with several entities, including:

• Sacramento Municipal Utility District has provided test sites for the Company since 2010.

• Southern California Gas Company and San Diego Gas & Electric Company, each a Sempra Energy subsidiary have granted us research and development contracts since 2004.

• Department of Energy's Lawrence Berkeley National Laboratory, research and development contracts executed since 2005, including ongoing Microgrid development work related to the InVerde.

• Eastern Municipal Water District has co-sponsored demonstration projects to retrofit both a natural-gas powered municipal water pump engine, and a biofuel powered pumping station engine with the Ultera low emissions technology since 2012.

• Consortium for Electric Reliability Technology Solutions executed research and development contracts, and provided a test site to the Company since 2005.

• California Energy Commission executed research and development contracts from 2004 until March 2013.

• The AVL California Technology Center has performed a support role in research and development contracts as well as internal research and development on our emission control system from August 2009 to November 2011. Currently, this testing center's work on emissions from gasoline vehicles which began in January of 2016 continues for the Ultra Emissions joint venture.

• Propane Education & Research Council (PERC) executed research and development contracts for work related to developing Ultera for the propane powered fork truck market.

Our efforts to forge partnerships continue to focus on utilities, particularly to promote the InVerde, our most utility-friendly product. The nature of these alliances varies by utility, but could include simplified interconnection, joint marketing, ownership options, peak demand mitigation agreements, and customer services. We have commissioned a Microgrid with the Sacramento Municipal Utility District at its headquarters in Sacramento, California, where the central plant incorporated three InVerde systems equipped with our Ultera low-emissions technology. Some expenses for this project were reimbursed to the utility through a grant from the California Energy Commission.

Certain components of our InVerde product were developed through a grant from the California Energy Commission. This grant includes a requirement that we pay royalties on all sales of all products related to the grant. As of December 31, 2016, such royalties accrued in accordance with this grant agreement were less than \$6,000 on an annual basis.

We also continue to leverage our resources with government and industry funding, which has yielded a number of successful developments, including the Ultera low-emissions technology, sponsored by the California Energy Commission and Southern California Gas Company. Pursuant to the terms of the grants from the California Energy Commission, the California Energy Commission has a royalty-free, perpetual, non-exclusive license to these technologies, for government purposes.

For the years ended December 31, 2016 and 2015, we spent approximately \$667,064 and \$591,585, respectively, in research and development activities.

Intellectual Property

Patents

We currently hold six United States patents for our technologies:

• 9,470,126: "Assembly and method for reducing ammonia in exhaust of internal combustion engines." This patent, granted in October 2016, is related to the Ultera emission control system applicable to all of our products.

• 9,121,326: "Assembly and method for reducing nitrogen oxides, carbon monoxide and hydrocarbons in exhausts of internal combustion engines." This patent, granted in September 2015, is related to the Ultera emission control system applicable to all of our products.

• 8,829,698: "Power generation systems." This patent, granted in September 2014, is for a power generation system that includes an internal combustion engine configured to provide rotational mechanical energy.

8,578,704: “Assembly and method for reducing nitrogen oxides, carbon monoxide, and hydrocarbons in exhausts of internal combustion engines.” This patent, granted in November 2013, is for the Ultera emission system applicable to all our products.

7,239,034: “Engine driven power inverter system with cogeneration.” This patent, granted in July 2007, pertains to the utilization of an engine-driven CHP module combined with an inverter and applies to our InVerde product specifically.

7,243,017: “Method for controlling internal combustion engine emissions.” This patent, granted in July 2007, applies to the specific algorithms used in our engine controller for metering the fuel usage to obtain the correct combustion mixture and is technology used by most of our engines.

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We have filed for several additional patents - most notable among them:

"Systems and methods for reducing emissions in exhaust of vehicles and producing electricity." This patent, filed in November 2015 and published in March 2016, is related to the development of the Ultera emission control system for vehicle applications.

"Poison-Resistant Catalyst and Systems Containing Same." This application, filed in March 2016, relates to treatment of exhaust generated by internal combustion engines, combustion turbines, and boilers and more particularly to systems and method for treating exhausts containing one or more poisons, such as sulfur.

"Internal Combustion Engine Controller." This application, filed in October 2015, relates to controllers and control circuits for controlling an internal combustion engine, including a gas fired internal combustion prime mover used for driving a generator for generating electrical power.

"Emissions Control Systems and Methods for Vehicles." This application, filed in April 2016 relates to emissions control systems for vehicles.

In addition, the Company licensed specific rights to Microgrid algorithms developed by University of Wisconsin researchers for which we pay royalties to the assignee, The Wisconsin Alumni Research Foundation (WARF). The specific patent named in our agreement is "Control of small distributed energy resources" (7,116,010), granted in 2006. Our exclusive rights are valid for engine-driven systems utilizing natural gas or diesel fuel in the application of power generation where the per-unit output is less than 500 kW.

The software allows our products to be integrated as a Microgrid, where multiple InVerde units can be seamlessly isolated from the main utility grid in the event of an outage and re-connected to it afterward. The licensed software allows us to implement such a Microgrid with minimal control devices and associated complexity and cost. Tecogen pays WARF a royalty for each cogeneration module sold using the licensed technology. Such royalty payments have been in the range of \$5,000 to \$20,000 on an annual basis through the year ended December 31, 2016. In addition, WARF reserved the right to grant non-profit research institutions and governmental agencies non-exclusive licenses to practice and use, for non-commercial research purposes technology developed by Tecogen that is based on the licensed software.

We consider our patents and licensed intellectual property to be important in the operation of our business. The expiration, termination, or invalidity of one or more of these patents may have a material adverse effect on our business. Our earliest patent, licensed from WARF, was issued in 2006 and expires in 2022. Most of our current patents expire between 2022 and 2027.

We believe that one other company has developed a product that competes with our inverter-based InVerde. We anticipate that an inverter-based product with at least some of these features will be introduced by others, but we believe that competitors will face serious challenges in duplicating the InVerde. Product development time and costs would likely be significant, and we expect that our patent for the inverter-based CHP system (7,239,034) would offer significant protection, especially in key features. Likewise, we consider the Microgrid license with WARF to be a key feature of our InVerde product, and one that would be difficult to duplicate outside the patent.

In 2013, we purchased rights to designs and technologies including patents granted or pending for our permanent magnet generators. A key component of our InVerde module uses this acquired technology.

The recent issuance by the U.S. PTO of the patent for the Ultera low-emissions technology keeps that technology exclusive to us. It applies to all of our gas engine-driven products and may have licensing applications to other rich-burn spark-ignited internal combustion engines. We have also filed for or been granted patents for this technology in Europe, Australia, Brazil, Canada, China, Costa Rica, Dominican Republic, India, Japan, Mexico, New Zealand, Republic of Korea, Singapore, and South Africa. There is no assurance, however, that the Ultera low-emissions patent applications will be approved in any other country.

### Copyrights

Our control software is protected by copyright laws or on an exclusive license agreement.

### Trademarks

The Company has registered the brand names of our equipment and logos used on our equipment. These registered trademarks include Tecogen, Tecochill, Ultera, InVerde, Ilios, and the associated logos. We will continue to



trademark our product names and symbols.

We rely on treatment of our technology as trade secrets through confidentiality agreements, which our employees and vendors are required to sign. Also, we rely on non-disclosure agreements with others that have or may have access to confidential information to protect our trade secrets and proprietary knowledge.

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### Sourcing & Manufacturing

We are focused on continuously strengthening our manufacturing processes and increasing operational efficiencies within the Company. Many of the components used in the manufacture of our highly-efficient clean energy equipment are readily fabricated from commonly available raw materials or are standardly available parts sourced from multiple suppliers. We believe that in most cases, adequate supply exists to meet our near to medium term manufacturing needs. Tecogen has an on-going focus on developing and implementing new systems to simplify our manufacturing processes, product sourcing methods, and our supply chain.

The Company has a combined total of approximately 26,000 square foot manufacturing and warehouse footprint running on a single 5-day per week shift at the Waltham, Massachusetts facility. We believe we have sufficient spare capacity to meet near to medium term demand without accruing additional fixed cost.

### Government & Regulation

Several kinds of federal, state and local government regulations affect our current and future business, including but not exclusive to:

- Product safety certifications and interconnection requirements;
- Air pollution regulations, which govern the emissions allowed in engine exhaust;
- State and federal incentives for CHP technology;
- Various local building and permitting codes and third party certifications; and

• Electric utility pricing and related regulations.

Our markets can be positively or negatively impacted by the effects of governmental and regulatory matters. We are impacted not only by energy policy, laws, regulations and incentives of governments in the markets in which we sell, but also by rules, regulations and costs imposed by utilities. Utility companies or governmental entities may place barriers on the installation or interconnection of our product with the electric grid. Further, utility companies may charge additional fees to customers who install on-site power generation; thereby reducing the electricity they take from the utility, or for having the capacity to use power from the grid for back-up or standby purposes. These types of restrictions, fees or charges could hamper the ability to install or effectively use our product, or increase the cost to our potential customers for using our systems. This could make our systems less desirable, adversely impacting our revenue and profitability. In addition, utility rate reductions can make our products less competitive, causing a material adverse effect on our operations. These costs, incentives and rules are not always the same as those faced by technologies with which we compete.

Similarly, rules, regulations, laws and incentives could also provide an advantage to our distributed generation solutions as compared with competing technologies if we are able to achieve required compliance in a lower cost, more efficient manner. Additionally, reduced emissions and higher fuel efficiency could help our customers combat the effects of global warming. Accordingly, we may benefit from increased government regulations that impose tighter emission and fuel efficiency standards. We encourage investors and potential investors to carefully consider associated Risk Factors detailed below which highlight various aspects of the regulatory environment and other related risks.

### Employees

As of December 31, 2016, we employed 83 full-time employees and 3 part-time employees, including 7 sales and marketing personnel and 35 service personnel. We believe that our relationship with our employees is satisfactory. Six of our New Jersey service employees are represented by a collective bargaining agreement which was executed on December 30, 2016 with an effective date of January 1, 2017.

### Properties

Our headquarters is located in Waltham, Massachusetts, and consists of approximately 43,000 square feet of leased space, of which Tecogen occupies approximately 40,000 square feet of manufacturing, storage and office space. We sub-lease the remaining space to ADGE. Our lease will expire March 31, 2024. We believe that our facilities are appropriate and adequate for our current needs.

Our nine leased service centers can be broken into two different sizes. The larger of the two has office space to accommodate administrative, sales and engineering personnel, and warehouse space to stock parts in support of our service contracts.

As of December 31, 2016, the service centers that fit this larger category are based in Piscataway, New Jersey, Valley Stream and Buchanan, New York to service the Metro New York City and the Mid-Atlantic region. The San Francisco bay area and Northern California is served by such a center in Hayward, California. A portion of the Corporate headquarters in Waltham, Massachusetts is used in this manner to service Boston and northern New England.

The smaller type service center is a parts depot or warehouse for the stocking of parts in support of our service contracts. These centers are located in Los Angeles, California, Sterling Heights, Michigan, Newark, New York, and East Windsor, Connecticut.

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## Legal Proceedings

Tecogen is not currently a party to any material litigation arising from its operations, and the Company is not aware of any pending or threatened litigation against it from its operations that could have a material adverse effect on its business, operating results or financial condition. However, it is a party to a claim in the Superior Court of the Commonwealth of Massachusetts and named as a defendant in a case in the United States District Court for the District of Massachusetts, described below, related to the Merger. At this time the Company believes these cases are not material to its financial statements. See "The Merger - Litigation Related to the Merger."

Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.  
Market

The Company's common stock has been listed on the NASDAQ Capital Market since May 2014 and trades under the ticker symbol TGEN. The following table sets forth, for the periods indicated, the high and low sale prices per share of common stock as quoted by the NASDAQ.

Year Ended December 31, 2016	High	Low
1st Quarter	\$6.50	\$2.80
2nd Quarter	5.75	3.50
3rd Quarter	5.20	4.00
4th Quarter	4.80	3.75
Year Ended December 31, 2015	High	Low
1st Quarter	\$5.65	\$4.55
2nd Quarter	5.19	3.90
3rd Quarter	4.40	2.80
4th Quarter	4.10	2.46

## Holders

As of March 21, 2017, there were more than 300 beneficial owners of our Common Stock including 66 holders of record.

## Dividends

To date, we have not declared or paid any dividends on our outstanding shares. We currently do not anticipate paying any cash dividends in the foreseeable future on our Common Stock. Although we intend to retain our earnings to finance our operations and future growth, our Board of Directors will have discretion to declare and pay dividends in the future. Payment of dividends in the future will depend upon our earnings, capital requirements and other factors, which our Board of Directors may deem relevant. Also, the Company's convertible note provides that the Company shall not declare, pay or authorize any dividend, without prior consent of the note holder. Further, under the terms of the Merger Agreement among the Company, Tecogen.ADGE Acquisition Corp., and ADGE, we have agreed that between November 1, 2016, and the Merger effective time or the date the Merger Agreement is terminated, we may not make, declare or set aside any dividend or other distribution to our stockholders.

## Issuer Purchases of Equity Securities

Not applicable.

## Management's Discussion and Analysis of Financial Condition and Results of Operations of Tecogen

## Overview

Tecogen designs, manufactures and sells industrial and commercial cogeneration systems that produce combinations of electricity, hot water, and air conditioning using automotive engines that have been specially adapted to run on natural gas. Cogeneration systems are efficient because in addition to supplying mechanical energy to power electric generators or compressors – displacing utility supplied electricity – they provide an opportunity for the facility to incorporate the engine's waste heat into onsite processes such as space and potable water heating. We produce standardized, modular, small-scale products, with a limited number of product configurations that are adaptable to multiple applications. We refer to these combined heat and power products as CHP (electricity plus heat) and MCHP (mechanical power plus heat).



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Our products are sold directly to end-users by our in-house marketing team and by established sales agents and representatives. We have agreements in place with distributors and sales representatives, including ADGE. Our existing customers include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations. We have an installed base of more than 2,500 units. Many of these have been operating for almost 30 years.

Although we may, from time to time, have one or a few customers who may represent more than 10% of our product revenue for a given year, we are not dependent on the recurrence of revenue from those customers. Our product revenue is such that customers may make a large purchase once and may not ever make a purchase again. Our equipment is built to last 20 or more years, therefore, our product revenue model is not dependent on recurring sales transactions from the same customer. Our service revenue, however, lends itself to recurring revenue from particular customers; although we currently do not have any service revenue customers who make up more than 10% of our total revenues on an annual basis.

For the last two fiscal years, more than one third of our revenue was generated from long-term maintenance contracts, or service contracts, which provide us with a predictable revenue stream, especially during the summer months. We have a slight surge of activity from May through September as our “chiller season” is in full swing. Our service revenue has grown from year to year since 2005, with our New York City/New Jersey, New England and to some extent California territories experiencing the majority of the growth. This growth is consistent with the sale of new units into those territories. Our service margins are generally predictable as we service hundreds of long-term contracts with relatively low dollar, high volume sales.

