

ECOLAB INC.  
Form 10-K  
February 26, 2016  
Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2015 Commission File No. 1-9328

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

ECOLAB INC.

(Exact name of registrant as specified in its charter)

Edgar Filing: ECOLAB INC. - Form 10-K

Delaware  
(State or other jurisdiction of incorporation or organization)

41-0231510  
(I.R.S. Employer Identification No.)

370 Wabasha Street North, St. Paul, Minnesota  
(Address of principal executive offices)

55102  
(Zip Code)

Registrant's telephone number, including area code: 1-800-232-6522

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, \$1.00 par value	New York Stock Exchange, Inc.
2.625% Euro Notes due 2025	New York Stock Exchange, Inc.

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
YES NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES NO

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Edgar Filing: ECOLAB INC. - Form 10-K

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES NO

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES NO

Aggregate market value of voting and non-voting common equity held by non-affiliates of registrant on June 30, 2015: \$33,339,392,886 (see Item 12, under Part III hereof), based on a closing price of registrant’s Common Stock of \$112.39 per share.

The number of shares of registrant’s Common Stock, par value \$1.00 per share, outstanding as of January 29, 2016: 296,001,857 shares.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s Proxy Statement for the Annual Meeting of Stockholders to be held May 5, 2016 and to be filed within 120 days after the registrant’s fiscal year ended December 31, 2015 (hereinafter referred to as “Proxy Statement”) are incorporated by reference into Part III.

Table of Contents

ECOLAB INC.

FORM 10-K

For the Year Ended December 31, 2015

## TABLE OF CONTENTS

	Beginning Page
<u>PART I</u>	
<u>Item 1. Business.</u>	3
<u>Item 1A. Risk Factors.</u>	16
<u>Item 1B. Unresolved Staff Comments.</u>	20
<u>Item 2. Properties.</u>	20
<u>Item 3. Legal Proceedings.</u>	22
<u>Item 4. Mine Safety Disclosures.</u>	22
<u>PART II</u>	
<u>Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.</u>	23
<u>Item 6. Selected Financial Data.</u>	25
<u>Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.</u>	26
<u>Item 7A. Quantitative and Qualitative Disclosures about Market Risk.</u>	49
<u>Item 8. Financial Statements and Supplementary Data.</u>	50
<u>Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.</u>	99
<u>Item 9A. Controls and Procedures.</u>	99
<u>PART III</u>	
<u>Item 10. Directors, Executive Officers of the Registrant and Corporate Governance.</u>	100
<u>Item 11. Executive Compensation.</u>	100
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.</u>	100
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence.</u>	100
<u>Item 14. Principal Accounting Fees and Services.</u>	100
<u>PART IV</u>	
<u>Item 15. Exhibits, Financial Statement Schedules.</u>	101

Table of Contents

PART I

Except where the context otherwise requires, references in this Form 10-K to (i) “Ecolab,” “Company,” “we” and “our” are to Ecolab Inc. and its subsidiaries, collectively; (ii) “Nalco” or “Nalco Company” are to Nalco Company LLC, a wholly-owned subsidiary of the Company; (iii) “Nalco transaction” are to the merger of Ecolab and Nalco Holding Company completed in December 2011; and (iv) “Champion transaction” are to our acquisition of privately held Champion Technologies and its related company Corsicana Technologies in April 2013.

Item 1. Business.

Item 1(a) General Development of Business.

Ecolab was incorporated as a Delaware corporation in 1924. Our fiscal year is the calendar year ending December 31.

In 2015, we took several actions to continue to invest in and build our business, including: the June 2015 acquisition of Jianghai Environmental Protection Co. Ltd, an industrial water treatment company headquartered in Changzhou, China; the November 2015 acquisition of the U.S. operations of Charlotte, N.C. – based Swisher Hygiene Inc, a provider of hygiene and sanitizing solutions for the foodservice, hospitality, retail and healthcare markets; and the November 2015 acquisition of the assets and operations of Calgary – based Ultra Fab Industries Ltd, which manufactures customized solutions and specialized chemical injection systems for the oil and gas industry. See Part II, Item 8, Note 4 of this Form 10-K for additional information about these three acquisitions as well as additional actions taken by the Company.

Item 1(b) Financial Information About Operating Segments.

The financial information about reportable segments appearing under the heading “Operating Segments and Geographic Information” is incorporated by reference from Part II, Item 8, Note 17 of this Form 10-K.

Item 1(c) Narrative Description of Business.

## General

With 2015 sales of \$13.5 billion, we are the global leader in water, hygiene and energy technologies and services that protect people and vital resources. We deliver comprehensive programs and services to promote safe food, maintain clean environments, optimize water and energy use, and improve operational efficiencies for customers in the food, energy, healthcare, industrial and hospitality markets in more than 170 countries. Our cleaning and sanitizing programs and products, pest elimination services, and equipment maintenance and repair services support customers in the foodservice, food and beverage processing, hospitality, healthcare, government and education, retail, textile care and commercial facilities management sectors. Our products and technologies are also used in water treatment, pollution control, energy conservation, oil production and refining, steelmaking, papermaking, mining and other industrial processes.

We pursue a “Circle the Customer – Circle the Globe” strategy by providing an array of innovative programs, products and services designed to meet the specific operational and sustainability needs of our customers throughout the world. Through this strategy and our varied product and service mix, one customer may utilize the offerings of several of our reportable segments.

The following description of our business is based upon our reportable segments as reported in our consolidated financial statements for the year ended December 31, 2015, which are located in Item 8 of Part II of this Form 10-K. Eight of our ten operating units have been aggregated into three reportable segments, Global Industrial, Global Institutional and Global Energy. Our two operating units that are primarily fee-for-service have been combined into the Other segment, and do not meet the quantitative criteria to be separately reported.

## Table of Contents

We provide similar information for the Other segment as compared to our three reportable segments as we consider the information regarding its two underlying operating units as useful in understanding our consolidated results.

### Global Industrial

This reportable segment consists of the Water, Food & Beverage, Paper and Textile Care operating units. It provides water treatment and process applications, and cleaning and sanitizing solutions primarily to large industrial customers within the manufacturing, food and beverage processing, chemical, mining and primary metals, power generation, pulp and paper, and commercial laundry industries. The underlying operating units exhibit similar manufacturing processes, distribution methods and economic characteristics. Descriptions of the four operating units which comprise our Global Industrial segment follow below.

#### Water

Our Water business serves customers across industrial and institutional markets, with the exception of the pulp and paper industry which is serviced by our Paper business and the energy industries which are served by our Energy business. Within Water, we serve customers in aerospace, chemical, pharmaceutical, mining and primary metals, power, food and beverage and medium and light manufacturing, as well as institutional clients such as hospitals, universities, commercial buildings and hotels. We provide products and programs for water treatment and process applications aimed at combining environmental benefits with economic gains for our customers. Our offerings include specialty products such as scale and corrosion inhibitors, antifoulants, pre-treatment solutions, membrane treatments, coagulants and flocculants, and anti-foams, as well as our 3D TRASARTM technology, which combines chemistry, remote services and monitoring and control. Typically, water savings, energy savings, maintenance and capital expenditure avoidance are among the primary sources of value to our customers, with product quality and production enhancement improvements also providing a key differentiating feature for many of our offerings.

Our Water business provides water treatment products and programs for cooling water, boiler water, process water and waste water applications. Our cooling water treatment programs are designed to control the main problems associated with cooling water systems — corrosion, scale and microbial fouling and contamination — in open recirculating, once-through and closed systems. We provide integrated chemical solutions, process improvements and mechanical component modifications to optimize boiler performance and control corrosion and scale build-up. Our programs assist the production of potable water or water for plant processes by optimizing the performance of treatment chemicals and equipment in order to minimize costs and maximize return on investment. Our wastewater products and programs focus on improving overall plant economics, addressing compliance issues, optimizing equipment efficiency and improving operator capabilities and effectiveness. Our offerings are sold primarily by our corporate account and field sales employees.

We believe that we have the leading market position world-wide among suppliers of products and programs for chemical treatment applications for industrial water treatment applications.

#### Food & Beverage

Our Food & Beverage business addresses cleaning and sanitation at the beginning of the food chain to facilitate the processing of products for human consumption. Food & Beverage provides detergents, cleaners, sanitizers, lubricants and animal health products, as well as cleaning systems, electronic dispensers and chemical injectors for the application of chemical products, primarily to dairy plants, dairy farms, breweries, soft-drink bottling plants, and meat, poultry and other food processors. Food & Beverage is also a leading developer and marketer of antimicrobial products used in direct contact with meat, poultry, seafood and produce during processing in order to reduce microbial contamination. Food & Beverage also designs, engineers and installs CIP (“clean in place”) process control systems and facility cleaning systems for its customer base. Products for use on farms are sold through dealers and independent, third-party distributors, while products for use in processing facilities are sold primarily by our corporate account and field sales employees.



## Table of Contents

We believe that we are the leading supplier world-wide of cleaning and sanitizing products to the dairy plant, dairy farm, food, meat and poultry, and beverage/brewery processor industries.

### Paper

Our Paper business provides water and process applications for the pulp and paper industries. Our Paper segment offers a comprehensive portfolio of programs that are used in all principal steps of the papermaking process and across all grades of paper, including graphic grades, board and packaging, and tissue and towel. Paper provides its customers the same types of products and programs for water treatment and wastewater treatment as those offered by Water. Also, Paper offers two specialty programs—pulp applications and paper applications. Our pulp applications maximize process efficiency and increase pulp cleanliness and brightness in bleaching operations, as well as predict and monitor scaling potential utilizing on-line monitoring to design effective treatment programs and avoid costly failures. Our paper process applications focus on improving our customers' operational efficiency. Advanced sensing, monitoring and automation combine with innovative chemistries and detailed process knowledge to provide a broad range of customer solutions. Specialty products include flocculants, coagulants, dewatering aids, and digester yield enhancers. Our offerings are sold primarily by our field sales employees.

We believe that we are one of the leading suppliers world-wide of water treatment products and process aids to the pulp and papermaking industry.

### Textile Care

Our Textile Care business provides products and services that manage the entire wash process through custom designed programs, premium products, dispensing equipment, water and energy management, and real time data management for large scale, complex commercial operations including uniform rental, hospitality, linen rental and healthcare laundries. Textile Care's programs are designed to meet our customers' needs for exceptional cleaning, while extending the useful life of linen and reducing our customers' overall operating costs. Products and programs are marketed primarily through field sales employees and, to a lesser extent, through distributors.

We believe that our Textile Care business is one of the leading suppliers world-wide in the laundry markets in which we compete.

### Global Institutional

This reportable segment consists of the Institutional, Specialty and Healthcare operating units. It provides specialized cleaning and sanitizing products to the foodservice, hospitality, lodging, healthcare, government, education and retail industries. The underlying operating units exhibit similar manufacturing processes, distribution methods and economic characteristics. Descriptions of the three operating units which comprise our Global Institutional segment follows below.

## Institutional

Our Institutional business sells specialized cleaners and sanitizers for washing dishes, glassware, flatware, foodservice utensils and kitchen equipment (“warewashing”), plus specialized cleaners for various applications throughout food service operations; for on-premise laundries (typically used by hotel and healthcare customers); and for general housekeeping functions, as well as food safety products and equipment, water filters, dishwasher racks and related kitchen sundries to the foodservice, lodging, educational and healthcare industries. Institutional also provides pool and spa treatment programs for hospitality and other commercial customers, as well as a broad range of janitorial cleaning and floor care products and programs to customers in hospitality, healthcare and commercial facilities. Institutional develops various chemical dispensing systems which are used by our customers to efficiently and safely dispense our cleaners and sanitizers. In addition, the Institutional operating unit markets a lease program comprised of energy-efficient dishwashing machines, detergents, rinse additives and sanitizers, including full machine maintenance. Through our EcoSure Food Safety Management business, Institutional also provides customized on-site evaluations, training and quality assurance services to foodservice operations.

Institutional sells its products and programs primarily through Company-employed field sales personnel. In addition, corporate account sales personnel establish relationships and negotiate contracts with larger multi-unit or “chain” customers. We also utilize independent, third-party foodservice, broad-line and janitorial distributors to provide logistics to end customers for accounts that prefer to purchase through these distributors. Many of these distributors also participate in marketing our product and service offerings to the end customers. Through our Company-employed field sales and service personnel, we generally provide the same customer support to end-use customers supplied by these distributors as we do to direct customers.

We believe that we are the leading global supplier of warewashing and laundry products and programs to the food service and hospitality markets.

## Table of Contents

### Specialty

Our Specialty operating unit supplies cleaning and sanitizing chemical products and related items primarily to regional, national and international quick service restaurant (“QSR”) chains and food retailers (i.e., supermarkets and grocery stores). Its products include specialty and general purpose hard surface cleaners, degreasers, sanitizers, polishes, hand care products and assorted cleaning tools and equipment which are primarily sold under the “Kay” and “Ecolab” brand names. Specialty’s cleaning and sanitation programs are customized to meet the needs of the market segments it serves and are designed to provide highly effective cleaning performance, promote food safety, reduce labor costs and enhance user and guest safety. A number of dispensing options are available for products in the core product range. Specialty supports its product sales with employee training programs and technical support designed to meet the special needs of its customers.

Both Specialty’s QSR business and its food retail business utilize a corporate account sales force which establishes relationships and negotiates contracts with customers at the corporate headquarters and regional office levels (and, in the QSR market segment, at the franchisee level) and a field sales force which provides program support at the individual restaurant or store level. Customers in the QSR market segment are primarily supplied through third party distributors while most food retail customers utilize their own distribution networks. While Specialty’s customer base has grown over the years, Specialty’s business remains largely dependent upon a limited number of major QSR chains and franchisees and large food retail customers.

We believe that Specialty is the leading supplier of cleaning and sanitizing products to the global QSR market and a leading supplier of cleaning and sanitizing products to the global food retail market.

### Healthcare

Our Healthcare business provides infection prevention, surgical solutions and contamination control solutions to acute care hospitals, surgery centers, medical device OEM manufacturers, and pharmaceutical and hospital clean room environments. Healthcare’s proprietary infection prevention and surgical solutions (hand hygiene, hard surface disinfection, instrument cleaning, patient drapes, equipment drapes and surgical fluid warming and cooling systems) are sold primarily under the “Ecolab” and “Microtek” brand names to various departments within the acute care environment (Infection Control, Environmental Services, Central Sterile and Operating Room). Healthcare sells its products and programs primarily through Company-employed field sales personnel and corporate account personnel but also sells through healthcare distributors.

We believe Healthcare is a leading supplier of infection prevention and surgical solutions in the United States and Europe.

### Global Energy

This reportable segment, which operates primarily under the Nalco Champion name, consists of the Energy operating unit. It serves the process chemicals and water treatment needs of the global petroleum and petrochemical industries in both upstream and downstream applications.