Our product revenue is derived from the sale of the various cogeneration modules, such as the InVerde 100, the CM-75 and the CM-60, Ilios heat pumps, and the three TECOCHILL chiller models, such as the smaller ST, the larger DT and the RT (roof-top) units. The sales cycle for each module varies widely, and can range from as short as a month to as long as a year or more. Furthermore, since our products and their installation are costly, they are considered a major capital improvement and customers may be slow in making their buying decisions. Our products sales are high dollar value, low volume transactions. Therefore our product revenue can be difficult to predict and the expected margin varies.

Our cogeneration, heat pump, and chiller modules are built to order and revenue is recognized upon shipment. The lead time to build and deliver a unit depends on its customized configuration and is approximately 12 to 14 weeks for a chiller and 6 to 8 weeks for a cogeneration or heat pump from time of purchase order. As revenue is recognized upon shipment, our work-in-process is an important factor in understanding our financial condition in any given quarter.

Recent Developments

In December 2015, the Company entered into a joint venture agreement with a group of European strategic investors relating to the formation of Ultra Emissions, organized under the laws of the Island of Jersey, Channel Islands, a joint venture company. Ultra Emissions was organized to develop and commercialize Tecogen’s patented technology, Ultera®, for the automotive market. The technology is designed to reduce harmful emissions generated by engines using fossil fuels. Tecogen contributed an exclusive license for use of Ultera in the automotive space to the joint venture while the strategic partners have committed to financing the initial research, development and testing of a viable product. Although Tecogen originally owned 50% of the joint venture, due to investment by outside investors, as of December 31, 2016, Tecogen’s ownership interest is 43%.

In April 2016 pursuant to share exchange agreements, holders of the non-controlling interest in Ilios agreed to exchange every 7.86 of their restricted Ilios shares of common stock for 1 share of the Company's common stock. In addition, the Company granted each exchanging shareholder registration rights with respect to the Company's common stock such shareholder received in exchange for such shareholder's Ilios shares. Thereafter, the Company effected a statutory merger of Tecogen and Ilios. Ilios remains a brand name for our line of heat pump products. In May 2016, Tecogen entered into the JV Agreement with Tedom, a European combined heat and power product manufacturer incorporated in the Czech Republic and Tedom’s subsidiary, Tedom USA, Inc., a Delaware corporation.

Pursuant to the JV Agreement, the parties formed TTcogen, a Delaware limited liability company, through which the joint venture is operated. TTcogen offers Tedom's line of CHP products to the United States via Tecogen's nationwide sales and service network consisting of 27 CHP modules ranging in size from 35 kW up to 4 MW and fully capable of running on a variety of fuel feedstocks (including natural gas, propane, and biofuel).

#### Critical Accounting Policies

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported. Note 2 of the Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of the consolidated financial statements. Some of these significant accounting policies are considered to be critical accounting policies, as defined below.

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A critical accounting policy is defined as one that is both material to the presentation of the Company's financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on the Company's financial condition and results of operations. Specifically, critical accounting estimates have the following attributes: 1) the Company is required to make assumptions about matters that are highly uncertain at the time of the estimate; and 2) different estimates the Company could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on the Company's financial condition or results of operations. Estimates and assumptions about future events and their effects cannot be determined with certainty. The Company bases its estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as the Company's operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. These uncertainties are discussed in Item 1A, "Risk Factors" above. Based on a critical assessment of its accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that the Company's consolidated financial statements are fairly stated in accordance with generally accepted accounting principles, and present a meaningful presentation of the Company's financial condition and results of operations.

Management believes that the following are critical accounting policies:

**Accounts Receivable**

Accounts receivable are stated at the amount management expects to collect from outstanding balances. An allowance for doubtful accounts is provided for those accounts receivable considered to be uncollectible based upon historical experience and management's evaluation of outstanding accounts receivable at the end of the year. Bad debts are written off against the allowance when identified.

**Inventory**

Raw materials, work in process, and finished goods inventories are stated at the lower of cost, as determined by the average cost method, or market. The Company periodically reviews inventory quantities on hand for excess and/or obsolete inventory based primarily on historical usage, as well as based on estimated forecast of product demand. Any reserves that result from this review are charged to cost of sales.

**Revenue Recognition**

Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Generally, sales of cogeneration and chiller units and parts are recognized when shipped and services are recognized over the term of the service period. Payments received in advance of services being performed are recorded as deferred revenue. The Company recognizes revenue in certain circumstances before delivery has occurred (commonly referred to as bill and hold transactions). In such circumstances, among other things, risk of ownership has passed to the buyer, the buyer has made a written fixed commitment to purchase the finished goods, the buyer has requested the finished goods be held for future delivery as scheduled and designated by them, and no additional performance obligations exist by the Company. For these transactions, the finished goods are segregated from inventory and normal billing and credit terms granted.

For those arrangements that include multiple deliverables, the Company first determines whether each service or deliverable meets the separation criteria of FASB ASC 605-25, Revenue Recognition—Multiple-Element Arrangements. In general, a deliverable (or a group of deliverables) meets the separation criteria if the deliverable has stand-alone value to the customer and, if the arrangement includes a general right of return, delivery or performance of the undelivered item(s) is considered probable and substantially in control of the Company. Each deliverable that meets the separation criteria is considered a separate "unit of accounting". The Company allocates the total arrangement consideration to each unit of accounting using the relative selling price method. The amount of arrangement consideration that is allocated to a delivered unit of accounting is limited to the amount that is not contingent upon the delivery of another unit of accounting.



When vendor-specific objective evidence or third-party evidence is not available, adopting the relative fair value method of allocation permits the Company to recognize revenue on specific elements as completed based on the estimated selling price. The Company generally uses internal pricing lists that determine sales prices to external customers in determining its best estimate of the selling price of the various deliverables in multiple-element arrangements. Changes in judgments made in estimating the selling price of the various deliverables could significantly affect the timing or amount of revenue recognition. The Company enters into sales arrangements with customers to sell its cogeneration and chiller units and related service contracts and occasionally installation services. Based on the fact that the Company sells each deliverable to other customers on a stand-alone basis, the Company has determined that each deliverable has a stand-alone value. Additionally, there are no rights of return relative to the delivered items; therefore, each deliverable is considered a separate unit of accounting.

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After the arrangement consideration has been allocated to each unit of accounting, the Company applies the appropriate revenue recognition method for each unit of accounting based on the nature of the arrangement and the services included in each unit of accounting. Cogeneration and chiller units are recognized when shipped and services are recognized over the term of the applicable agreement, or as provided when on a time and materials basis.

In some cases, our customers may choose to have the Company engineer and install the system for them rather than simply purchase the cogeneration and/or chiller units. In this case, the Company accounts for revenue, or turnkey revenue, and costs using the percentage-of-completion method of accounting. Under the percentage-of-completion method of accounting, revenues are recognized by applying percentages of completion to the total estimated revenues for the respective contracts. Costs are recognized as incurred. The percentages of completion are determined by relating the actual cost of work performed to date to the current estimated total cost at completion of the respective contracts. When the estimate on a contract indicates a loss, the Company's policy is to record the entire expected loss, as required by generally accepted accounting principles. The excess of contract costs and profit recognized to date on the percentage-of-completion accounting method in excess of billings is recorded as unbilled revenue. Billings in excess of related costs and estimated earnings are recorded as deferred revenue.

### Recent Accounting Pronouncements

In May 2014, the FASB amended its standards related to revenue recognition. This amendment replaces all existing revenue recognition guidance and provides a single, comprehensive revenue recognition model for all contracts with customers. The standard contains principles that we will apply to determine the measurement of revenue and timing of when it is recognized. The underlying principle is that we will recognize revenue in a manner that depicts the transfer of goods or services to customers at an amount that we expect to be entitled to in exchange for those goods or services. The guidance provides a five-step analysis of transactions to determine when and how revenue is recognized. Other major provisions include capitalization of certain contract costs, consideration of the time value of money in the transaction price and allowing estimates of variable consideration to be recognized before contingencies are resolved in certain circumstances. The amendment also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to fulfill a contract. The standard allows either full or modified retrospective adoption effective for our annual and interim periods beginning January 1, 2018. Management is in the process of evaluating the impact the amendment will have on our Consolidated Financial Statements. While a final decision has not been made, we are currently planning to adopt the standard using the modified retrospective approach.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which requires companies to recognize all leases as assets and liabilities on the consolidated balance sheet. This ASU retains a distinction between finance leases and operating leases, and the classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria for distinguishing between capital leases and operating leases in the current accounting literature. The result of retaining a distinction between finance leases and operating leases is that under the lessee accounting model in Topic 842, the effect of leases in a consolidated statement of comprehensive income and a consolidated statement of cash flows is largely unchanged from previous GAAP. The amendments in this ASU are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Earlier application is permitted. The Company is currently evaluating the impact that the adoption of this ASU will have on its Consolidated Financial Statements.

### Emerging Growth Company

Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. However, we chose to "opt out" of any extended transition period, and as a result we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.



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## Results of Operations

The following table sets forth for the periods indicated, the percentages of the net sales represented by certain items reflected in the Company's statements of operations.

	Years ended	
	December 31,	
	2016	2015
Revenues	100.0 %	100.0 %
Cost of Sales	62.0	64.4
Gross Profit	38.0	35.6
General and administrative	32.6	37.3
Selling	6.7	7.9
Research and development	2.7	2.8
Loss from operations	(4.0 )	(19.2 )
Total other expense, net	(0.7 )	(0.7 )
Consolidated net loss	(4.7 )	(13.2 )
Less: Loss attributable to the noncontrolling interest	0.3	0.3
Net loss attributable to Tecogen Inc.	(4.4 )%	(19.5 )%

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

## Revenues

Revenues in 2016 were \$24,490,386 compared to \$21,442,657 in 2015, an increase of \$3,047,729 or 14.2%. This increase is the result of the increased sales in both equipment and services. Product revenues in 2016 were \$10,722,285 compared to \$10,055,237 in 2015, an increase of \$667,048 or 6.6%. This increase from the year ended December 31, 2015 to 2016 resulted from a decrease in cogeneration sales of \$88,263 which was more than offset by an increase in chiller sales of \$755,311. The focus on chiller and heat pump sales efforts in 2016 yielded the increase in sales. Our product mix, as well as product revenue, can vary significantly from period to period as our products are high dollar, low volume sales in which revenue is recognized upon shipment.

Revenues derived from our service centers, including installation activities, in 2016 were \$13,768,101 compared to \$11,387,420 for the same period in 2015, an increase of \$2,380,681 or 20.9%. Our service operation grows with the sales of installed systems, since the majority of our product sales are accompanied by a service contract or time and materials agreements. As a result our "fleet" of units being serviced by our service department grows with product sales. In addition, our service department revenue has increased due to turnkey projects of \$5,227,054 in 2016 compared to \$3,555,239 in 2015.

## Cost of Sales

Cost of sales in 2016 was \$15,189,708 compared to \$13,809,431 in 2015, an increase of \$1,380,277 or 10.0%. Our gross profit margin was 38.0% in 2016 compared to 35.6% in 2015, an increase of 6.7%. The increase in gross profit margin is attributable to better margins on turnkey projects year over year and improving production efficiencies in material, labor and factory utilization. The factory continues to improve product service cycles, ease of maintenance, and component sourcing in to order to continuously improve efficiencies in our processes.

## Operating Expenses

Operating expenses increased in 2016 to \$10,298,129 compared to \$10,276,576 in 2015, an increase of \$21,553 or 0.2%. This increase was the net of a decrease in general and administrative expense of \$3,151, a decrease of \$50,775 in selling expense and an increase in research and development expense of \$75,479. Selling expenses decreased in 2016 to \$1,636,704 compared to \$1,687,479 in 2015, a decrease of \$50,775 or 3.0%. This decrease was due to a decrease in marketing expenses. Research and development expenses increased in 2016 to \$667,064 compared to \$591,585 in 2015, an increase of \$75,479 or 12.8%. The increase in research and development expenses was due to development of our real-time equipment monitoring system. There has not been a change in focus with research and development. Management continues its efforts to improve the product's performance and cost.

## Loss from Operations

Loss from operations for the year ended December 31, 2016 was \$997,451 compared to \$2,643,350 in 2015, a decrease of \$1,645,899 or 62.3%. The decrease in the loss was due to the continuing effort to reduce material costs and control operating expenses as well as to revenue growth.

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## Other Income (Expense), net

Other expense, net, for the year ended December 31, 2016 was \$163,794 compared to \$157,610 for the same period in 2015. Other income (expense) includes interest income and other income of \$11,988, net of interest expense on notes payable of \$175,782 in 2016. For the same period in 2015, interest and other income was \$14,334 and interest expense was \$171,944. The interest income and expense is not expected to significantly change in the near future.

## Noncontrolling Interest

The noncontrolling interest share in the losses of Ilios was \$64,962 for the year ended December 31, 2016 compared to \$73,547 for the same period in 2015, a decrease of \$8,585 or 11.7%. The noncontrolling interest losses ended with the private placement exchange of the outstanding shares of Ilios. On April 11, 2016, this exchange was completed as Ilios merged into Tecogen through a statutory merger.

## Net Loss Attributable to Tecogen, Inc.

Net loss for the year ended December 31, 2016 was \$1,096,283 compared to \$2,727,413 for the same period in 2015. The decrease in the loss of \$1,631,130 or 59.8% was due to the increase in gross profit offset partially by the increase in operating expenses as discussed above.

## Net Loss per share

Net loss per share for the year ended December 31, 2016 was \$0.06 compared to \$0.16 for the same period in 2015. The decrease in the loss of \$0.10 or 62.5% was due to the increase in gross profit offset partially by the increase in operating expenses as discussed above. The basic weighted average shares outstanding for the year ended December 31, 2016 was 19,295,922 compared to 16,860,453 for the same period in 2015. This increase of 2,435,469 or 14.4% shares amounted to less than \$0.01 per share in the decrease of the net loss per share.

## Liquidity and Capital Resources

Consolidated working capital at December 31, 2016 was \$14,436,452, compared to \$14,027,370 at December 31, 2015, an increase of \$409,082 or 2.9%. Included in working capital were cash and cash equivalents of \$3,721,765 and \$0 in restricted short-term investments at December 31, 2016, compared to \$5,486,526 in cash and cash equivalents and \$294,802 of restricted short-term investments at December 31, 2015. These increases in consolidated working capital and decrease in cash are due to increased accounts receivable, unbilled revenue and an increase in inventory partially offset by a decrease in amount due to a related party and increases in other assets.