Our Energy business provides on-site, technology-driven solutions to the global drilling, oil and gas production, refining, and petrochemical industries. Our product and service portfolio includes corrosion inhibitors, scale control additives, biocides, cleaners, hydrate control, hydrogen sulfide scavengers, oil dispersants, asphaltene and paraffin control, foamers and anti-foams, flow assurance, oil/water separation, heavy crude desalting, monomer inhibitors, anti-oxidants, fuel and lubricant additives, air emission control and combustion efficiency, and traditional water treatment. Our customers include nearly all of the largest publicly traded oil companies, as well as national oil companies and large independent oil companies. Our Energy offerings are sold primarily by our corporate account and field sales employees. The Energy business operates an Upstream group composed of our WellChem and Oilfield Chemicals businesses and a Downstream refinery and petrochemical processing business.

- Well Stimulation and Completion: Our WellChem business supplies chemicals for the cementing, drilling, fracturing and acidizing phases of well drilling and stimulation. Our integrated approach to product development combines marketing and research efforts supported with process simulation, pilot plants and full-scale manufacturing capabilities.
- Oilfield Applications: Our Oilfield Chemicals business provides solutions to the oil and gas production sector. We have expertise in crude oil and natural gas production, pipeline gathering/transmission systems, gas processing, heavy oil and bitumen upgrading and enhanced oil recovery. Our priority is to safely manage the critical challenges facing today's oil and gas producers throughout the lifecycle of their assets. Starting with the design/capital investment phase to asset decommission, a lifecycle approach to chemical solutions and offerings helps our customers minimize risk, achieve their production targets and maximize profitability.
- Custom Equipment and Facilities: Our FabTech business designs, fabricates and commissions custom, high-quality oil and gas equipment for a range of applications. Our UltraFab business designs, fabricates and commissions compact, modular, and custom-engineered H<sub>2</sub>S mitigation systems that help to ensure optimized and effective treatment.

## Table of Contents

- **Downstream Refining Applications:** Our industry-focused sales engineers provide products and programs for process and water treatment applications specific to the petroleum refining and fuels industry, enabling our customers to profitably refine and upgrade hydrocarbons. Our heavy oil upgrading programs minimize operation costs and mitigate fouling, corrosion, foaming and the effects of heavy metals when refining opportunity crudes. We also offer an entire line of fuel additives, including corrosion inhibitors, to protect engine fuel systems and pre-market underground storage tanks and piping. In addition, we offer fuel stabilizers, pour point depressants, cetane improvers, detergents and antioxidants for home heating oil and premium diesel and gasoline packages.
- **Downstream Chemical Processing Applications:** Our customized process and water treatment programs are delivered by onsite technical experts who are focused on providing improved system reliability, reduced total cost of operations, environmental compliance, sustainability in the form of energy and water savings and reduced carbon emissions.
- **Water Treatment Applications:** We provide total water and wastewater management solutions specific to customers' refining and chemical processing needs including boiler treatment, cooling water treatment and wastewater treatment.

We believe Energy is a leading global provider of specialty chemicals to the upstream oil and gas industry, refineries and petrochemical operations.

### Other

Other consists of the Pest Elimination and Equipment Care operating units. It provides pest elimination and kitchen repair and maintenance, with its two operating units that are primarily fee-for-service businesses. In general, these businesses provide service which can augment or extend our product offerings to our business customers as a part of our "Circle the Customer" approach and, in particular, by enhancing our food safety capabilities.

### Pest Elimination

Pest Elimination provides services designed to detect, eliminate and prevent pests, such as rodents and insects, in restaurants, food and beverage processors, educational and healthcare facilities, hotels, quick service restaurant and grocery operations and other institutional and commercial customers. The services of Pest Elimination are sold and performed by Company-employed field sales and service personnel.

Our Pest Elimination business continues to expand its geographic coverage. In addition to the United States, which constitutes the largest operation, we operate this business in various countries in Asia Pacific, Western Europe, Latin America and South Africa, with the largest operations in France, the United Kingdom, Greater China and Brazil.

We believe Pest Elimination is one of the leading suppliers of pest elimination programs to the commercial, hospitality and institutional markets in the geographies it serves.

#### Equipment Care

Our Equipment Care business provides equipment repair, maintenance and preventive maintenance services for the commercial food service industry. Repair services are offered for in-warranty repair, acting as the manufacturer's authorized service agent, as well as after-warranty repair. In addition, Equipment Care operates as a parts distributor to repair service companies and end-use customers. At this time, the Equipment Care business operates solely in the United States.

We believe that Equipment Care is a leading provider of equipment maintenance and repair programs to the commercial food service industry in the United States locations in which we compete.

## Table of Contents

### Additional Information

### International Operations

We directly operate in approximately 90 countries outside of the United States through wholly-owned subsidiaries or, in some cases, through a joint venture with a local partner. In certain countries, selected products are sold by our export operations to distributors, agents or licensees, although the volume of those sales is not significant in terms of our overall revenues. In general, our businesses conducted outside the United States are similar to those conducted in the United States.

Our business operations outside the United States are subject to the usual risks of foreign operations, including possible changes in trade and foreign investment laws, international business laws and regulations, tax laws, currency exchange rates and economic and political conditions. The profitability of our International operations has historically been lower than the profitability of our businesses in the United States, due to (i) the additional cost of operating in numerous and diverse foreign jurisdictions, (ii) higher costs of importing certain raw materials and finished goods in some regions, (iii) the smaller scale of international operations where certain operating locations are smaller in size, and (iv) the additional reliance on distributors and agents in certain countries which can negatively impact our margins. Proportionately larger investments in sales and technical support are also necessary in certain geographies in order to facilitate the growth of our international operations.

### Competition

In general, the markets in which the businesses in our Global Industrial segment compete are led by a few large companies, with the rest of the market served by smaller entities focusing on more limited geographic regions or a smaller subset of products and services. Our businesses in this segment compete on the basis of their demonstrated value, technical expertise, chemical formulations, customer support, detection equipment, monitoring services, and dosing and metering equipment.

The businesses in our Global Institutional and Other segments have two significant classes of competitors. First, we compete with a small number of large companies selling directly or through distributors on a national or international scale. Second, we have numerous smaller regional or local competitors which focus on more limited geographies, product lines and/or end-use customer segments. We believe we compete principally by providing superior value, premium customer support and differentiated products to help our customers protect their brand reputation.

Our Global Energy segment competes with a limited number of multinational companies, with the remainder of the market comprised of smaller, regional niche companies focused on limited geographic areas. We compete in this business on the basis of our product and service quality, technical expertise, chemical formulations and emphasis on safety and environmental leadership.

#### Sales

Products, systems and services are primarily marketed in domestic and international markets by Company-trained field sales personnel who also advise and assist our customers in the proper and efficient use of the products and systems in order to meet a full range of cleaning and sanitation, water treatment and process chemistry needs. Independent, third-party distributors are utilized in several markets, as described in the business unit descriptions found above.

#### Number of Employees

We had approximately 47,000 employees as of December 31, 2015.



## Table of Contents

### Customers and Classes of Products

We believe that our business is not materially dependent upon a single customer. Additionally, although we have a diverse customer base and no customer or distributor constitutes 10 percent or more of our 2015 consolidated revenues, we do have customers and independent, third-party distributors, the loss of which could have a material adverse effect on results of operations for the affected earnings periods; however, we consider it unlikely that such an event would have a material adverse impact on our financial position. No material part of our business is subject to renegotiation or termination at the election of a governmental unit.

We sold one class of products within the Global Institutional segment which comprised 10% or more of consolidated net sales in two of the last three years. Sales of warewashing products were approximately 10% of consolidated net sales in both 2015 and 2013.

### Patents and Trademarks

We own and license a number of patents, trademarks and other intellectual property. While we have an active program to protect our intellectual property by filing for patents or trademarks and pursuing legal action, when appropriate, to prevent infringement, we do not believe that our overall business is materially dependent on any individual patent or trademark except patents related to our TRASAR and 3D TRASAR technology, which are material to our Water and Paper segments, and trademarks related to Ecolab, Nalco and 3D TRASAR. The Ecolab trademarks are material to the Global Industrial, Global Institutional and Other segments and the Nalco trademarks are material to the Water, Paper and Energy businesses. The 3D TRASAR trademarks predominantly relate to our Water and Paper segments. U.S. and foreign patents protect aspects of our key TRASAR and 3D TRASAR technology until at least 2024. The Ecolab, Nalco Company and 3D TRASAR trademarks are registered or applied for in all of our key markets, and we anticipate maintaining them indefinitely.

### Seasonality

We experience variability in our quarterly operating results due to seasonal sales volume and business mix fluctuations in our operating segments. Part II, Item 8, Note 18, entitled “Quarterly Financial Data” of this Form 10-K is incorporated herein by reference.

### Investments in Equipment

We have no unusual working capital requirements. We have invested in the past, and will continue to invest in the future, in process control and monitoring equipment consisting primarily of systems used by customers to dispense our products as well as to monitor water systems. The investment in such equipment is discussed under the heading "Investing Activities" in Management's Discussion and Analysis of Financial Condition and Results of Operations of this Form 10-K.

## Manufacturing and Distribution

We manufacture most of our products and related equipment in Company-operated manufacturing facilities. Some products are also produced for us by third-party contract manufacturers. Other products and equipment are purchased from third-party suppliers. Additional information on product/equipment sourcing is found in the segment discussions above and additional information on our manufacturing facilities is located under Part I, Item 2. "Properties," of this Form 10-K.

Deliveries to customers are made from our manufacturing plants and a network of distribution centers and third-party logistics service providers. We use common carriers, our own delivery vehicles, and distributors for transport. Additional information on our plant and distribution facilities is located under Part I, Item 2. "Properties," of this Form 10-K.

## Raw Materials

Raw materials purchased for use in manufacturing our products are inorganic chemicals, including alkalis, acids, biocides, phosphonates, phosphorous materials, silicates and salts; and organic chemicals, including acids, alcohols, amines, fatty acids, surfactants, solvents, monomers and polymers. Healthcare purchases plastic films and parts to manufacture medical devices that serve the surgical and infection prevention markets. Pesticides used by our Pest Elimination business are purchased as finished products under contract or purchase order from the producers or their distributors. We also purchase packaging materials for our manufactured products and components for our specialized cleaning equipment and systems. We purchase more than 10,000 raw materials, with the largest single raw material representing less than 2% of raw material purchases. Our raw materials, with the exception of a few specialized chemicals which we manufacture, are generally purchased on an annual contract basis and are ordinarily available in adequate quantities from a diverse group of suppliers globally. When practical, global sourcing is used so that purchasing or production locations can be shifted to control product costs at globally competitive levels.

## Research and Development

Our research and development program consists principally of developing and validating the performance of new products, processes, techniques and equipment, improving the efficiency of existing ones, improving service program

content, evaluating the environmental compatibility of products and technical support. Key disciplines include analytical and formulation chemistry, microbiology, process and packaging engineering, remote monitoring engineering and product dispensing technology. Substantially all of our principal products have been developed by our research, development and engineering personnel. At times, technology has also been licensed from third parties to develop offerings.

Table of Contents

We believe that continued research and development activities are critical to maintaining our leadership position within the industry and will provide us with a competitive advantage as we seek additional business with new and existing customers.

Part II, Item 8, Note 14, entitled “Research and Development Expenditures” of this Form 10-K is incorporated herein by reference.

## Joint Ventures

Over time, certain of our business units have entered into partnerships or joint ventures in order to meet local ownership requirements, to achieve quicker operational scale, to expand our ability to provide our customers a more fully integrated offering or to provide other benefits to our business or customers. In particular, our Energy and Water businesses are parties to numerous joint ventures, though many of our other business units also conduct some business through joint ventures. During 2015, the impact on our consolidated net income of our joint ventures, in the aggregate, was less than two percent. The table below identifies our most significant consolidated and non-consolidated joint ventures, summarized by the primary purpose of the joint venture.

Local Ownership Requirements / Geographic Expansion		
Joint Venture	Location	Segment
Nalco Angola Prestaca de Servicos, Limitada	Angola	Global Energy Global
Nalco Saudi Co. Ltd.	Saudi Arabia	Energy, Global Industrial
RauanNalco LLP	Kazakhstan	Global Energy
Emirates National Chemical Company LLC	United Arab Emirates	Global Energy
Malaysian Energy Chemical & Services Sdn. Bhd.	Malaysia	Global Energy
Nalco Champion Dai-ichi India Private Limited	India	Global Energy
Nalco Champion EG Sarl	Equatorial Guinea	Global Energy
AGS Champion LLP	Kazakhstan	Global Energy
Operational Scale / Geographic Critical Mass		
Joint Venture	Location	Segment
Katayama Nalco Inc.	Japan	Global Industrial
Technology / Expanded Product Offering / Manufacturing Capability		
Joint Venture	Location	Segment
Treated Water Outsourcing	United States	Global Industrial
Derypol, S.A.	Spain	

		Global
		Industrial
Kogalym Chemicals Plant LLC	Russia	Global Energy
CJSC Nalco Element JV	Russia	Global Energy
Century LLC	United	Global
	States	Institutional
OWT Oil-Water Treatment Services B.V.	Netherlands	Global Energy

Additionally, we continue to be party to the Ecolab S.A. joint venture in Venezuela, which historically operated businesses in our Global Industrial and Global Institutional segments. This joint venture was included among the Venezuelan subsidiaries that we deconsolidated for U.S. GAAP purposes effective at the end of the fourth quarter of 2015, as further described within the MD&A and Part II, Item 8, Note 3 of this Form 10-K.

We will continue to evaluate the potential for partnerships and joint ventures that can assist us in increasing our geographic, technological and product reach.

#### Environmental and Regulatory Considerations

Our businesses are subject to various legislative enactments and regulations relating to the protection of the environment and public health. While we cooperate with governmental authorities and take commercially practicable measures to meet regulatory requirements and avoid or limit environmental effects, some risks are inherent in our businesses. Among the risks are costs associated with transporting and managing hazardous materials and waste disposal and plant site clean up, fines and penalties if we are found to be in violation of law, as well as modifications, disruptions or discontinuation of certain operations or types of operations including product recalls and reformulations. Similarly, the need for certain of our products and services is dependent upon or might be limited by governmental laws and regulations. Changes in such laws and regulations, including among others, air pollution regulations and regulations relating to oil and gas production (including those related to hydraulic fracturing), could impact the sales of some of our products or services. In addition to an increase in costs of manufacturing and delivering products, a change in production regulations or product regulations could result in interruptions to our business and potentially cause economic or consequential losses should we be unable to meet the demands of our customers for products.

## Table of Contents

Additionally, although we are not currently aware of any such circumstances, there can be no assurance that future legislation or enforcement policies will not have a material adverse effect on our consolidated results of operations, financial position or cash flows. Environmental and regulatory matters most significant to us are discussed below.