Net cash used in operating activities for the years ended December 31, 2016 and 2015 were \$2,717,856 and \$4,733,759, respectively, a decrease of \$2,015,903 or 42.6%. As discussed above, the Company had a decreased net loss during 2016 when compared to 2015. Our accounts receivable balance increased to \$8,630,418 at December 31, 2016 compared to \$5,286,863 at December 31, 2015, an increase of \$3,343,555 due to timing of billing, shipments, and collections. Unbilled revenues also increased by \$1,197,254 in connection with turnkey projects as some revenues are recognized prior to contractual milestones for invoicing. Our inventory decreased to \$4,774,264 as of December 31, 2016 compared to \$5,683,043 as of December 31, 2015, a decrease of \$935,779. This decrease was due to continued efforts in materials management. Prepaid expenses as of December 31, 2016 increased to \$401,876 as compared to \$353,105, an increase of \$48,771.

Accounts payable increased to \$3,367,481 as of December 31, 2016 from \$3,311,809 at December 31, 2015, an increase of \$55,672. The increase in accounts payable is related to increased activities in manufacturing. Accrued expenses increased to \$1,378,258 as of December 31, 2016 compared to \$1,066,860 as of December 31, 2015, an increase of \$311,398. Deferred revenues increased to \$1,336,040 as of December 31, 2016 from \$1,270,103 at December 31, 2015, an increase of \$65,937. This increase in deferred revenues relates to an increase in prepaid service contracts and an increase in projects billed but not completed.

Our related party balance was a net receivable of \$260,988 as of December 31, 2016 and \$1,177,261 as of December 31, 2015. This change is due to the acquisition of Ilios by Tecogen and is not necessarily indicative of any significant change in operations.

During 2016 our cash flows used in investing activities were \$2,259,390, and included purchases of property and equipment of \$139,725, expenditures related to intangible assets such as patents and product certifications of \$119,665, and an investment of \$2,000,000 in Ultra Emissions.

During 2016 our cash flows provided by financing activities were \$3,212,485 resulting from the exercise of warrants of \$2,700,000, proceeds from the amendment of the notes payable of \$150,000, and proceeds from the exercising of stock options of \$395,572, offset by the cost of the debt of \$2,034 and cost of \$31,053 from the share issuance in the Ilios consolidation.

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Tecogen's total product and installation backlog as of December 31, 2016 was \$11.1 million compared to \$11.6 million as of December 31, 2015. This backlog meets management's expectation of exceeding a backlog \$10 million. Backlog does not include maintenance contract service revenues.

At December 31, 2016, our commitments included various leases for office and warehouse facilities of \$3,902,346 to be paid over several years through 2024. The source of funds to fulfill these commitments will be provided from operations.

On June 15, 2015, the Company entered into a non-revolving line of credit agreement, or the Agreement, with John N. Hatsopoulos, the Company's Co-Chief Executive Officer. Under the terms of the Agreement, Mr. Hatsopoulos has agreed to lend the Company up to an aggregate of \$2,000,000, with a withdrawal limit of \$250,000 per financial calendar quarter, at the written request of the Company. Any amounts borrowed by the Company pursuant to the Agreement will bear interest at 6% per year. Interest is due and payable quarterly in arrears. The term of the Agreement is from July 1, 2015 to July 1, 2017. Repayment of the principal amount borrowed pursuant to the Agreement will be due on July 1, 2017, or the Maturity Date. The Company has not yet borrowed any amounts pursuant to the Agreement.

Based on our current operating plan, we believe existing resources, including cash and cash flows from operations and funds raised in subsequent private placements, will be sufficient to meet our working capital requirements for the next twelve months. As we continue to grow our business, we expect that our cash requirements will increase. As a result, we may need to raise additional capital through a debt financing or an equity offering to meet our operating and capital needs for future growth.

Seasonality

We expect that the majority of our heating systems sales will be operational for the winter and the majority of our chilling systems sales will be operational for the summer. Our cogeneration sales are not generally affected by the seasons. Our service team does experience higher demand in the warmer months when cooling is required. These chiller units are generally shut down in the winter and started up again in the spring. This chiller "busy season" for the service team generally runs from May through the end of September.

Off Balance Sheet Arrangements

On April 10, 2015, the performance obligation tied to a performance bond previously collateralized by an account owned by John N. Hatsopoulos was relieved and the credit facility was canceled. As of December 31, 2015, \$294,802 in a letter of credit was outstanding under a revolving bank credit facility needed to collateralize a performance bond on a certain installation project. The bank required collateral to issue the letter of credit which the company provided in the form of restricted cash. This revolving bank credit facility was terminated on January 28, 2016 as the performance bond obligations were cleared. As of December 31, 2016, we no longer have off balance sheet arrangements.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Management of Tecogen

Set forth below are descriptions of the backgrounds of the executive officers and directors of Tecogen and their principal occupations for the past five years. Post-Merger all directors currently serving on the Board of Directors of Tecogen are expected to remain until Tecogen's next annual shareholder meeting. Tecogen's executive officers will remain the same following the Merger except that Bonnie Brown, the current Chief Financial Officer of ADGE, will become the Tecogen Principal Accounting Officer. See "Management of ADGE" for biographical information with respect to Ms. Brown.

Name	Age	Position
John N. Hatsopoulos	82	Co-Chief Executive Officer and Director
Benjamin M. Locke	49	Co-Chief Executive Officer
Robert A. Panora	62	Chief Operating Officer and President
Bonnie Brown	54	Principal Accounting Officer
Angelina M. Galiteva	50	Chairperson and Director



Ahmed F. Ghoniem	65	Director
Charles T. Maxwell	85	Director
Keith Davidson	66	Director

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John N. Hatsopoulos, age 82, has been the Chief Executive Officer of the Tecogen since the organization of the Tecogen in 2000, and has shared the role as Co-Chief Executive Officer since the fall of 2014. Mr. Hatsopoulos is also a member of Tecogen's board of directors. Mr. Hatsopoulos is also the Co-Chief Executive Officer of American DG Energy and the Chairman of EuroSite Power Inc. On average, Mr. Hatsopoulos spends approximately 50% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops. Post-Merger, Mr. Hatsopoulos will continue to serve as Co-Chief Executive Officer of Tecogen.

Benjamin M. Locke, age 49, has been Tecogen's Co-Chief Executive Officer since 2014. Mr. Locke was the Director of Corporate Strategy for Tecogen and was promoted to General Manager prior to his appointment as Co-Chief Executive Officer of Tecogen. In October of 2014, Mr. Locke began serving as Co-Chief Executive Officer of American DG Energy. He splits his time between the two companies. Previously, Mr. Locke was the Director of Business Development and Government Affairs at Metabolix, a bioplastics technology development and commercialization company. In that role, he was responsible for developing and executing plans for partnerships, joint ventures, acquisitions, and other strategic arrangements for commercializing profitable clean energy technologies. Prior to joining Metabolix in 2001, Mr. Locke was Vice President of Research at Innovative Imaging Systems, or IISI, a high-technology R&D company. At IISI, he drove the development and implementation of growth strategies for the funding of specialty electronic systems for the United States Government. Mr. Locke has a B.S. in Physics from the University of Massachusetts, an M.S. in Electrical Engineering from Tufts University, and an M.B.A. in Corporate Finance from Boston University. Post-Merger, Mr. Locke will continue to serve as Co-Chief Executive Officer of Tecogen.

Robert A. Panora, age 62, has been Tecogen's Chief Operating Officer and President since the organization of the Tecogen in 2000 and the Chief Operating Officer of Ilios since its inception in 2009. In August of 2015, Mr. Panora began serving as Director of Operations of American DG Energy. He splits his time between the two companies. Before this role, he had been General Manager of the Company's Product Group while a division of Thermo Electron Corporation since 1990, and Manager of Product Development, Engineering Manager, and Operations Manager since 1984. Over his 31-year tenure with the Company and its predecessors, Mr. Panora has been responsible for sales and marketing, engineering, service, and manufacturing. Mr. Panora contributed to the development of Tecogen's first product, the CM-60 cogeneration system, and was Program Manager for the cogeneration and chiller projects that followed. Mr. Panora has had considerable influence on many aspects of the business, from building the employee team, to conceptualizing product designs and authoring many of the original business documents, sales tools, and product literature pieces. Mr. Panora has a bachelor's and master's degrees in Chemical Engineering from Tufts University. Post-Merger, Mr. Panora will continue to serve as Chief Operating Officer and President of Tecogen. There are no arrangements or understandings between any of Tecogen's Executives and any other individuals regarding why that Tecogen Executive was selected to serve as an Executive.

Angelina M. Galiteva, age 50, has been Tecogen's Chairperson of the board of directors since 2005. Ms. Galiteva is founder and Chair of the Board for the Renewables 100 Policy Institute, a non-profit entity dedicated to the global advancements of renewable energy solutions since 2008. She is also Chairperson at the World Council for Renewable Energy (WCRE), which focuses on the development of legislative and policy initiatives to facilitate the introduction and growth of renewable energy technologies since 2003. Since 2011, She has served on the Board of Governors of the California Independent System Operator (CA ISO), providing direction and oversight for the CA ISO which operates the California electricity grid. Also, she is a principal at New Energy Options, Inc., a company focusing on advancing the integration of sustainable energy solutions since 2006. She has also been a strategic consultant with Renewable Energy Policy and Strategy Consulting since 2004. Ms. Galiteva holds a Master's degree in Environmental and Energy Law, a law degree from Pace University School of Law, and a bachelor's degree from Sofia University in Bulgaria. Ms. Galiteva is currently serving a one year term as Tecogen's Chairperson and as a director. Ms. Galiteva is also a member of Tecogen's Audit Committee and a member of Tecogen's Compensation Committee.

Tecogen's Board has determined that Ms. Galiteva's prior experience in the energy field qualifies her to be a member of the Board in light of the Company's business and structure.

John N. Hatsopoulos, age 82, has been a member of the Tecogen's board of directors since its founding in 2000 and is Tecogen's Co-Chief Executive Officer. He has also been the Co-Chief Executive Officer of American DG Energy and the Chairman of EuroSite Power Inc. since 2009. Mr. Hatsopoulos is a co-founder of Thermo Electron Corporation, which is now Thermo Fisher Scientific, and is the retired President and Vice Chairman of the Board of Directors of that company. He is a member of the Board of Directors of Ilios Inc., and is a former Member of the Corporation of Northeastern University. Mr. Hatsopoulos graduated from Athens College in Greece, and holds a bachelor's degree in history and mathematics from Northeastern University, as well as honorary doctorates in business administration from Boston College and Northeastern University. Mr. Hatsopoulos is currently serving a one year term as a Tecogen director.

Tecogen's Board has determined that Mr. Hatsopoulos' prior experience as co-founder, president and Chief Financial Officer of Thermo Electron Corporation, where he demonstrated leadership capability and gained extensive expertise involving complex financial matters, and his extensive knowledge of complex financial and operational issues qualify him to be a member of our Board in light of the Company's business and structure.

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Ahmed F. Ghoniem, age 65, has been a member of Tecogen's board of directors since 2008. Dr. Ghoniem is the Ronald C. Crane Professor of Mechanical Engineering at MIT. He is also the Director of the Center for 21st Century Energy, and the head of Energy Science and Engineering at MIT, where he plays a leadership role in many energy-related activities, initiatives and programs. He joined MIT as an assistant professor in 1983. He is an associate fellow of the American Institute of Aeronautics and Astronautics, and Fellow of American Society of Mechanical Engineers. He was recently granted the KAUST Investigator Award. He is a member of the board of directors of EuroSite Power Inc. Dr. Ghoniem holds a Ph.D. in Mechanical Engineering from the University of California, Berkeley, and an M.S. and B.S. in Mechanical Engineering from Cairo University. Dr. Ghoniem is currently serving a one year term as a Tecogen director. Dr. Ghoniem is also a member of Tecogen's Nominating and Governance Committee.

Tecogen's Board has determined that Mr. Ghoniem's prior experience as a Professor of Mechanical Engineering at MIT and his prior experience in the energy sector qualify him to be a member of the Board of Directors in light of the Company's business and structure.

Charles T. Maxwell, age 85, has been a member of Tecogen's board of directors since 2001. Mr. Maxwell is a widely recognized expert in the energy sector, with over 40 years of experience with major oil companies and investment banking firms. From 1999, until his retirement in 2012, Mr. Maxwell was a Senior Energy Analyst with Weeden & Co. of Greenwich, Connecticut, where he developed strategic data and forecasts on oil, gas, and power markets. Mr. Maxwell is a member of the Board of Directors of American DG Energy. Mr. Maxwell holds a bachelor's degree in political science from Princeton University and holds a B.A. from Oxford University as a Marshall Scholar in Middle East literature and history. Mr. Maxwell is currently serving a one year term as a Tecogen director. Mr. Maxwell is also a member of Tecogen's Audit Committee and a member of Tecogen's Nominating and Governance Committee. Tecogen's Board has determined that Mr. Maxwell's prior experience in the energy sector and his extensive experience as a director of public companies qualifies him to be a member of our Board in light of the Company's business and structure.

Keith Davidson, age 66, has been a member of Tecogen's board of directors since 2016. Mr. Davidson is President of DE Solutions Inc., a consulting and engineering firm serving the distributed energy markets. With over 25 years of experience in the energy industry, Mr. Davidson has focused on environmental technology development, feasibility studies, product commercialization, application engineering, economic analysis and market development. Prior to joining DE Solutions, Mr. Davidson was President of Energy Nexus Group and Senior Vice President of Onsite Energy Corp. He served as a Director of the Gas Research Institute for over a decade, was past President of the American Cogeneration Association, served as Chair of the National Association of Energy Service Companies' Distribution Generation Committee, and is the recipient of several industry honors. Mr. Davidson is currently active in the California Clean DG Coalition and the US Combined Heat and Power Association. He holds a Master's degree in Mechanical Engineering from Stanford University and a B.S. from the University of Missouri, Rolla. Mr. Davidson has a long history with Tecogen, actively supporting new business initiatives as well as being instrumental in securing utility and government funding to support product developments, including the Ultera technology. Mr. Davidson is currently serving a one year term as a Tecogen director. Mr. Davidson is also a member of Tecogen's Audit Committee, Tecogen's Compensation Committee and Tecogen's Nominating and Governance Committee.

Tecogen's Board has determined that Mr. Davis' prior experience in the energy sector and prior associations in the energy industry qualify him to be a member of our Board in light of the Company's business and structure.

There are no arrangements or understandings between any of Tecogen's directors and any other individuals regarding why that Tecogen director was selected to serve as a director.