**Ingredient Legislation:** Various laws and regulations have been enacted by state, local and foreign jurisdictions pertaining to the sale of products which contain phosphorous, volatile organic compounds, or other ingredients that may impact human health or the environment. Under California Proposition 65, for example, label disclosures are required for certain products containing chemicals listed by California. Chemical management initiatives that promote pollution prevention through research and development of safer chemicals and safer chemical processes are being advanced by certain states, including California, Maine, Maryland, Massachusetts, Minnesota, Oregon and South Carolina. Environmentally preferable purchasing programs for cleaning products have been enacted in nine states to date, and in recent years have been considered by several other state legislatures. Cleaning product ingredient disclosure legislation has been introduced in the U.S. Congress in each of the past few years but has not passed, and several states including California and New York are considering further regulations in this area. The California Safer Consumer Products Act regulations became effective in 2013 and focus on ingredients in consumer products that have the potential for widespread public exposure. The U.S. Government is monitoring “green chemistry” initiatives through a variety of initiatives, including its “Design for the Environment” (“DfE”)/”Safer Choice” program. DfE/Safer Choice has three broad areas of work (recognition of safer products on a DfE/Safer Choice label, development of best practices for industrial processes and evaluation of safer chemicals), and we are involved in these to varying degrees. Our Global Institutional and Global Industrial cleaning products are subject to the regulations and may incur additional stay-in-market expenses associated with conducting the required alternatives analyses for chemicals of concern. To date, we generally have been able to comply with such legislative requirements by reformulation or labeling modifications. Such legislation has not had a material adverse effect on our consolidated results of operations, financial position or cash flows to date.

**TSCA:** Re-authorization of the Toxic Substances Control Act (“TSCA”) and an update of the chemicals on the TSCA Inventory (the so-called “reset” of the TSCA Inventory) were passed by both chambers of the U.S. Congress, and final enactment of legislation is likely to occur in the first half of 2016. The U.S. Environmental Protection Agency (“EPA”) also is more aggressively using the existing TSCA tools to manage chemicals of concern. We anticipate that compliance with new requirements under TSCA could be similar to the costs associated with REACH in the European Union, which is discussed below.

**REACH:** The European Union has enacted a regulatory framework for the Registration, Evaluation and Authorization of Chemicals (“REACH”). It established a new European Chemicals Agency (“ECHA”) in Helsinki, Finland, which is responsible for evaluating data to determine hazards and risks and to manage this program for authorizing chemicals for sale and distribution in Europe. We met the pre-registration requirements of REACH, the 2010 and 2013 registration deadlines, and are on track to meet the upcoming registration deadlines and requirements in 2018. To help manage this program, we have been simplifying our product lines and working with chemical suppliers to comply with registration requirements. In addition, Korea, Taiwan and other countries are planning similar requirements. Potential costs to us are not yet fully quantifiable, but are not expected to have a material adverse effect on our consolidated results of operations or cash flows in any one reporting period or on our financial position.

GHS: In 2003, the United Nations adopted a standard on hazard communication and labeling of chemical products known as the Globally Harmonized System of Classification and Labeling of Chemicals (“GHS”). GHS is designed to facilitate international trade and increase safe handling and use of hazardous chemicals through a worldwide system that classifies chemicals based on their intrinsic hazards and communicates information about those hazards through standardized product labels and safety data sheets (“SDSs”). Most countries in which we operate will adopt GHS-related legislation, and numerous countries already have done so. The primary cost of compliance revolves around reclassifying products and revising SDSs and product labels. We met the 2015 deadlines in the U.S. and European Union and are working toward a phased-in approach to mitigate the costs of GHS implementation in other countries. Potential costs to us are not expected to have a material adverse effect on our consolidated results of operations or cash flows in any one reporting period or on our financial position.

Pesticide and Biocide Legislation: Various international, federal and state environmental laws and regulations govern the manufacture and/or use of pesticides. We manufacture and sell certain disinfecting, sanitizing and material preservation products that kill or reduce microorganisms (bacteria, viruses, fungi) on hard environmental surfaces, in process fluids and on certain food products. Such products constitute “pesticides” or “antimicrobial pesticides” under the current definitions of the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”), as amended by the Food Quality Protection Act of 1996, the principal federal statute governing the manufacture, labeling, handling and use of pesticides. We maintain several hundred product registrations with the U.S. Environmental Protection Agency (“EPA”). Registration entails the necessity to meet certain efficacy, toxicity and labeling requirements and to pay on-going registration fees. In addition, each state in which these products are sold requires registration and payment of a fee. In general, the states impose no substantive requirements different from those required by FIFRA. However, California and certain other states have adopted additional regulatory programs, and California imposes a tax on total pesticide sales in that state. While the cost of complying with rules as to pesticides has not had a material adverse effect on our consolidated results of operations, financial condition, or cash flows to date, the costs and delays in receiving necessary approvals for these products continue to

Table of Contents

increase. Total fees paid to the EPA and the states to obtain or maintain pesticide registrations are not expected to significantly affect our consolidated results of operations or cash flows in any one reporting period or our financial position.

In Europe, the Biocidal Product Directive and the more recent Biocidal Products Regulation established a program to evaluate and authorize marketing of biocidal active substances and products. We are working with suppliers and industry groups to manage these requirements and have met the first relevant deadline of the program by the timely submission of dossiers for active substances. Anticipated registration costs, which will be incurred through the multi-year phase-in period, will be significant; however, these costs are not expected to significantly affect our consolidated results of operations or cash flows in any one reporting period or our financial position.

In addition, our Pest Elimination business applies restricted-use pesticides that it generally purchases from third parties. That business must comply with certain standards pertaining to the use of such pesticides and to the licensing of employees who apply such pesticides. Such regulations are enforced primarily by the states or local jurisdictions in conformity with federal regulations. We have not experienced material difficulties in complying with these requirements.

**FDA Antimicrobial Product Requirements:** Various laws and regulations have been enacted by federal, state, local and foreign jurisdictions regulating certain products manufactured and sold by us for controlling microbial growth on humans, animals and foods. In the United States, these requirements generally are administered by the U.S. Food and Drug Administration ("FDA"). However, the U.S. Department of Agriculture and EPA also may share in regulatory jurisdiction of antimicrobials applied to food. The FDA codifies regulations for these product categories in order to ensure product quality, safety and effectiveness. The FDA also has been expanding requirements applicable to such products, including proposing regulations for over-the-counter antiseptic drug products, which may impose additional requirements associated with antimicrobial hand care products and associated costs when finalized by the FDA. FDA regulations associated with the Food Safety Modernization Act may impose additional requirements related to safety product lines. To date, such requirements have not had a material adverse effect on our consolidated results of operations, financial position or cash flows.

**Medical Device and Drug Product Requirements:** As a manufacturer, distributor and marketer of medical devices and human drugs, we also are subject to regulation by the FDA and corresponding regulatory agencies of the state, local and foreign governments in which we sell our products. These regulations govern the development, testing, manufacturing, packaging, labeling, distribution and marketing of medical devices and medicinal products. We also are required to register with the FDA as a medical device and drug manufacturer, comply with post-market reporting (e.g., Adverse Event Reporting, MDR and Recall) requirements, and to comply with the FDA's current Good Manufacturing Practices and Quality System Regulations which require that we have a quality system for the design and production of our products intended for commercial distribution in the United States and satisfy recordkeeping requirements with respect to our manufacturing, testing and control activities. Countries in the European Union require that certain products being sold within their jurisdictions obtain a "CE mark", an international symbol of adherence to quality assurance standards, and be manufactured in compliance with certain requirements (e.g., Medical Device Directive 93/42/EE and ISO 13485). We have CE mark approval to sell various medical device and medicinal



products in Europe. Our other international non-European operations also are subject to government regulation and country-specific rules and regulations. Regulators at the federal, state and local level have imposed, are currently considering and are expected to continue to impose regulations on medical devices and drug products. No prediction can be made of the potential effect of any such future regulations, and there can be no assurance that future legislation or regulations will not increase the costs of our products or prohibit the sale or use of certain products.