**Director Independence**

The Company's common stock is listed on the NASDAQ stock exchange. The Board considers the status of its members pursuant to the independence requirements set forth in the applicable NASDAQ rules and applicable federal securities laws. Under these requirements, the Board undertakes a review at least annually of director independence. During this review, the Board considers transactions and relationships between each director or any member of his immediate family and the Company and its affiliates, if any. The purpose of this review is to determine whether any

such relationships or transactions exist that are inconsistent with a determination that the director is independent. The following current directors, Ms. Galiteva, Dr. Ghoniem and Mr. Davidson are “independent” in each case as defined in the applicable NASDAQ rules. As of December 31, 2016, the members of the Compensation Committee, Audit Committee and Nominating and Governance Committee are also “independent” for purposes of Section 10A-3 of the Exchange Act and NASDAQ listing requirements. The Board bases these determinations primarily on a review of the responses of the directors and executive officers to questions regarding employment and transaction history, affiliations and family and other relationships and on discussions with the directors.

Table of ContentsCompensation of Directors and Executive Officers of Tecogen  
Summary Compensation Table

The following table sets forth information with respect to the compensation of Tecogen's last two completed fiscal years to those persons who were, during the fiscal year ended December 31, 2016, the Company's Co-Chief Executive Officers and the Company's most highly compensated executive officers serving as such as of December 31, 2016 whose compensation was in excess of \$100,000 (the "Named Executive Officers").

Name and principal position	Year	Salary (\$)	Bonus (\$)	Stock awards (\$)	Option awards (\$) <sup>(3)</sup>	All other compensation (\$)	Total (\$)
John N. Hatsopoulos Co-Chief Executive Officer (Principal Executive Officer)	2016	1	—	—	—	—	1
	2015	1	—	—	—	—	1
Benjamin Locke <sup>(1)</sup> Co-Chief Executive Officer (Principal Executive Officer)	2016	210,000	—	—	—	630	210,630
	2015	108,116	—	—	—	—	108,116
Robert A. Panora <sup>(2)</sup> Chief Operating Officer and President	2016	200,001	—	—	3,518	2,772	206,291
	2015	131,963	—	—	—	—	131,963
David A. Garrison Chief Financial Officer, Treasurer, and Secretary (Principal Financial Officer)	2016	180,000	—	—	858	558	181,416
	2015	186,923	—	—	—	—	186,923

Mr. Locke is also the Co-CEO of American DG Energy Inc., and devotes part of his business time to the affairs of American DG Energy. In 2016, \$127,400 of his salary was reimbursed by American DG Energy according to the requirements of the business in a given week at a fully burdened rate. On average, Mr. Locke spends approximately 50% of his business time on the affairs of Tecogen, but such amount varies widely depending on the needs of the business.

Mr. Panora devotes part of his business affairs to American DG Energy. In 2016, \$127,400 of his salary was reimbursed by American DG Energy according to the requirements of the business in a given week at a fully burdened rate. On average, Mr. Panora spends approximately 50% of his business time on the affairs of Tecogen, but such amount varies widely depending on the needs of the business.

<sup>(3)</sup> Includes stock option award granted May 16, 2016 in connection with Ilios Inc. merger with the Company. Upon completion of the merger all stockholders of Ilios Inc. were given fully vested options of the Company.

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## Executive Officer Outstanding Equity Awards at Fiscal-Year End

The following table sets forth information with respect to outstanding equity awards held by Tecogen's executive officers as of December 31, 2016.

Name	Option Awards			Option expiration date	Stock awards	
	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying exercised options (#) unexercisable	Option exercise price (\$)		Number of shares of stock that have not vested (#)	Market value of shares of stock that have not vested (\$)
John N. Hatsopoulos <sup>(1)</sup>	12,723	—	3.93	6/3/2021	—	—
Benjamin Locke <sup>(2)(3)(4)</sup>	28,125	9,375	3.20	6/3/2023	—	—
	31,250	31,250	4.96	12/18/2024	—	—
Robert A. Panora <sup>(5)(6)</sup>	50,000	50,000	4.96	12/18/2024	—	—
	125,000	—	2.60	2/14/2021	69,175	242,113
David A. Garrison <sup>(7)(8)</sup>	12,723	—	0.79	4/28/2019	—	—
	25,000	25,000	4.50	4/24/2024	—	—
	6,362	—	3.93	4/24/2024	—	—

(1) Includes stock option award granted May 16, 2016 in connection with Ilios Inc. merger with the Company. Upon completion of the merger all stockholders of Ilios Inc. were given fully vested options of the Company.

(2) Includes stock option award granted on June 3, 2013, with 25% of the shares vesting on June 3, 2014 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Mr. Locke's continued employment and subject to acceleration of vesting upon a change in control.

(3) Includes stock option award granted on December 18, 2014, with 25% of the shares vesting on December 18, 2015 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Mr. Locke's continued employment and subject to acceleration of vesting upon a change in control.

(4) Includes stock option award granted on December 18, 2014, with the shares vesting if the Company achieves a positive adjusted EBITDA for the year ended 2015, modified in December 2015 with 25% of the shares vesting on December 18, 2015 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, a subject to Mr. Locke's continued employment and subject to acceleration of vesting upon a change in control.

(5) Includes stock option award granted on February 15, 2011, with 25% of shares vesting on February 15, 2012 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Mr. Panora's continued employment and subject to acceleration of vesting upon a change in control. Includes 138,350 shares of restricted Common Stock at a purchase price of \$0.001 per share granted on December 4, 2006, 24% shares vesting starting May 20, 2016, subject to acceleration of vesting upon a change in control prior to a termination event.

(6) Includes stock option award granted May 16, 2016 in connection with Ilios Inc. merger with the Company. Upon completion of the merger all stockholders of Ilios Inc. were given fully vested options of the Company.

(7) Includes stock option award granted on April 25, 2014, with 255 of the shares vesting on April 25, 2015 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Mr. Garrison's continued employment and subject to acceleration of vesting upon a change in control.

(8) Includes stock option award granted May 16, 2016 in connection with Ilios Inc. merger with the Company. Upon completion of the merger all stockholders of Ilios Inc. were given fully vested options of the Company.

Director Compensation

Each director who is also not one of Tecogen's employees will receive a fee of \$500 per day for service on those days that our Board and/or each of the Audit, Compensation or Nominating and Governance Committees holds meetings, or otherwise conducts business. Non-employee directors also will be eligible to receive stock or option awards under Tecogen's equity incentive plan. Tecogen reimburses all of the non-employee directors for reasonable travel and other expenses incurred in attending Board and committee meetings. Any director who is also one of Tecogen's employees receives no additional compensation for serving as a director.



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The following table sets forth information with respect to the fiscal year 2016 compensation of Tecogen's directors who were not executive officers during the year ended December 31, 2016.

Name	Fees				Total (\$)
	earned or paid in cash (\$)	Stock awards (\$)	Option awards (\$)	All other compensation (\$)	
Angelina M. Galiteva	4,500	—	—	—	4,500
Joseph A. Aoun	1,000	—	—	—	1,000
Ahmed F. Ghoniem <sup>(1)</sup>	1,500	—	3,518	—	5,018
Charles T. Maxwell	4,000	—	—	—	4,000
Earl R. Lewis	1,500	—	—	—	1,500
Keith Davidson	1,500	—	182,820	—	184,320
John Hatsopoulos	—	—	—	—	—

(1) Includes stock option award granted May 16, 2016 in connection with Ilios Inc. merger with the Company. Upon completion of the merger all stockholders of Ilios Inc. were given fully vested options of the Company.

## Outstanding Equity Awards of Directors at Fiscal Year-End Table

The following table summarizes the outstanding equity awards held by each Tecogen director who were not executive officers during the year ended December 31, 2016.

Name	Option Awards				Stock awards	
	Number of underlying unexercised options (#)	Number of underlying exercised options (#)	Option exercise price (\$)	Option expiration date	Number of shares of stock that have not vested (#)	Market value of shares of stock that have not vested (\$)
Angelina M. Galiteva <sup>(1)</sup>	25,000	—	2.60	2/14/2021	8,334	29,169
Ahmed F. Ghoniem <sup>(2)</sup>	25,000	—	2.60	2/14/2021	—	—
Ahmed F. Ghoniem <sup>(3)</sup>	12,723	—	0.79	4/29/2019	—	—
Charles T. Maxwell <sup>(4)</sup>	25,000	—	2.60	2/14/2021	—	—
John N. Hatsopoulos <sup>(5)</sup>	12,723	—	3.93	6/3/2021	—	—
Keith Davidson <sup>(6)</sup>	12,500	12,500	5.39	12/18/2024	—	—
Keith Davidson <sup>(7)</sup>	—	100,000	4.27	9/2/2026	—	—

Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Ms.

(1) Galiteva serves as a director or consultant to the Company. Includes 25,000 shares of restricted Common Stock at a purchase price of \$.004 per share granted on December 13, 2006, with 100% of the shares vesting on May 20, 2017.

(2) Includes stock option award granted on December 31, 2013, with 25% of the shares vesting on December 31, 2014, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Dr. Aoun serves as a director or consultant to the Company.

(3) Includes stock option award granted May 16, 2016 in connection with Ilios Inc. merger with the Company. Upon completion of the merger all stockholders of Ilios Inc. were given fully vested options of the Company.

- Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012,
- (4) and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Mr. Maxwell serves as a director or consultant to the Company.
- (5) Includes stock option award granted May 16, 2016 in connection with Ilios Inc. merger with the Company. Upon completion of the merger all stockholders of Ilios Inc. were given fully vested options of the Company.
- (6) Includes stock option award granted on September 8, 2014, with 25% of the shares vesting on September 8, 2015, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries.
- Includes stock option award granted on September 2, 2016, with 25% of the shares vesting on September 2, 2017,
- (7) and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Mr. Davidson serves as a director on consultant to the Company.

#### Employment Contracts and Termination of Employment and Change-in-Control Arrangements

None of Tecogen's executive officers, other than Mr. David Garrison, has an employment contract or change-in-control arrangement, other than stock and option awards that contain certain change-in-control provisions such as accelerated vesting due to acquisition. In the event an acquisition that is not a private transaction occurs while the optionee maintains a business relationship with the Company and the option has not fully vested, the option will become exercisable for 100% of the then number of shares as to which it has not vested with such vesting to occur immediately prior to the closing of the acquisition.

The stock and option awards that would vest for each named executive officer if a change-in-control were to occur are disclosed under our Outstanding Equity Awards at Fiscal Year-End Table. Our stock and option awards contain certain change-in-control provisions. Descriptions of those provisions are set forth below:

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Stock Awards: Change-in-Control Definition

For the purposes of our stock awards, change-in-control shall mean (a) the acquisition in a transaction or series of transactions by an person (such term to include anyone deemed a person under Section 13(d)(3) of the Exchange Act), other than the Company or any of its subsidiaries, or any employee benefit plan or related trust of the Company or any of its subsidiaries, of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors or (b) the sale or other disposition of all or substantially all of the assets of the Company in one transaction or series of related transactions.

Option Awards Change-in-Control Definition

For the purposes of our option awards, change-in-control shall mean merger (or reverse merger), consolidation, or other similar event or the sale or lease of all or substantially all of the Company's assets. Upon a change-in-control, while the optionee maintains a business relationship with the Company and the option has not fully vested, the option shall become exercisable for 100% of the then number of shares as to which it has not vested, such vesting to occur immediately prior to the closing of the acquisition.

Employment Termination Contract

On December 2, 2016, Tecogen entered into an agreement with David Garrison, the chief financial officer. The agreement specifies that Mr. Garrison will be resigning from the position of Chief Financial Officer and any other position with the Company and its affiliates within six months from the date of the agreement or when the merger between the Company's subsidiary and American DG Energy is completed, whichever occurs later. If the merger is completed before the six months has expired, Mr. Garrison will be paid his normal salary until the end of the six months. Under the agreement, Mr. Garrison's duties and compensation in his current roles will not change. This agreement may also be terminated with or without cause by either party, pursuant to the terms of the agreement.

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## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT OF TECOGEN

The following table sets forth, as of March 9, 2017 certain information with respect to the beneficial ownership of Tecogen's shares of common stock by (1) any person (including any "group" as set forth in Section 13(d)(3) of the Exchange Act) known by us to be the beneficial owner of more than five percent (5%) of any class of Tecogen's voting securities, (2) each director, (3) each of the named executive officers and (4) all of our current directors and executive officers as a group. The percentages in the following table are based on 20,043,052 shares of common stock issued and outstanding.

Name and address of beneficial owner <sup>(1)</sup>	Number of Shares Beneficially Owned	% of Shares Beneficially Owned	
5% Stockholders:			
John N. Hatsopoulos <sup>(2)</sup>	3,265,118	16.30	%
Tryfon Natsis and Despina Pantopoulou Natsis <sup>(3)</sup>	1,616,673	8.07	%
George N. Hatsopoulos <sup>(4)</sup>	1,355,541	6.76	%
Wincrest Capital Limited <sup>(5)</sup>	1,247,165	6.22	%
Michaelson Capital Special Finance Fund, LP <sup>(6)</sup>	1,197,537	5.97	%
Directors & Officers:			
John N. Hatsopoulos <sup>(2)</sup>	3,265,118	16.30	%
Robert Panora <sup>(7)</sup>	288,573	1.4	%
Charles T. Maxwell <sup>(8)</sup>	132,269	*%	
Benjamin Locke <sup>(9)</sup>	109,375	*%	
Angelina M. Galiteva <sup>(10)</sup>	75,000	*%	
Ahmed Ghoniem <sup>(11)</sup>	62,723	*%	
David Garrison <sup>(12)</sup>	53,862	*%	
Keith Davidson <sup>(13)</sup>	9,044	*%	
All executive officers and directors as a group (8 persons)	3,995,964	19.5	%

(1) The address of the executive officers and directors listed in the table above is: c/o Tecogen Inc., 45 First Avenue, Waltham, Massachusetts, 02451.

Based solely upon: (a) the Schedule 13G/A filed by Mr. John N. Hatsopoulos on February 14, 2017. The Schedule 13G/A states the beneficial ownership of Mr. Hatsopoulos as the following: (1) 155,351 shares of common stock held directly by Mr. Hatsopoulos; 1,039,480 shares of common stock held by the Nia M. Hatsopoulos Jephson 2011 Irrevocable Trust, for which Mr. Hatsopoulos is the trustee; (3) 1,039,480 shares of common stock held by the Alexander J. Hatsopoulos 2011 Irrevocable Trust, for which Patricia L. Hatsopoulos, Mr. Hatsopoulos' spouse is the trustee; (4) 989,589 shares of common stock held by the John N. Hatsopoulos Family Trust 2007 for the benefit of Patricia L. Hatsopoulos, Alexander J. Hatsopoulos, and Nia Marie Hatsopoulos, for which Dr. George N. Hatsopoulos and Ms. Patricia L. Hatsopoulos are the trustees; and 28,225 shares of common stock held by Patricia L. Hatsopoulos. The address of the holder is 3 Woodcock Lane, Lincoln, MA 01773; and (b) an SEC Form 4 filed on May 18, 2016 12,723 common stock options exercisable within 60 days of March 9, 2017.