**Other Environmental Legislation; Capital Expenditures:** Our manufacturing plants are subject to federal, state, local or foreign jurisdiction laws and regulations relating to discharge of hazardous substances into the environment and to the transportation, handling and disposal of such substances. The primary federal statutes that apply to our activities in the United States are the Clean Air Act, the Clean Water Act and the Resource Conservation and Recovery Act. We are also subject to the Superfund Amendments and Reauthorization Act of 1986, which imposes certain reporting requirements as to emissions of hazardous substances into the air, land and water. The products we produce and distribute into Europe are also subject to directives governing electrical waste (WEEE Directive 2012/19/EU) and restrictive substances (RoHS Directive 2011/65/EU). Similar legal requirements apply to Ecolab's facilities globally. We make capital investments and expenditures to comply with environmental laws and regulations, to promote employee safety and to carry out our announced environmental sustainability principles. To date, such expenditures have not had a significant adverse effect on our consolidated results of operations, financial position or cash flows. Our capital expenditures for environmental, health and safety projects worldwide were approximately \$55 million in 2015 and \$53 million in 2014. Approximately \$67 million has been budgeted globally for projects in 2016. The increase in 2016 over 2015 is due to continued spending on process safety matters throughout the Company, including facilities acquired in connection with the Champion transaction.

**Climate Change:** Various laws and regulations pertaining to climate change have been implemented or are being considered for implementation at the international, national, regional and state levels, particularly as they relate to the reduction of greenhouse gas ("GHG") emissions. None of these laws and regulations directly apply to Ecolab at the present time; however, as a matter of corporate policy, we support a balanced approach to reducing GHG

## Table of Contents

emissions while sustaining economic growth. We are committed to reducing our carbon footprint and have made significant strides in recent years. In 2014, we received a Climate Leadership Award, co-sponsored by EPA, recognizing Ecolab for achieving an absolute global greenhouse gas emissions reduction of more than 12.5 percent (22.4 percent intensity reduction).

Our current global sustainability targets were established in 2014. They include a 25 percent reduction in effluent discharge and waste, a 20 percent reduction in water use and a 10 percent reduction in greenhouse gas emissions by 2017. In addition to our internal sustainability performance, we partner with customers at more than 1.3 million customer locations around the world to reduce energy and greenhouse gas emissions through our high-efficiency solutions in cleaning and sanitation, water, paper and energy services. These actions directly reduce greenhouse gas emissions by lessening the demand for energy.

**Environmental Remediation and Proceedings:** Along with numerous other potentially responsible parties (“PRP”), we are currently involved with waste disposal site clean up activities imposed by the federal Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”) or state equivalents at 23 sites in the United States. Additionally, we have similar liability at nine sites outside the United States. In general, under CERCLA, we and each other PRP that actually contributed hazardous substances to a Superfund site are jointly and severally liable for the costs associated with cleaning up the site. Customarily, the PRPs will work with the EPA to agree and implement a plan for site remediation.

Based on an analysis of our experience with such environmental proceedings, our estimated share of all hazardous materials deposited on the sites referred to in the preceding paragraph, and our estimate of the contribution to be made by other PRPs which we believe have the financial ability to pay their shares, we have accrued our best estimate of our probable future costs relating to such known sites. Unasserted claims are not reflected in the accrual. In establishing accruals, potential insurance reimbursements are not included. The accrual is not discounted. It is not feasible to predict when the amounts accrued will be paid due to the uncertainties inherent in the environmental remediation and associated regulatory processes.

The Texas Commission on Environmental Quality (“TCEQ”) issued a Notice of Enforcement (“NOE”) and Notice of Violation (“NOV”) related to Ecolab’s facility in Fresno, TX on August 29, 2014, alleging violations of the facility’s air permits and various state and federal air laws. We have provided information to the TCEQ regarding the alleged violations and met with them to discuss our response to the NOV and NOE and the corrective actions already implemented. On June 24, 2015, the TCEQ issued a draft consent decree to Ecolab for certain violations, and the TCEQ is now seeking an administrative penalty of approximately \$0.9 million. We anticipate that this matter will not have a material effect on our consolidated results of operations, financial position or cash flows.

We have also been named as a defendant in lawsuits where our products have not caused injuries, but the claimants wish to be monitored for potential future injuries. We cannot predict with certainty the outcome of any such tort claims or the involvement we or our products might have in such matters in the future, and there can be no assurance

that the discovery of previously unknown conditions will not require significant expenditures. In each of these chemical exposure cases, our insurance carriers have accepted the claims on our behalf (with or without reservation) and our financial exposure should be limited to the amount of our deductible; however, we cannot predict the number of claims that we may have to defend in the future and we may not be able to continue to maintain such insurance.

We have also been named as a defendant in a number of lawsuits alleging personal injury due to exposure to hazardous substances, including multi-party lawsuits alleging personal injury in connection with our products and services. While we do not believe that any of these suits will be material to us based upon present information, there can be no assurance that these environmental matters could not have, either individually or in the aggregate, a material adverse effect on our consolidated results of operations, financial position or cash flows.

Our worldwide net expenditures for contamination remediation were approximately \$6.5 million in 2015 and \$5.0 million in 2014. Our worldwide accruals at December 31, 2015 for probable future remediation expenditures, excluding potential insurance reimbursements, totaled approximately \$26 million. We review our exposure for contamination remediation costs periodically and our accruals are adjusted as considered appropriate. While the final resolution of these issues could result in costs below or above current accruals and, therefore, have an impact on our consolidated financial results in a future reporting period, we believe the ultimate resolution of these matters will not have a material effect on our consolidated results of operations, financial position or cash flows.

#### Item 1(d) Financial Information About Geographic Areas.

The financial information about geographic areas appearing under the heading “Operating Segments and Geographic Information” is incorporated by reference from Part II, Item 8, Note 17 of this Form 10-K.

Table of Contents

## Item 1(e) Available Information.

Our Internet address is [www.ecolab.com](http://www.ecolab.com). Copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to these reports, are available free of charge on our website [www.ecolab.com/investor](http://www.ecolab.com/investor) as soon as reasonably practicable after such material is filed with, or furnished to, the Securities and Exchange Commission.

In addition, the following governance materials are available on our web site at [www.ecolab.com/investors/corporate-governance](http://www.ecolab.com/investors/corporate-governance): (i) charters of the Audit, Compensation, Finance, Governance and Safety, Health and Environment Committees of our Board of Directors; (ii) our Board's Corporate Governance Principles; and (iii) our Code of Conduct.

## Executive Officers of the Registrant.

The persons listed in the following table are our current executive officers. Officers are elected annually. There is no family relationship among any of the directors or executive officers, and except as otherwise noted, no executive officer has been involved during the past ten years in any legal proceedings described in applicable Securities and Exchange Commission regulations.