Based solely upon the Schedule 13G filed by Tryfon Natsis and Despina Pantopoulou Natsis on February 1, 2017.

(3) The Schedule 13G states the beneficial ownership as the following: 1,616,673 owned jointly by Tryfon Natsis and Despina Pantopoulou Natsis as spouses and joint tenants with the right of survivorship. The address for each holder is 36 Chemin Du Milieu, Collonge-Bellerive, Geneva, Switzerland 1245.

(4) Based solely upon the Schedule 13G/A filed by Dr. George Hatsopoulos on December 14, 2016. The Schedule 13G/A states the beneficial ownership of Dr. Hatsopoulos as the following: (1) 1,276,604 shares of common stock held directly by Dr. Hatsopoulos; and (2) 78,937 shares of common stock held by Dr. Hatsopoulos and his wife

Daphne Hatsopoulos as joint tenants. The address of the holder is 233 Tower Road, Lincoln, MA 01773.

- Based solely upon the Schedule 13D filed by Wincrest Capital Limited on February 13, 2017. The Schedule 13D states the beneficial ownership of Wincrest Capital Limited is as follows: 1,247,165 shares owned directly by
- (5) Wincrest Capital Limited. The principal business address of the holder is 7 Old Fort Bay Town Centre Nassau, The Bahamas.
  - (6) This amount includes: (a) \$3,150,000 of convertible debt that is convertible at \$3.54 within 60 days of of March 9, 2017; and (b) 307,329 shares of common stock.
  - (7) Includes: (a) 150,850 shares of Common Stock, directly held by Mr. Panora, and (b) options to purchase 125,000 shares of Common Stock exercisable within 60 days of March 9, 2017.
  - (8) Includes: (a) 107,269 shares of Common Stock, directly held by Mr. Maxwell, and (b) options to purchase 25,000 shares of Common Stock exercisable within 60 days of March 9, 2017.
  - (9) Includes 109,375 options to purchase Common Stock exercisable within 60 days of March 9, 2017.
  - (10) Includes: (a) 50,000 shares of Common Stock, directly held by Ms. Galiteva and (b) options to purchase 25,000 shares of Common Stock exercisable within 60 days of March 9, 2017.
  - (11) Includes: (a) 25,000 shares of Common Stock, directly held by Mr. Ghoniem, and (b) options to purchase 37,723 shares of Common Stock exercisable within 60 days of March 9, 2017.
  - (12) Includes: (a) 10,000 shares of Common Stock, directly held by Mr. Garrison, and (b) options to purchase 43,862 shares of Common Stock exercisable within 60 days of March 9, 2017.
  - (13) Includes: (a) 9,044 shares of Common Stock, directly held by Mr. Davidson, and options to purchase 12,500 shares of Common Stock exercisable within 60 days of March 9, 2017.
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Certain Relationships and Related Transactions

Set forth below are summaries of transactions since the beginning of the last completed fiscal year in which the amount involved exceeded or will exceed the lesser of \$120,000 or one percent of the average of our total assets as at the year-end for the last two completed fiscal years and in which any of our directors, executive officers or beneficial holders of more than 5% of our capital stock, or any immediate family member of, or person sharing the household with, any of these individuals, had or will have a direct or indirect material interest.

Consulting Agreement

Pursuant to a Consulting Agreement dated December 8, 2015, as amended, between Ahmed F. Ghoniem, a director, and Tecogen, Mr. Ghoniem was engaged to provide consulting services for Ultra Emissions Technology, Inc. As amended the agreement automatically renews for six month periods unless terminated according to its terms. It was agreed that aggregate fees of \$240,000 annually would be paid in monthly installments of \$20,000. Tecogen paid the monthly installments to Mr. Ghoniem and then billed and was reimbursed by Ultra Emissions for the full amount of each monthly payment to date.

Senior Convertible Promissory Note

On December 23, 2013, Tecogen entered into a Senior Convertible Promissory Note (the "Note"), with Michaelson Capital Special Finance Fund LP, for the principal amount of \$3,000,000 with interest at 4% per annum for a term of three years. The Note is a senior unsecured obligation which pays interest only on a monthly basis in arrears at a rate of 4% per annum, unless earlier converted in accordance with the terms of the agreement prior to such date. Effective April 1, 2016, the Note was amended increasing the principal amount by \$150,000 for a total of \$3,150,000 and extending the maturity date. The principal amount, if not converted, is now due on the fifth anniversary of the Note, December 28, 2018. The Note is senior in right of payment to any unsecured indebtedness that is expressly subordinated in right of payment to the Note.

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## INFORMATION ABOUT ADGE

## Business of ADGE

American DG Energy Inc., or ADGE, we, our, or us, was incorporated in the State of Delaware on July 24, 2001. Our principal executive offices are located in Waltham, Massachusetts. We install, own, operate and maintain complete distributed generation, or DG systems or energy systems, and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. As of December 31, 2016, we had 92 installed energy systems, representing an aggregate of approximately 5,445 kilowatts, or kW, 41.6 million British thermal units, or MMBtu's, of heat and hot water and 4,500 tons of cooling. kW is a measure of electricity generated, MMBtu is a measure of heat generated and a ton is a measure of cooling generated.

## Recent Developments

## Disposition of Interest in Eurosite Power

In July 2010, we established EuroSite Power Inc., or EuroSite, as a subsidiary to introduce our On-Site Utility solution into the European market. As of December 31, 2015, we owned an approximately 48% interest in EuroSite and, as required under U.S. Generally Accepted Accounting Principles, or GAAP, consolidated the financial statements of EuroSite into our consolidated financial statements and did so through the quarter ended June 30, 2016. Since inception, ADGE provided United States' accounting, finance, and legal assistance to EuroSite from its office in Waltham, Massachusetts. During the second and third quarters of 2016, we entered into the following transactions that had the effect of reducing our ownership interest in EuroSite to slightly above 2%:

On May 4, 2016, we entered into an agreement with John Hatsopoulos, our co-Chief Executive Officer, a director and principal stockholder, and another investor to exchange an aggregate of \$9.3 million in principal and prepaid interest under outstanding 2014 Senior Unsecured Debentures ("Senior Unsecured Debentures") held by them for an aggregate of approximately 14.72 million shares of EuroSite owned by us.

On June 28, 2016, our ownership interest in EuroSite was reduced to 20.5% as a result of the conversion of substantially all of the outstanding convertible debentures of Eurosite that had been guaranteed by ADGE into shares of common stock of EuroSite. Following such conversion, ADGE accounted for its interest in EuroSite in its consolidated financial statements under the equity method of accounting.

On September 30, 2016, holders of our outstanding 6% convertible notes ("convertible notes") agreed to exchange principal and prepaid interest in the aggregate amount of approximately \$4.3 million under such notes for an aggregate of 9,700,000 shares of common stock of EuroSite owned by us.

On September 30, 2016, we sold an aggregate of 5,500,000 shares of common stock of EuroSite owned by us to two investors for an aggregate of \$2.2 million, the proceeds of which were paid to further reduce the amount of our outstanding convertible notes. As part of such transaction, the former convertible note holders cancelled warrants to purchase an aggregate of 1,020,000 shares of common stock of EuroSite we had issued to such holders.

As a result of such transactions, our ownership interest in EuroSite was decreased to approximately 2% and, pursuant to GAAP, we presented EuroSite as discontinued operations. Accordingly, the financial statements and other information related to EuroSite have not been consolidated with our consolidated financial statements for the year ended December 31, 2016, included herein.

## Repayment and Settlement of Convertible Debentures and Notes

During 2016, we effected the following transactions to substantially reduce the amount of our outstanding indebtedness:

On May 4, 2016, as discussed above, we exchanged an aggregate of \$9.3 million in principal and prepaid interest under outstanding Senior Unsecured Debentures for an aggregate of approximately 14.72 million shares of EuroSite owned by us. Following the exchange, the debentures were cancelled.

On September 30, 2016, holders of our outstanding 6% convertible notes exchanged \$4.3 million in principal and prepaid interest for 9,700,000 shares of EuroSite owned by us and we issued a new note to evidence the remaining balance of the debt of \$3,418,681. The prior convertible note was cancelled by us. The new note was upon substantially the same terms as the 6% convertible note and was convertible into our shares at a price of \$2.11 per

share, subject to certain adjustments in the event of stock splits, stock dividends, and certain other events.

On September 30, 2016, as discussed above, we used the \$2.2 million proceeds from the sale of 5.5 million shares of EuroSite to further reduce the amount of our outstanding convertible notes.

On December 23, 2016, we repaid the remaining outstanding balance of our outstanding convertible notes of approximately \$3.1 million (net of prepaid interest).



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Revolving Line of Credit Provided by Our Co-CEO, Director and Principal Stockholder

On December 22, 2016, we entered into a revolving line of credit agreement with John Hatsopoulos, our co-CEO, a director and a principal stockholder. The original amount of the line of credit was \$3 million. We drew down \$850,000 under the line of credit. On February 27, 2017, Mr. Hatsopoulos advised us that he was terminating the line of credit agreement except to the extent of the current draw down. The line of credit bears interest at the rate of 6% per annum on the outstanding balance, and is due on the first day of each calendar quarter. The line of credit terminates May 25, 2018 and the principal and any unpaid interest is repayable on that date. An event of default under the line of credit occurs in the event any amount of principal or interest is not paid when due.

Proposed Merger with Tecogen

On November 1, 2016, ADGE entered into a the Merger Agreement with Tecogen and Merger Sub. Pursuant to the Merger Agreement, the Merger Sub will be merged with and into ADGE with ADGE continuing as the surviving company in the Merger. Following the Merger, ADGE will become a wholly-owned subsidiary of Tecogen. The Merger Agreement sets forth the terms and conditions of ADGE's proposed acquisition by Tecogen. See "The Merger" and "The Merger Agreement." For a description of litigation related to the proposed Merger, see "The Merger - Litigation Relating to the Merger."

Company Overview

We distribute, own and operate clean, on-site energy systems that produce electricity, hot water, heat, and cooling. Our business model is to own the equipment that we install at customers' facilities and to sell the energy produced by these systems to customers on a long-term contractual basis. We call this business the "On-Site Utility."

We offer natural gas powered cogeneration systems that are reliable and energy efficient. Our cogeneration systems produce electricity from an internal combustion engine driving a generator, while the heat from the engine and exhaust is recovered and typically used to produce heat and hot water for use on-site. We also distribute and operate water chiller systems for building cooling applications that operate in a similar manner, except the engines in the water chiller systems drive a large air-conditioning compressor while recovering heat for hot water. Cogeneration systems reduce the amount of electricity that a customer must purchase from the local utility and produce valuable heat and hot water on-site to use as required. By simultaneously providing electricity, hot water and heat, cogeneration systems also have a significant, positive impact on the environment by reducing the carbon dioxide, or CO<sub>2</sub>, produced by replacing a portion of the traditional energy supplied by the electric grid and conventional hot water boilers. Distributed generation of electricity, or DG, often referred to as cogeneration systems or combined heat and power systems, or CHP, is an attractive option for reducing energy costs and increasing the reliability of available energy. DG has been successfully implemented by others in large industrial installations over 10 Megawatts, or MW, where the market has been growing for a number of years, and is increasingly being accepted in smaller sized units because of technology improvements, increased energy costs, and better DG economics. We believe that our target market (users of up to 1 MW) has been barely penetrated and that the reduced reliability of the utility grid, increasing cost pressures experienced by energy users, advances in new, low cost technologies, and DG-favorable legislation and regulation at the state and federal level will drive our near-term growth and penetration of the target market. ADGE maintains a website at [www.americandg.com](http://www.americandg.com). Our website address is a textual reference only, and the information in the website is not incorporated by reference herein.

We believe that our primary opportunity for DG energy and equipment sales is where commercial electricity rates exceed \$0.12 per kW hour, or kWh, which is predominantly in the Northeast and California. Attractive DG economics are currently attainable in applications that include hospitals, nursing homes, multi-tenant residential housing, hotels, schools and colleges, recreational facilities, food processing plants, dairies, and other light industrial facilities.

We believe that the largest number of potential DG users in the U.S. require less than 1 MW of electric power and less than 1,200 tons of cooling capacity. We are able to design our systems to suit a particular customer's needs because of our ability to place multiple units at a site. This approach is part of what allows our products and services to meet changing power and cooling demands throughout the day (also from season-to-season) and greatly improves efficiency.

We purchase energy equipment from various suppliers. The primary type of equipment we use in our energy systems is a natural gas-powered, reciprocating engine supplied by Tecogen. We believe that our supply arrangements with Tecogen have been negotiated on an arm's length basis, and we also believe there are enough alternative vendors of CHP equipment to satisfy ADGE's needs of the supply arrangement if Tecogen were to terminate for any reason. See Financial Statements, Note 10 "Related Parties" for additional information. A CHP system simultaneously produces two types of energy - heat and electricity - from a single fuel source, generally natural gas. The two key components of a CHP system are an internal combustion reciprocating engine and an electric generator. The clean natural gas fired engine spins a generator to produce electricity. The natural byproduct of the working engine is heat. The heat is captured and used to supply space heating, domestic hot water heating, laundry hot water, or heating for swimming pools and spas.

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As power sources that use alternative energy technologies mature to the point when they are both reliable and economical, we will consider employing them to supply energy for our customers. We regularly assess the technical, economic, reliability, and emissions issues associated with systems that use solar, micro-turbine, or fuel cell technologies to generate power.

### Background and Market

We believe the delivery of energy services to commercial and residential customers in the United States has evolved over many decades into an inefficient and increasingly unreliable structure. Power for lighting, air conditioning, refrigeration, communications, and computing demands comes almost exclusively from centralized power plants serving users through a complex grid of transmission and distribution lines and substations. Even with continuous improvements in central station generation and transmission technologies, we believe today's power industry is inefficient compared to DG. Coal accounts for more than half of all electric power generation, so, consequently, we believe these inefficiencies are a major contributor to rising atmospheric CO<sub>2</sub> emissions. As countermeasures are sought to limit global warming, it is expected that environmental pressures against coal will favor the deployment of alternative energy technologies.

On-site boilers and furnaces burning either natural gas or petroleum distillate fuels produce most thermal energy for space heating and hot water services. This separation of thermal and electrical energy supply services has persisted despite a general recognition that CHP can be significantly more energy efficient than central generation of electricity by itself. Except in large-scale industrial applications (e.g., paper and chemical manufacturing), cogeneration has not yet attained general acceptance. This is due, in part, because the technologies previously available for small on-site cogeneration systems were incapable of delivering the reliability, cost and environmental performance necessary to displace or even substantially modify the established power industry structure.

Due to these factors, electricity reserve margins have declined, and the reliability of service has begun to deteriorate, particularly in regions of high economic growth. Widespread acceptance of computing and communications technologies by consumers and commercial users has further increased the demand for electricity, while also creating new requirements for very high power quality and reliability. At the same time, technological advances in emission control, microprocessors, and internet technologies have sharply altered the competitive balance between centralized generation and DG. These fundamental shifts in economics and requirements are key to the emerging opportunity for DG equipment and services.