Name	Age	Office	Positions Held Since Jan. 1, 2011
Douglas M. Baker, Jr.	57	Chairman of the Board and Chief Executive Officer Chairman of the Board, President and Chief Executive Officer	Dec. 2011 – Present Jan. 2011 – Nov. 2011
Christophe Beck	48	Executive Vice President and President – Global Water & Process Services Executive Vice President and President – Regions Executive Vice President – Global Integration Executive Vice President – Institutional	May 2015 - Present Oct. 2012 – May 2015 Dec. 2011 – Sep. 2012 Jan. 2011 – Nov. 2011
Larry L. Berger	55	Executive Vice President and Chief Technical Officer Senior Vice President and Chief Technical Officer	Oct. 2011 – Present Jan. 2011 – Sep. 2011
Alex N. Blanco	55	Executive Vice President and Chief Supply Chain Officer	Jan. 2013 – Present 1
Thomas W. Handley	61	President and Chief Operating Officer	Sep. 2012 – Present

Edgar Filing: ECOLAB INC. - Form 10-K

		Senior Executive Vice President and President – Global Food & Beverage and Asia Pacific Latin America	Oct. 2011 – Aug. 2012
		President, Global Food & Beverage and Asia Pacific Latin America Sectors	Jan. 2011 – Sep. 2011
Michael A. Hickey	54	Executive Vice President and President – Global Institutional	Oct. 2012 – Present
		Executive Vice President and President – Institutional Executive Vice President Global Services Sector	Aug. 2011 – Sep. 2012 Jan. 2011 – Jul. 2011
Bryan L. Hughes	47	Senior Vice President and Corporate Controller Vice President-Finance, Global Institutional	May 2014 - Present Jan. 2011 – Apr. 2014
Roberto Inchaustegui	60	Executive Vice President and President – Global Services and Specialty	Sep. 2012 - Present
		Executive Vice President and President – Global Specialty Executive Vice President – Global Specialty Sector	Dec. 2011 – Sep. 2012 May 2011 – Dec. 2011
		Senior Vice President – Global Food Retail Services	Jan. 2011 – May 2011
Laurie M. Marsh	52	Executive Vice President – Human Resources Vice President – Total Rewards and HR Service Delivery & Technology	Nov. 2013 – Present Dec. 2011 – Oct.2013 2
Timothy P. Mulhere	53	Executive Vice President and President – Regions	May 2015 – Present
		Executive Vice President and President – Global Water and Process Services	Oct. 2012 – May 2015
		Executive Vice President and President – Global Healthcare Senior Vice President and General Manager – Food & Beverage North America	Feb. 2012 – Sep. 2012 Jan. 2011 – Jan. 2012
Daniel J. Schmechel	56	Chief Financial Officer Senior Vice President – Services and Systems Senior Vice President and Chief Transformation Officer – EMEA	Oct. 2012 – Present Jun. 2012 – Sep. 2012 Jan. 2011 – May 2012

Table of Contents

Name	Age	Office	Positions Held Since Jan. 1, 2011
James J. Seifert	59	Executive Vice President, General Counsel and Secretary General Counsel & Secretary	Oct. 2011 – Present Jan. 2011 – Sep. 2011
Stephen M. Taylor	54	Executive Vice President and President – Nalco Champion  Executive Vice President and President – Global Energy Services Executive Vice President – Energy Services	Apr. 2013 – Present  Oct. 2012 – March 2013 Dec. 2011 – Sep. 2012 3
Jill S. Wyant	44	Executive Vice President and President – Global Food & Beverage and Healthcare Executive Vice President and President – Global Food & Beverage Senior Vice President and General Manager – North America and Latin America Senior Vice President – Food & Beverage Asia Pacific and Latin America	Aug. 2015 – Present Oct. 2012 – July 2015 Jan. 2012 – Sep. 2012 Jan. 2011 – Dec. 2011

1. Prior to joining Ecolab in 2013, Mr. Blanco was employed by Procter & Gamble Co., for 30 years, most recently as Vice President, Product Supply Global Beauty Sector.
2. Prior to joining Ecolab in 2011 upon the closing of the Nalco merger, Ms. Marsh was employed by Nalco for 20 years, most recently as Executive Vice President of Human Resources.
3. Prior to joining Ecolab in 2011 upon closing of the Nalco merger, Mr. Taylor was employed by Nalco for 17 years. Mr. Taylor led Nalco's Energy Services Division since 2007 after a series of leadership roles in the division.

## Forward-Looking Statements

This Annual Report on Form 10-K, including the MD&A within Part II, Item 7 of this Form 10-K, contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include expectations concerning items such as:

- amount, funding and timing of cash expenditures; scope; timing; costs; benefits; synergies and headcount impact relating to our restructuring initiatives
- utilization of recorded restructuring liabilities
- capital investments and strategic business acquisitions
- share repurchases
- payments under operating leases

- borrowing capacity
- global market risk
- impact of oil price fluctuations, expectations concerning production at certain projects and comparative performance and prospects of businesses in our Global Energy segment
- targeted credit rating metrics
- long-term potential of our business
- impact of changes in exchange rates and interest rates
- losses due to concentration of credit risk
- recognition of share-based compensation expense
- future benefit plan payments
- amortization expense
- customer retention rate
- bad debt experiences and customer credit worthiness
- disputes, claims and litigation
- environmental contingencies
- returns on pension plan assets
- funding of cash requirements, future cash flow and uses for cash
- dividends
- debt repayments
- contributions to pension and postretirement healthcare plans
- liquidity requirements and borrowing methods
- impact of credit rating downgrade
- impact of new accounting pronouncements
- tax deductibility of goodwill
- non-performance of counterparties
  - income taxes, including valuation allowances, loss carryforwards, unrecognized tax benefits and uncertain tax positions

Table of Contents

Without limiting the foregoing, words or phrases such as “will likely result,” “are expected to,” “will continue,” “is anticipated,” “we believe,” “we expect,” “estimate,” “project” (including the negative or variations thereof) or similar terminology, generally identify forward-looking statements. Forward-looking statements may also represent challenging goals for us. These statements, which represent the Company’s expectations or beliefs concerning various future events, are based on current expectations that involve a number of risks and uncertainties that could cause actual results to differ materially from those of such forward-looking statements. We caution that undue reliance should not be placed on such forward-looking statements, which speak only as of the date made. Some of the factors which could cause results to differ from those expressed in any forward-looking statement are set forth under Item 1A of this Form 10-K, entitled Risk Factors. Except as may be required under applicable law, we undertake no duty to update our Forward-Looking Statements.

Item 1A. Risk Factors.

The following are important factors which could affect our financial performance and could cause our actual results for future periods to differ materially from our anticipated results or other expectations, including those expressed in any forward-looking statements made in this Form 10-K. See the section entitled Forward-Looking Statements set forth above.

We may also refer to this disclosure to identify factors that may cause results to differ from those expressed in other forward-looking statements including those made in oral presentations, including telephone conferences and/or webcasts open to the public.

Our results depend upon the continued vitality of the markets we serve.

Economic downturns, and in particular downturns in the energy, foodservice, hospitality, travel, health care, food processing, pulp and paper, mining and steel industries, can adversely impact our end-users. The well completion and stimulation, oil and gas production and refinery and petrochemical plant markets served by our Global Energy segment may be impacted by substantial fluctuations in oil and gas prices; in 2015, the Global Energy Segment experienced a decrease in sales as a result of challenging global energy market conditions. In recent years, the weaker global economic environment, particularly in Europe and emerging markets such as China and Brazil, has negatively impacted many of our end-markets. Weaker economic activity may continue to adversely affect these markets. During such cycles, these end-users may reduce their volume of purchases of cleaning and sanitizing products and water treatment and process chemicals, which has had, and may continue to have, an adverse effect on our business.

Our results are impacted by general worldwide economic factors.