### The Role of DG

DG is the production of two sources or two types of energy (electricity or cooling and heat) from a single energy source (natural gas). We use technology that utilizes a low-cost, mass-produced, internal combustion engine from General Motors, used primarily in light trucks and sport utility vehicles that is modified to run on natural gas. The engine spins either a standard generator to produce electricity, or a conventional compressor to produce cooling. For heating, because the working engine generates heat, we capture the byproduct heat with a heat exchanger and utilize the heat for facility applications in the form of space heating and hot water for buildings or industrial facilities. Standard refrigeration and cooling equipment uses an electric motor to spin a conventional compressor, but we replace the standard electric motor with a modified internal combustion engine, as described above, that runs on natural gas. DG refers to the application of small-scale energy production systems, including electricity generators, at locations in close proximity to the end-use loads that they serve. Integrated energy systems, operating at user sites but interconnected to existing electric distribution networks, can reduce demand on the nation's utility grid, increase energy efficiency, avoid the waste inherent in long distance wire and cable transmission of electricity, reduce air pollution and greenhouse gas emissions, and protect against power outages, while, in most cases, significantly lowering utility costs for power users and building operators.

Until recently, many DG technologies have not been a feasible alternative to traditional energy sources because of economic, technological, and regulatory considerations.

We supply cogeneration systems that are capable of meeting the demands of commercial users and that can be connected to the existing utility grid. Specific advantages of ADGE's on-site DG systems, compared with traditional centralized generation and distribution of electricity alone, include the following:

Greatly increased overall energy efficiency (up to 90% - see Environmental and Energy Study Institute (EESI), Energy Generation and Distribution Efficiency, available at [http://www.eesi.org/generation\\_distribution](http://www.eesi.org/generation_distribution). This website address and any other website addresses included herein are included as textual references only and the information in such websites is not incorporated herein by reference.

• Rapid adaptation to changing demand requirements (e.g., weeks, not years, to add new generating capacity where and when it is needed).

• Ability to by-pass transmission line and substation bottlenecks in congested service areas.

• Avoidance of site and right-of-way issues affecting large-scale power generation and distribution projects.

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Clean operation, in the case of natural gas fired reciprocating engines using microprocessor combustion controls and low-cost exhaust catalyst technology developed for automobiles.

Rapid economic paybacks for equipment investments, as fast as four to six years when compared to existing utility costs and technologies.

Decreased sensitivity to fuel prices due to high overall efficiencies achieved with cogeneration of electricity and thermal energy, including the use of waste heat to operate absorption type air conditioning systems (displacing electric-powered cooling capacity at times of peak summer demand).

Reduced vulnerability of multiple de-centralized small-scale generating units compared to the risk of major outages from natural disasters or terrorist attacks against large central-station power plants and long distance transmission lines.

Ability to remotely monitor, control and dispatch energy services on a real-time basis using advanced switchgear, software, microprocessor and internet modalities. Through our on-site energy products and services, energy users are able to optimize, in real time, the mix of centralized and distributed electricity-generating resources.

The EPA has created a Combined Heat and Power Partnership to promote the benefits of DG systems. ADGE is a member of this partnership.

**Our Business Strategy**

We are a DG on-site energy company that generates revenue by selling energy in the form of electricity, heat, hot water, and air conditioning under long-term contracts with commercial, institutional and light industrial customers with a typical term of 10 to 15 years. We install our systems at no cost to our customers and retain ownership of the installed systems, although in some cases we also offer turnkey installations where customers may directly purchase our cogeneration systems. Our systems operate more efficiently than the utility grid, and we are able to sell the energy produced by these systems to our customers at prices below their existing cost of electricity (or air conditioning), heat, and hot water. Our cogeneration systems consist of natural gas-powered internal combustion engines that drive an electrical generator to produce electricity and that capture the engine heat to produce space heating and hot water. Our energy systems also can be configured to drive a compressor that produces air conditioning and that also captures the engine heat. As of December 31, 2016, we had 92 energy systems operational.

To date, each of our installations runs in conjunction with the electric utility grid and requires standard interconnection approval from the local utility. Our customers use both our energy system and the electric utility grid for their electricity requirements. We typically supply the first 20% to 60% of a building's electricity requirements while the remaining electricity is supplied by the electric utility grid. Our customers are contractually bound to use the energy we supply.

To date, the price that we have charged our customers is set in our customer contracts at a discount to the price our customers would otherwise pay to their local electric utility. For the portion of the customer's electricity that we supply, the customer realizes immediate savings on his/her electric bill. In addition to electricity, we sell our customers the heat and hot water at the same price they were previously paying or at a discount equivalent to their discount from us on electricity. Our air conditioning systems are also priced at a discount.

We own and operate the DG systems; our customers have no investment in the units, and therefore our customers benefit from no capital requirements and no operating responsibilities. We manage the DG systems; our customers require no staff to manage the energy systems we provide, and, therefore, our customers have no energy system responsibilities. Our customers are bound, however, to pay for the energy supplied by the energy systems over the term of the agreement.

**Energy and Products Portfolio**

We provide a full range of CHP product and energy options. Our primary energy and products are listed below:

Energy Sales

Electricity

Thermal (Hot Water, Heat and Cooling)

Energy Producing Products

Cogeneration Packages

Chillers

Natural Gas Heat Pumps

Complementary Energy Equipment (e.g., boilers, etc.)

• Turnkey Installation of Energy Producing Products with Incentives

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### Energy Sales

For the customers that want to own a CHP system, we offer a "turn-key" option whereby we provide equipment systems engineering, installation, interconnect approvals, on-site labor, and startup services needed to bring the complete CHP system on-line. Some customers contract with us to operate and manage the installed CHP systems. For customers seeking an alternative to our turn-key systems, we install, maintain, finance, own and operate complete on-site CHP systems that supply, on a long-term, contractual basis, electricity and other energy services. We sell the energy to customers at a guaranteed discount rate to the rates charged by conventional utility suppliers.

Customers benefit from our On-Site Utility in a number of ways:

- Guaranteed lower price for energy
- Only pay for the energy they use
- No capital costs for equipment, engineering and installation
- No equipment operating costs for fuel and maintenance
- Immediate cash flow improvement
- Significant green impact by the reduction of carbon produced
- No staffing, operations and equipment responsibility

Customers are billed monthly and benefit from a reduction in their current energy bills without the capital costs and risks associated with owning and operating a cogeneration or chiller system. Also, by outsourcing the management and financing of on-site energy facilities to us, they can reap the economic advantages of DG without the need for retaining specialized in-house staff with skills unrelated to their core business. As part of our standard customer contract, we also agree to obtain any necessary permits or regulatory approvals at our sole expense. Our agreements are generally for a term of 15 years, renewable for two additional five-year terms upon the mutual agreement of the parties.

In regions where high electricity rates prevail, such as the Northeast, monthly payments for CHP energy services can yield attractive paybacks (e.g. in some cases as quickly as 3-5 years) on our investments in On-Site Utility projects. The price of natural gas has a minor effect on the financial returns obtained from our energy service contracts because we believe the value of hot water and other thermal services produced from the recovered heat generated by the internal combustion engine in our on-site DG system will generally increase or decrease faster, relative to higher or lower fuel costs. This recovered energy, which comprises up to 60% of the total heating value of fuel supplied to our CHP equipment, displaces some fuel use, but requires less than would otherwise be burned in a conventional boiler.

### Energy Producing Products

Typically we offer our customers cogeneration units sized to produce 75 kW to 100 kW of electricity, water chillers sized to produce 200 to 400 tons of cooling and ultra-high-efficiency heating products, such as high efficiency water heaters.

For cogeneration, we prefer a modular design approach that allows us to group multiple units together to serve customers with considerably larger power requirements. Often, cogeneration units are conveniently dispersed within a large operation, such as a hospital or campus, serving multiple-process heating systems that would otherwise be impractical to serve from a single large machine. The equipment we select often yields overall energy efficiencies in excess of 80% (from our equipment supplier's specifications). We also purchase energy equipment that incorporates mechanical work to extract heat from the environment, like high-efficiency water heaters, in order to supplement the chemical energy available in the fuel. The result is a significant boost in efficiency and reduced carbon emissions relative to conventional heating systems.

### Service and Installation

Where appropriate, we utilize local vendors to install the equipment we deploy. We require long-term maintenance contracts and ongoing parts sales. Our centralized remote monitoring capability allows us to manage our equipment in the field. Our installations are performed by local contractors with experience in energy cogeneration systems.

### Other Funding and Revenue Opportunities

Due to the availability of our energy systems, we are able to participate in the demand response market and, where permitted by customer contracts, receive payments. Demand response programs provide payments for either the

reduction of electricity usage or the increase in electricity production during periods of peak usage throughout a utility territory. We have also received grants and incentives from state organizations and natural gas companies for our installed energy systems.



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### Sales and Marketing

Our On-Site Utility services are sold directly to end-users. We offer standardized packages of energy, equipment, and services suited to the needs of property owners and operators in healthcare, hospitality, large residential, athletic facilities, and certain industrial sites. This includes national accounts and other customer groups having a common set of energy requirements at multiple locations.

In 2015, as part of the initiative described below, we eliminated our in-house sales staff to focus on effectively investing capital in improvements aimed at increasing productivity of our existing portfolio. Accordingly, currently, we are not actively soliciting new customers for our On-Site Utility services or Turnkey solutions through sales or marketing staff although we may receive customer referrals from our equipment suppliers, including Tecogen and Ilios.

### Competition

We compete with established utilities that provide electricity, wholesale electricity and gas utility distributors, companies that provide services similar to ours, and other forms of alternative energy. We believe DG is gaining acceptance in regions where energy customers are dissatisfied with the cost and reliability of traditional electricity service. These end-users, together with growing support from state legislatures and regulators, are creating a favorable climate for the growth of DG that is overcoming the objections of established utility providers. In our target markets, we compete with large utility companies such as Con Edison, Inc. and Long Island Power Authority in New York, Public Service Electric and Gas Company in New Jersey, and Eversource and National Grid USA Service Company, Inc. in Massachusetts. These companies are much larger than us in terms of revenues, assets, marketing and other resources, but we target the same markets and customers. We compete with large utility companies by marketing our electricity services to the same potential commercial building customers. We compete on the basis of the cost, service, price, and favorable environmental benefits of generating energy with our installed systems. We also compete with other on-site utility companies, such as Aegis Energy Services Inc. and All Systems Cogeneration Inc.

Certain engine manufacturers sell DG units that range in size from a few kW to many MWs in size. Most of the DG units are greater than 1 MW, and the manufacturers producing those units include Caterpillar Inc., Cummins Power Generation Inc., and Waukesha, a subsidiary of General Electric Company. In many cases, we view these companies as potential suppliers of equipment and not as competitors.

The alternative energy market continues to evolve. Many companies are developing alternative and renewable energy sources including solar power, wind power, fuel cells and micro-turbines. The effect of these developing technologies on our business is difficult to predict; however, when their technologies become more viable for our target markets, we may be able to adopt their technologies into our business model.

There are a number of energy service companies that offer services related to DG systems. These companies include Siemens AG, Honeywell International Inc. and Johnson Controls Inc. In general, these companies seek large, diverse projects for electricity demand reduction (e.g., campuses) that include building lighting and controls, and electricity (on rare occasions) or cooling. Because of their overhead structures, these companies often solicit large projects rather than individual properties. Since we focus on smaller projects for energy supply, we believe we are suited to work in tandem with these companies when the opportunity arises.

There are local emerging cogeneration developers and contractors that are attempting to offer services similar to ours. To be successful, they would need to have the proper experience in equipment and technology, installation contracting, equipment maintenance and operation, economic site evaluation, project financing, and energy sales in addition to the capability of covering a broad region.

### Relationship with Tecogen

Subsequent to year-end, on January 13, 2017, ADGE sold certain items of equipment and a substantial portion of its parts inventory to Tecogen, which is a major supplier to ADGE, at Tecogen's cost, which is generally manufactured or wholesale cost rather than a retail cost. The sale was prompted out of a need for funds to retire existing long-term indebtedness of ADGE. As a result, ADGE has classified these items as held for sale at December 31, 2016 at fair value (see Note 11 "Fair Value Measurements"). ADGE's carrying value in respect of the items sold exceeded their fair value by approximately \$744,000, which has been recognized in the accompanying consolidated statement of

operations for the year ended December 31, 2016.

As discussed above, on November 1, 2016, we entered into the Merger Agreement pursuant to which Tecogen has agreed to acquire all of the outstanding shares of ADGE in a stock-for-stock merger. Under the terms of the Merger Agreement, at the effective time of the Merger, each share of ADGE common stock will be exchanged for 0.092 shares of Tecogen common stock, valuing ADGE at an approximately 27% premium to ADGE's closing share price on that day. Consummation of the Merger is subject to certain conditions including, among others, customary conditions relating to the adoption of the Merger Agreement by the requisite vote of ADGE's stockholders and the stockholders of Tecogen; the receipt of all required regulatory approvals; the effectiveness of Tecogen's registration statement on Form S-4 as amended, related to the Merger; and certain other customary

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closing conditions. Although there can be no assurance, and subject to the foregoing conditions, the Merger is expected to close in the first half of fiscal 2017. See the "Merger - Litigation Relating to the Merger" for a description of certain litigation arising from the proposed Merger transaction.

On August 7, 2015, ADGE entered into a Facilities, Support Services and Business Agreement with Tecogen, or the Facilities Agreement. The Facilities Agreement replaced and amended version of the Facilities and Support Service Agreement, dated as of January 1, 2006 with Tecogen. The Facilities Agreement provides that, in exchange for agreed upon fees, Tecogen will provide ADGE with, among other things; (1) certain office space; (2) certain business support services; (3) certain rights to purchase cogeneration products directly from Tecogen at a discounted price; (4) certain rights to purchase Tecogen services at a discounted price; (5) certain rights that allow ADGE to purchase Tecogen products from Tecogen's sales representatives; and (6) the right to certain royalty fees. Absent required notice, the Facilities Agreement will automatically renew for one-month periods. Under this agreement ADGE leases approximately 2,400 square feet of office space from Tecogen. Under the terms of the Facilities Agreement ADGE pays Tecogen a monthly fee of \$4,479 per month.

In October 2009, ADGE entered into a five-year exclusive distribution agreement with Ilios Inc., or Ilios, a former subsidiary of Tecogen that develops and distributes ultra-high-efficiency heating products, such as a high efficiency water heater, that provides increased efficiency compared to conventional boilers. This distribution agreement was subsequently amended on November 12, 2013, as amended, the Distribution Agreement. The Distribution Agreement automatically renews for successive one year terms unless one party notifies the other in writing that it desires to terminate the agreement. Under the terms of the Distribution Agreement, ADGE has exclusive rights to incorporate Ilios's products in ADGE's energy systems throughout the European Union and New England. ADGE also has non-exclusive rights to distribute Ilios's products into the remaining parts of the United States and the world in cases where ADGE retains ownership of the equipment for its On-Site Utility business. The Distribution Agreement allows Ilios to appoint sales representatives in the European Union, other than ADGE.

### Government Regulation

We are subject to extensive government regulation. We are required to file for local construction permits (electrical, mechanical and the like) and utility interconnects, and we must make various local and state filings related to environmental emissions.

### Compliance with Environmental Laws

In the past, many electric utility companies have raised opposition to DG, a critical element of our On-Site Utility business. Such resistance has generally taken the form of stringent standards for interconnection and the use of targeted rate structures as disincentives to combined generation of on-site power and heating or cooling services. A DG company's ability to obtain reliable and affordable back-up power through interconnection with the grid is essential to our business model. Utility policies and regulations in most states are often not prepared to accommodate widespread on-site generation. These barriers erected by electric utility companies and unfavorable regulations, where applicable, make more difficult or uneconomic our ability to connect to the electric grid at customer sites and are an impediment to the growth of our business. The development of our business could be adversely affected by any slowdown or reversal in the utility deregulation process or by difficulties in negotiating backup power supply agreements with electric providers in the areas where we intend to do business.

### Employees

As of December 31, 2016, ADGE employed twelve active full-time employees and three part-time employees. We believe that our relationship with our employees is satisfactory. None of our employees are represented by a collective bargaining agreement. As part of the Initiative, and in order to benefit from reduced payroll costs and expenses, we determined to predominantly eliminate our direct sales department and rely upon referrals related to additional sales of our equipment and services to new customers, including referrals from Tecogen.

### Strategic Initiative

Late in 2015, ADGE began executing an initiative to more effectively invest its capital, or the Initiative. The Initiative is focused on effectively investing ADGE's capital by increasing the performance of its existing sites. The goal of the Initiative is to make strategic capital improvements aimed at increasing productivity of the existing portfolio while

optimizing ADGE's margins and increasing cash flow. ADGE expects that the Initiative will provide a strong foundation of high performing assets to be used to fund future growth.

The Initiative comprises a number of phases and contains multiple layers of evaluation. The first step was analyzing the existing portfolio to determine which sites make feasible options for investment. ADGE compared each site's unique income factors to its current operational performance to determine not only each site's viability but also its order of priority. ADGE evaluated certain indicators, including the size of the existing site, highly profitable utility rate matrices, and unique economic opportunities, including demand management programs or carbon credit rebates. ADGE believes that upgrading existing sites is a more effective use of ADGE's capital than building new sites because in general it takes at least four years for a new site to

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experience a positive return on investment, while improvements to existing sites can boost the return on already profitable sites and result in rapid positive returns on investment for sites that have not yet become profitable. After identifying viable sites, ADGE determined the appropriate improvements to be conducted at such viable sites. This process, managed by ADGE's operations and engineering staff, included evaluating the existing energy installation for points of deficiency and evaluating the site location for opportunities for new points of delivery. These evaluations were driven through the careful analysis of ADGE's vast catalog of historic operational energy data, which grows at a rate of approximately two million new data points per day. By utilizing the catalog, ADGE's staff can make data-driven decisions. Once the improvements have been made and the existing sites have been optimized it is more self-sufficient, driving down ongoing maintenance and equipment related expenses and improving the site's energy revenue profile.

This final phase in the Initiative is focused on improved customer relations and higher customer satisfaction. ADGE is elevating its relationship with its' customers from a passive utility provider to an active energy partner. This means not only delivering consistent, reliable energy to the customer at our discounted rate, but also promptly resolving any issues and assisting customers with other issues if and when the opportunity arises. ADGE believes that by taking this approach it will produce more inside sales leads. Many of ADGE's customers own multiple buildings or are part of organizations that manage many properties that can benefit from On-Site Utility CHP technology, making them prime candidates for inside sales. Low interest rates are currently an additional hurdle to outside sales by making outright customer purchase of equipment easier and potentially more attractive than our On-Site Utility solutions.

In conjunction with the Initiative, ADGE is making broader improvements to all of its portfolios, including: (1) upgrading monitoring to 4G to reduce communications-based downtime and allow for instant, real-time monitoring of sites; (2) introducing water treatment to the water that flows through our equipment to improve the lifespan of our equipment and decrease operating costs; and (3) adding and improving equipment focused on generating demand revenue. These smaller steps across the fleet have already and will continue to increase revenues and reduce costs. To support the Initiative, ADGE diverted resources from some other departments; primarily the sales and marketing departments. This results in a decrease in selling expenses and general administrative expenses. ADGE believes these are the best departments and expenses to reduce as improvement of the installed base has the ability to lead to higher customer satisfaction and possibly customer referrals. ADGE believes that focusing on fixing existing sites is a better use of resources than incurring these high sales cost to find new suitable customers. This may change if interest rates rise and it becomes less cost effective for potential customers to finance their own equipment purchase.

**Restructuring of American DG New York, LLC Joint Venture**

On June 5, 2015, American DG New York, LLC, or ADGNY, a joint venture in which ADGE holds a 51% membership interest, distributed certain energy systems related to sites it owned and operated to each of its members, ADGE and AES-NJ Cogen Co., Inc., or AES, in exchange for (i) with respect to 100,000 shares of ADGE's common stock and (ii) with respect to AES, \$100,000. Prior to the distribution, ADGNY owned and operated cogeneration units at 21 sites, and each member shared proportionally in the revenue generated by each site. In accordance with the terms of the distribution, all of ADGNY's assets related to eight sites were distributed to ADGE, all of ADGNY's assets related to eight sites were distributed to AES, and all of the assets related to the remaining five sites remain held by ADGNY. The assets distributed related to each site, consisted primarily of cogeneration units and long term operating agreements. Prior to the distribution, each member held a certain percentage interest in the assets related to each site; following the distribution, however, each member holds complete direct ownership of the assets such member received in the distribution.

The direct and whole ownership of the assets, received by each party in the distribution, related to the respective sites will allow each party to independently manage and operate such assets. Prior to the distribution, AES operated the assets related to these sites under an operating agreement. Following the distribution, ADGE will manage the remaining sites in ADGNY.

This relocation of ownership of these units was done to: (1) increase the overall number of units ADGE owns; (2) give ADGE the ability to increase the performance of the sites it acquired and the sites remaining in ADGNY; (3) have stronger relationships with the customers that obtain energy from the units acquired; and (4) improve logistics. Eight

sites consisting of 13 units were distributed to ADGE, while eight sites consisting of nine units were distributed to AES. In addition, these acquired units have great potential for improvement. ADGE believes that assuming control of more sites, including the ability to maintain five sites remaining in ADGNY, will give ADGE increased flexibility to improve the performance of each site. This in turn has the potential to increase revenue. In the short term, this restructuring resulted in a loss of revenue for ADGE because: (1) in the distribution eight sites were distributed to AES that ADGE previously majority owned and received considerable revenue from; and (2) ADGE has not had sufficient time to offset this revenue loss by substantially improving the performance of the eight sites distributed to it or by substantially improving the performance of the five sites remaining in ADGNY that ADGE now maintains.

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## Properties

Our headquarters are located in Waltham, Massachusetts and consist of 2,389 square feet of office and storage space that are sub-leased from Tecogen. We believe that our facilities are appropriate and adequate for our current needs.

## Legal Proceedings

In the ordinary course of its business, ADGE is involved in various legal proceedings involving a variety of matters. On or about February 6, 2017, ADGE, John Hatsopoulos, George N. Hatsopoulos, Charles T. Maxwell, Deanna M. Petersen, Christine Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen, and ADGE Acquisition Corp., were served with a Verified Complaint by William C. May ("May"), individually and on behalf of the other shareholders of ADGE as a class. The action was commenced in the Business Litigation Session of the Superior Court of the Commonwealth of Massachusetts, Civil Action No. 17-0390. The complaint alleges the proposed Merger is subject to certain conflicts of interest; that ADGE's board failed to protect our stockholders by failing to conduct an auction or market check; that the Exchange Ratio undervalues ADGE's outstanding shares; that ADGE's directors breached their fiduciary duties in approving the Merger proposal; that Tecogen's registration statement on Form S-4 contained material omissions; that Tecogen aided and abetted ADGE's board's breaches of its fiduciary duties; and other claims. The plaintiff is seeking preliminary and permanent injunctions related to the Merger, rescissory damages, compensatory damages, accounting, and other relief.

The May action is in its earliest stages. The state court denied plaintiff's motion for expedited discovery. The Defendants have not yet answered or otherwise responded to the complaint, and plaintiff has not yet filed a motion for injunctive relief.

On or about February 15, 2017, a lawsuit was filed in the United States District Court for the District of Massachusetts by Lee Vardakas ("Vardakas"), individually and on behalf of other shareholders of ADGE, naming ADGE, John N. Hatsopoulos, George N. Hatsopoulos, Benjamin Locke, Charles T. Maxwell, Deanne M. Petersen, Christine M. Klaskin, John Rowe, Joan Giacinti, Elias Samaras, Tecogen Inc., Tecogen ADGE Acquisition Corp., and Cassel Salpeter & Co., LLC, as defendants. Among other things, the complaint alleges (1) the merger is the result of a flawed and conflicted sales process and that the Exchange Ratio undervalues ADGE's outstanding shares and (2) the registration statement on Form S-4 contains materially incomplete and misleading information concerning: (a) the financial analyses performed by ADGE's financial advisor, (b) financial projections for ADGE and Tecogen, and (c) conflicts of interest in the sales process. The complaint asserts that defendants violated Section 14(a)(1) of the Securities Exchange Act of 1934, as amended ("Exchange Act"), and Rule 14a-9 thereunder, as a result of the alleged materially incomplete and misleading information; that the directors and officers of ADGE have control person liability for the alleged material misstatements and omissions pursuant to Section 20(a) of the Exchange Act; that the directors of ADGE breached their fiduciary duties to ADGE's stockholders related to the merger, including that they failed to take steps to obtain the highest possible consideration for ADGE shareholders in the transaction; that Mr. John Hatsopoulos and Mr. George Hatsopoulos, acting in concert and as a group, as controlling shareholders of ADGE, violated their fiduciary duties to the shareholders of ADGE; and that Mr. George Hatsopoulos, Tecogen ADGE Acquisition Corp., and ADGE's financial advisor aided and abetted breaches of fiduciary duties by the directors and officers of ADGE. Vardakas is seeking to certify a class action, a preliminary injunction, damages, costs and disbursements, including reasonable attorneys' fees, and such other relief as the court deems just and proper. The Vardakas action is in its earliest phase, with Vardakas not yet serving the complaint on Defendants.

Market for ADGE's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

## Market

Our common stock is traded on the NYSE MKT under the symbol ADGE. The following table sets forth the high and low sale prices of the Company's common stock for 2016 and 2015, as reported by the exchange.

Quarter	2016		2015	
	High	Low	High	Low
First Quarter	\$0.43	\$0.26	\$0.66	\$0.34
Second Quarter	0.65	0.22	0.90	0.28
Third Quarter	0.44	0.22	0.48	0.26

Fourth Quarter 0.34 0.22 0.59 0.29

Recent Purchases of the Company's Equity Securities

We did not repurchase any shares of our common stock during the three months ended December 31, 2016.

Holder of Record

As of March 21, 2017, there were approximately 100 record holders of our common stock.

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### Dividend Policy

We have never declared or paid any cash dividends on shares of our common stock. We currently intend to retain earnings, if any, to fund the development and growth of our business and do not anticipate paying cash dividends in the foreseeable future. Our payment of any future dividends will be at the discretion of our Board of Directors after taking into account various factors, including our financial condition, operating results, cash needs and growth plans. Also, under the terms of our Merger Agreement with Tecogen and Tecogen.ADGE Acquisition Corp., we have agreed that between November 1, 2016, and the merger effective time or the date the Merger Agreement is terminated, we may not make, declare or set aside any dividend or other distribution to our stockholders.

### Recent Sales of Unregistered Equity Securities

We did not sell any unregistered securities during the three months ended December 31, 2016.

### ADGE's Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing elsewhere herein. Some of the information contained in this discussion and analysis or set forth elsewhere herein, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review "Risk Factors" for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

### Overview

ADGE was incorporated in the State of Delaware on July 24, 2001. Its principal executive offices are located in Waltham, Massachusetts. We install, own, operate and maintain complete distributed generation of electricity systems, or DG systems or energy systems, and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. As of December 31, 2016, we had 92 operational energy systems, representing an aggregate of approximately 5,445 kilowatts, or kW, 41.6 million British thermal units, or MMBtu's, of heat and hot water and 4,500 tons of cooling. kW is a measure of electricity generated, MMBtu is a measure of heat generated and a ton is a measure of cooling generated.

### Strategic Initiative

Late in 2015, ADGE began executing an initiative to more effectively invest its capital, or the Initiative. The Initiative is focused on effectively investing ADGE's capital by increasing the performance of its existing sites. The goal of the Initiative is to make strategic capital improvements aimed at increasing productivity of the existing portfolio while optimizing ADGE's margins and increasing cash flow. ADGE expects that the Initiative will provide a strong foundation of high performing assets to be used to fund future growth.

The Initiative comprises a number of phases and contains multiple layers of evaluation. The first step was analyzing the existing portfolio to determine which sites make feasible options for investment. ADGE compared each site's unique income factors to its current operational performance to determine not only each site's viability but also its order of priority. ADGE evaluated certain indicators, including the size of the existing site, highly profitable utility rate matrices, and unique economic opportunities, including demand management programs or carbon credit rebates. ADGE believes that upgrading existing sites is a more effective use of ADGE's capital than building new sites because in general it takes at least four years for a new site to experience a positive return on investment, while improvements to existing sites can boost the return on already profitable sites and result in rapid positive returns on investment for sites that have not yet become profitable.

After identifying viable sites, ADGE determined the appropriate improvements to be conducted at such viable sites. This process, managed by ADGE's operations and engineering staff, included evaluating the existing energy installation for points of deficiency and evaluating the site location for opportunities for new points of delivery. These evaluations were driven through the careful analysis of ADGE's vast catalog of historic operational energy data, which grows at a rate of approximately two million new data points per day. By utilizing the catalog, ADGE's staff can make data-driven decisions. Once the improvements have been made and the existing sites have been optimized it is more self-sufficient, driving down ongoing maintenance and equipment related expenses and improving the site's energy

revenue profile.

This final phase in the Initiative is focused on improved customer relations and higher customer satisfaction. ADGE is elevating its relationship with its' customers from a passive utility provider to an active energy partner. This means not only delivering consistent, reliable energy to the customer at our discounted rate, but also promptly resolving any issues and assisting customers with other issues if and when the opportunity arises. ADGE believes that by taking this approach it will produce more inside sales leads. Many of ADGE's customers own multiple buildings or are part of organizations that manage many properties that can benefit from On-Site Utility CHP technology, making them prime candidates for inside sales. Low interest rates are

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currently an additional hurdle to outside sales by making outright customer purchase of equipment easier and potentially more attractive than our On-Site Utility solutions.

In conjunction with the Initiative, ADGE is making broader improvements to all of its portfolios, including: (1) upgrading monitoring to 4G to reduce communications-based downtime and allow for instant, real-time monitoring of sites; (2) introducing water treatment to the water that flows through our equipment to improve the lifespan of our equipment and decrease operating costs; and (3) adding and improving equipment focused on generating demand revenue. These smaller steps across the fleet have already and will continue to increase revenues and reduce costs. To support the Initiative, ADGE diverted resources from some other departments; primarily the sales and marketing departments. This results in a decrease in selling expenses and general administrative expenses. ADGE believes these are the best departments and expenses to reduce as improvement of the installed base has the ability to lead to higher customer satisfaction and possibly customer referrals. ADGE believes that focusing on fixing existing sites is a better use of resources than incurring these high sales cost to find new suitable customers. This may change if interest rates rise and it becomes less cost effective for potential customers to finance their own equipment purchase.

Disposition of Interest in Eurosite Power

In July 2010, we established EuroSite Power Inc., or EuroSite, as a subsidiary to introduce our On-Site Utility solution into the European market. As of December 31, 2015, we owned an approximately 48% interest in EuroSite and, as required under U.S. Generally Accepted Accounting Principles, or GAAP, consolidated the financial statements of EuroSite into our consolidated financial statements and did so through the quarter ended June 30, 2016. Since inception, ADGE provided United States' accounting, finance, and legal assistance to EuroSite from its office in Waltham, Massachusetts. During the second and third quarters of 2016, we entered into the following transactions that had the effect of reducing our ownership interest in EuroSite to slightly above 2%:

On May 4, 2016, we entered into an agreement with John Hatsopoulos, our co-Chief Executive Officer, a director and principal stockholder, and another investor to exchange an aggregate of \$9.3 million in principal and prepaid interest under outstanding 2014 Senior Unsecured Debentures ("Senior Unsecured Debentures") held by them for an aggregate of approximately 14.72 million shares of EuroSite owned by us.

On June 28, 2016, our ownership interest in EuroSite was reduced to 20.5% as a result of the conversion of substantially all of the outstanding convertible debentures of Eurosite that had been guaranteed by ADGE into shares of common stock of EuroSite. Following such conversion, ADGE accounted for its interest in EuroSite in its consolidated financial statements under the equity method of accounting.

On September 30, 2016, holders of our outstanding 6% convertible notes ("convertible notes") agreed to exchange principal and prepaid interest in the aggregate amount of approximately \$4.3 million under such notes for an aggregate of 9,700,000 shares of common stock of EuroSite owned by us.

On September 30, 2016, we sold an aggregate of 5,500,000 shares of common stock of EuroSite owned by us to two investors for an aggregate of \$2.2 million, the proceeds of which were paid to further reduce the amount of our outstanding convertible notes. As part of such transaction, the former convertible note holders cancelled warrants to purchase an aggregate of 1,020,000 shares of common stock of EuroSite we had issued to such holders.

As a result of such transactions, our ownership interest in EuroSite was decreased to approximately 2.03% and, pursuant to GAAP, we presented EuroSite as discontinued operations. Accordingly, the financial statements and other information related to EuroSite have not been consolidated with our consolidated financial statements for the year ended December 31, 2016, included herein.

Repayment and Settlement of Convertible Debentures and Notes

During 2016, we effected the following transactions to substantially reduce the amount of our outstanding indebtedness:

On May 4, 2016, as discussed above, we exchanged an aggregate of \$9.3 million in principal and prepaid interest under outstanding Senior Unsecured Debentures for an aggregate of approximately 14.72 million shares of EuroSite owned by us. Following the exchange, the debentures were cancelled.

On September 30, 2016, holders of our outstanding 6% convertible notes exchanged \$4.3 million in principal and prepaid interest for 9,700,000 shares of EuroSite owned by us and we issued a new note to evidence the remaining

balance of the debt of \$3,418,681. The prior convertible note was cancelled by us. The new note was upon substantially the same terms as the 6% convertible note and was convertible into our shares at a price of \$2.11 per share, subject to certain adjustments in the event of stock splits, stock dividends, and certain other events. On September 30, 2016, as discussed above, we used the \$2.2 million proceeds from the sale of 5.5 million shares of EuroSite to further reduce the amount of our outstanding convertible notes.

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On December 23, 2016, we repaid the remaining outstanding balance of our outstanding convertible notes of approximately \$3.1 million (net of prepaid interest).

Revolving Line of Credit Provided by Our Co-CEO, Director and Principal Stockholder

On December 22, 2016, we entered into a revolving line of credit agreement with John Hatsopoulos, our co-CEO, a director and a principal stockholder. The original amount of the line of credit was \$3 million. We drew down \$850,000 under the line of credit. On February 27, 2017, Mr. Hatsopoulos advised us that he was terminating the line of credit agreement except to the extent of the current draw down. The line of credit bears interest at the rate of 6% per annum on the outstanding balance, and is due on the first day of each calendar quarter. The line of credit terminates May 25, 2018 and the principal and any unpaid interest is repayable on that date. An event of default under the line of credit occurs in the event any amount of principal or interest is not paid when due.

Proposed Merger with Tecogen

On November 1, 2016, ADGE entered into the Merger Agreement with Tecogen and Merger Sub. Pursuant to the Merger Agreement, Merger Sub will be merged with and into ADGE with ADGE continuing as the surviving company in the Merger. Following the Merger, ADGE will become a wholly-owned subsidiary of Tecogen. The Merger Agreement sets forth the terms and conditions of ADGE's proposed acquisition by Tecogen. See "The Merger" and "The Merger Agreement."

Litigation Related to the Proposed Merger

For a discussion regarding certain litigation related to the Merger, see "[Information About ADGE - Legal Proceedings](#)".

At this time ADGE believes these cases are not material to its financial statements.

Our Business

We sell energy in the form of electricity, heat, hot water and cooling to our customers under long-term energy sales agreements (with a standard term of 10 to 15 years). Our typical sales model is to own and install energy systems in our customers' buildings and sell the energy produced by those systems back to the customers at a cost set by a negotiated formula in our customer contracts. Each month we obtain readings from our energy meters to determine the amount of energy produced for each customer. We use a contractually defined formula to multiply these readings by the appropriate published price of energy (electricity, natural gas or oil) from each customer's local energy utility, to derive the value of our monthly energy sale, which includes a negotiated discount. Our revenues per customer on a monthly basis vary based on the amount of energy produced by our energy systems and the published price of energy (electricity, natural gas or oil) from our customers' local energy utility that month. Our revenues commence as new energy systems become operational. As of December 31, 2016, we had 92 energy systems operational.

Some of our customers choose to purchase the energy system from us rather than have it owned by American DG Energy. In this case, we account for revenue and costs using the percentage-of-completion method of accounting. Under the percentage-of-completion method of accounting, revenues are recognized by applying percentages of completion to the total estimated revenues for the respective contracts. Costs are recognized as incurred. The percentages of completion are determined by relating the actual cost of work performed to date to the current estimated total cost at completion of the respective contracts. When the estimate on a contract indicates a loss, ADGE's policy is to record the entire expected loss, regardless of the percentage of completion. The excess of contract costs and profit recognized to date on the percentage-of-completion accounting method in excess of billings is recorded as unbilled revenue. Billings in excess of related costs and estimated earnings is recorded as deferred revenue. Customers may buy out their long-term obligation under energy contracts and purchase the underlying equipment from ADGE. Any resulting gain on these transactions is recognized over the payment period in the accompanying consolidated statements of operations. Revenues from operation and maintenance services, including shared savings are recorded when provided and verified.

We have experienced total net losses in each fiscal year since inception and we have accumulated losses of approximately \$41.4 million. For the foreseeable future, we expect to experience continuing operating losses and negative cash flows from operations as our management executes our current business plan. The cash and cash equivalents available at December 31, 2016 will, we believe, provide sufficient working capital to meet our

anticipated expenditures including installations of new equipment for the next twelve months; however, as we continue to grow our business by adding more energy systems, the cash requirements will increase. We believe that our cash and cash equivalents available at December 31, 2016, plus cash provided by the sale of certain inventory and assets held for sale in January of 2017, and our ability to control certain costs, including those related to general and administrative expenses, will enable us to meet our anticipated cash expenditures through March 21, 2018. Beyond March 21, 2018, we may need to raise additional capital through a debt financing or equity offering to meet our operating and capital needs. There can be no assurance, however, that we will be successful in our capital raising efforts or that additional funds will be available on acceptable terms, if at all.

ADGE's operations are comprised of one business segment. Our business is selling energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements.

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In 2015, ADGE began executing the Initiative and continues to execute this strategy through the date of this filing. The Initiative is focused on effectively investing ADGE's capital by increasing the performance of its existing sites. The goal of the Initiative is to make strategic capital improvements aimed at increasing productivity of the existing portfolio while optimizing ADGE's margins and increasing cash flow. ADGE expects that the Initiative will provide a strong foundation of high performing assets that may be used to fund future growth. See "Item 1 Business" for a description of the Initiative.

### Related Party Transactions

See Note 10 "Related Parties" to the consolidated financial statements contained herein.

### Results of Operations

Fiscal Year Ended December 31, 2016 Compared with Fiscal Year Ended December 31, 2015

#### Revenues

Revenues in 2016 were \$6,141,749 compared to \$6,358,196 for the same period in 2015, a decrease of \$216,447 or 3.4%. While energy production in 2016 increased mainly due to increased energy system performance under the Initiative, revenues decreased primarily due to the loss of revenue from eight energy sites under the restructuring of ADGE's joint venture, ADGNY. Our On-Site Utility energy revenues in 2016 decreased to \$5,565,909 compared to \$5,684,774 for the same period in 2015, a decrease of \$118,865 or 2.1%. As part of our On-Site Utility energy revenue, the revenue recognized from demand response activity was \$272,336 and \$104,744, for the years ended December 31, 2016 and 2015, respectively. Our turnkey and other revenues in 2016 decreased to \$575,840 compared to \$673,422 for the same period in 2015. The revenue from our turnkey projects can vary substantially from period to period.

During 2016 and 2015, we operated 92 energy systems, at 42 locations, representing 5,445 kW of installed electricity plus thermal energy. The revenue per customer on a monthly basis is based on the sum of the amount of energy produced by our energy systems and a contractually negotiated formula, which takes into account the monthly published price of energy (electricity, natural gas or oil) from each customer's local utility, less an applicable discount. Our revenues commence as new energy systems become operational.

#### Cost of Sales

Cost of sales, including depreciation, in 2016 was \$6,012,757 compared to \$6,411,568 for the same period in 2015, a decrease of \$398,811 or 6.2%. The decrease in expense was principally driven by a reduction in fuel, maintenance and installation costs of \$374,851 to \$3,689,294 in 2016 from \$4,064,145 in 2015, primarily as a result of a 4% reduction in fuel cost. Also contributing to this reduction in cost of sales was a decrease in site impairment charges for the year ended December 31, 2016 of \$503,072 as compared to \$618,661 in 2015. These decreases were offset by an increase in depreciation expense of \$91,629 to \$1,820,391 in 2016, from \$1,728,762 for the same period in 2015.

In 2016, our gross margins were 2.1% compared to a loss of 0.8% for the same period in 2015. This improvement was primarily due to lower fuel cost and site impairment costs. Our On-Site Utility energy margins excluding site impairments and depreciation were at 39.9% in 2016 compared to 36.1% for the same period in 2015.

#### Operating Expenses

Our general and administrative expenses consist of executive staff, accounting and legal expenses, office space, general insurance and other administrative expenses. Our general and administrative expenses in 2016 were \$1,878,008 compared to \$1,937,299 for the same period in 2015, a decrease of \$59,291 or 3.1%. The decrease was primarily due to reductions in payroll.

Our selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses including provisions for bad debt write-offs. ADGE sells energy using both direct sales and commissioned agents. Our marketing efforts consisted of internet marketing, print literature, media relations and event driven direct mail. Our selling expenses in 2016 were \$41,504 compared to \$694,101 for the same period in 2015, a decrease of \$652,597. The decrease in selling costs was principally due to a reduction in payroll, travel and entertainment costs offset with a bad debt recovery of approximately \$120,000.

Our engineering expenses consisted of technical staff and other engineering related expenses. The role of engineering is to evaluate potential customer sites based on technical and economic feasibility, manage the installed base of energy systems and oversee each installation project. Our engineering expenses in 2016 were \$649,181 compared to \$754,962 for the same period in 2015, a decrease of \$105,781 or 14.0%. The decrease in engineering expenses was due to reductions in payroll, travel and operating supplies.



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Loss from Operations

The loss from operations in 2016 was \$2,439,701 compared to \$3,439,734 for the same period in 2015, a decrease of \$1,000,033 which was principally due to gross profit improvement and a 24% decrease in operating expenses.

Other Income (Expense), Net

Our other income (expense), net, in 2016 was income of \$2,285,470 compared to an expense of \$1,034,254 for the same period in 2015. Other income (expense), net, includes interest and other income, interest and other expenses, gain on extinguishment of debt, gain on deconsolidation, a held for sale fair value adjustment and change in fair value of warrant liability. The majority of this overall fluctuation was due to the gain on deconsolidation with EuroSite Power of \$3,887,098. Interest and other income was \$21,837 in 2016 compared to \$193,691 for the same period in 2015. The decrease was primarily due to the reduction in cash balances in 2016. Interest and other expense was \$1,062,582 in 2016 compared to \$1,234,725 for the same period in 2015, a 13.9% decrease, primarily due to repayment of convertible debt.

Provision for Income Taxes

Our provision for income taxes in 2016 was \$60,572 compared to a provision of \$27,605 in 2015. The provision consists of various state income taxes accrued for the period.

Noncontrolling Interest

The noncontrolling interest share in the profits or losses in subsidiaries was an increase in net loss of \$675,612 for the year ended December 31, 2016 compared to a decrease of \$455,312 for the year ended December 31, 2015. The difference of \$220,300 is due to prior year's restructuring of ADGNY that occurred in the second quarter of 2015 as well as the deconsolidation of EuroSite in the second half of 2016.

Loss from discontinued operations

American DG's international operations through our former subsidiary, EuroSite Power, is being accounted for as discontinued operations through September 30, 2016. For the years ended December 31, 2016 and 2015 our share in its losses were \$1,219,256 and \$1,384,122, respectively.

Other Comprehensive Loss