Economic factors such as the worldwide economy, capital flows, interest rates and currency movements, including, in particular, our exposure to foreign currency risk, have affected our business in the past and may have a material adverse impact on our business in the future. In 2008 and 2009, the global economy experienced considerable disruption and volatility, and the disruption was particularly acute in the global credit markets. In 2011 and 2012, the European Union's sovereign debt crisis negatively impacted economic activity in that region as well as the strength of the euro versus the U.S. dollar. Other regions of the world, including emerging market areas, also expose us to foreign currency risk. For example, as more fully described in the MD&A located in Item 7 of Part II of this Form 10-K, continued deteriorating economic conditions and currency exchange control regulations have resulted in a charge of \$123.4 million during the fourth quarter of 2015 related to the deconsolidation of our Venezuelan subsidiaries. This charge was preceded by charges of \$165.9 million, \$154.8 million including the impact of \$11.1 million within net income (loss) attributable to non-controlling interest, through the first three quarters of 2015 related to Venezuela bolivar's devaluation. Similar currency devaluations, credit market disruptions or other economic turmoil in other countries could have a material adverse impact on our consolidated results of operations, financial position and cash flows by negatively impacting economic activity, including in our key end-markets, and by further weakening the local currency versus the U.S. dollar, resulting in reduced sales and earnings from our foreign operations, which are generated in the local currency, and then translated to U.S. dollars.

We depend on key personnel to lead our business.

Our continued success will largely depend on our ability to attract and retain a high caliber of talent and on the efforts and abilities of our executive officers and certain other key employees, particularly those with sales and sales management responsibilities. This is especially crucial as we continue the integration of new businesses, which may be led by personnel that we believe are critical to the success of the integration and the prospects of the business. Our operations could be adversely affected if for any reason we were unable to attract or retain such officers or key employees.

If we are unsuccessful in executing on key business initiatives, our business could be adversely affected.

In addition to the Energy Restructuring Plan and Combined Restructuring Plan discussed under Note 3, entitled "Special Gains and Charges" of this Form 10-K, we continue to make investments and execute business initiatives to develop business systems and optimize our business structure as part of our ongoing efforts to improve our efficiency and returns. In particular, we continue to invest in our ERP systems to integrate and streamline our processes and to improve our competitiveness. These initiatives involve complex business process design and a breakdown in certain of these processes could result in business disruption. If the projects in which we are investing or the initiatives which we are pursuing are not successfully executed, our consolidated results of operations, financial position or cash flows could be adversely affected.



## Table of Contents

We may be subject to information technology system failures, network disruptions and breaches in data security.

We rely to a large extent upon information technology systems and infrastructure to operate our business. The size and complexity of our computer systems make them potentially vulnerable to breakdown, malicious intrusion and random attack. Recent acquisitions, including the Nalco and Champion transactions, have resulted in further de-centralization of systems and additional complexity in our systems infrastructure. Likewise, data privacy breaches by employees and others with permitted access to our systems may pose a risk that sensitive data may be exposed to unauthorized persons or to the public. While we have invested in protection of data and information technology, there can be no assurance that our efforts will prevent breakdowns, cybersecurity attacks or breaches in our systems that could cause reputational damage, business disruption and legal and regulatory costs; could result in third-party claims; could result in compromise or misappropriation of our intellectual property, trade secrets and sensitive information; and could otherwise adversely affect our business.

Our significant non-U.S. operations expose us to global economic, political and legal risks that could impact our profitability.

We have significant operations outside the United States, including joint ventures and other alliances. We conduct business in approximately 170 countries and, in 2015, approximately 48% of our net sales originated outside the United States. There are inherent risks in our international operations, including:

- exchange controls and currency restrictions;
- currency fluctuations and devaluations;
- tariffs and trade barriers;
- export duties and quotas;
- changes in the availability and pricing of raw materials, energy and utilities;
- changes in local economic conditions;
- changes in laws and regulations, including the imposition of economic sanctions affecting commercial transactions in countries such as the Russian Federation;
- difficulties in managing international operations and the burden of complying with foreign laws;
  - requirements to include local ownership or management in our business;
- economic and business objectives that differ from those of our joint venture partners;
- exposure to possible expropriation, nationalization or other government actions;
- restrictions on our ability to repatriate dividends from our subsidiaries;
- unsettled political conditions, military action, civil unrest, acts of terrorism, force majeure, war or other armed conflict; and
- countries whose governments have been hostile to U.S.-based businesses.

Also, because of uncertainties regarding the interpretation and application of laws and regulations and the enforceability of intellectual property and contract rights, we face risks in some countries that our intellectual property

rights and contract rights would not be enforced by local governments. We are also periodically faced with the risk of economic uncertainty, which has impacted our business in some countries. Other risks in international business also include difficulties in staffing and managing local operations, including managing credit risk to local customers and distributors.

Further, our operations outside the United States require us to comply with a number of United States and international regulations, including anti-corruption laws such as the United States Foreign Corrupt Practices Act and the United Kingdom Bribery Act, as well as U.S. and international economic sanctions regulations. We have internal policies and procedures relating to such regulations; however, there is risk that such policies and procedures will not always protect us from the reckless acts of employees or representatives, particularly in the case of recently acquired operations that may not have significant training in applicable compliance policies and procedures. Violations of such laws and regulations could result in disruptive investigations of the Company, significant fines and sanctions, which could adversely affect our consolidated results of operations, financial position or cash flows.

Our overall success as a global business depends, in part, upon our ability to succeed in differing economic, social, legal and political conditions. We may not continue to succeed in developing and implementing policies and strategies that are effective in each location where we do business, which could adversely affect our consolidated results of operations, financial position or cash flows.

Our business depends on our ability to comply with laws and governmental regulations, and we may be adversely affected by changes in laws and regulations.

Our business is subject to numerous laws and regulations relating to the environment, including evolving climate change standards, and to the manufacture, storage, distribution, sale and use of our products as well as to the conduct of our business generally, including employment and labor laws. Compliance with these laws and regulations exposes us to potential financial liability and increases our operating costs. Regulation of our products and operations continues to increase with more stringent standards, causing increased costs of operations and potential for liability if a violation occurs. The potential cost to us relating to environmental and product registration laws and regulations is uncertain due to factors such as the unknown magnitude and type of possible contamination and clean-up costs, the complexity and evolving nature of laws and regulations, and the timing and expense of compliance. Changes to current laws (including tax laws), regulations and policies could impose new restrictions, costs or prohibitions on our current practices which would adversely affect our consolidated results of operations, financial position or cash flows.

We are a defendant in five wage hour lawsuits claiming violations of the Fair Labor Standards Act (“FLSA”) or a similar state law. While we have settled one wage hour case during the past year - namely, *Cancilla v. Ecolab Inc.*, U.S. District Court – Northern District of

Table of Contents

California, case no. CV 12-03001; and obtained summary judgment in Ecolab's favor on FLSA claims in another – namely, Charlot v. Ecolab Inc., U.S. District Court – Eastern District of New York, case no. CV 12-04543 - there can be no assurance that other pending or future wage hour lawsuits can be successfully defended or settled.

Our subsidiaries are defendants in pending lawsuits alleging negligence and injury resulting from the use of our COREXIT dispersant in response to the Deepwater Horizon oil spill, which could expose us to monetary damages or settlement costs.

Our subsidiaries were named as defendants in pending lawsuits alleging negligence and injury resulting from the use of our COREXIT dispersant in response to the Deepwater Horizon oil spill, which could expose us to monetary damages or settlement costs. On April 22, 2010, the deepwater drilling platform, the Deepwater Horizon, operated by a subsidiary of BP plc, sank in the Gulf of Mexico after a catastrophic explosion and fire that began on April 20, 2010. A massive oil spill resulted. Approximately one week following the incident, subsidiaries of BP plc, under the authorization of the responding federal agencies, formally requested our indirect subsidiary, Nalco Company, to supply large quantities of COREXIT 9500, a Nalco oil dispersant product listed on the U.S. EPA National Contingency Plan Product Schedule. Nalco Company responded immediately by providing available COREXIT and increasing production to supply the product to BP's subsidiaries for use, as authorized and directed by agencies of the federal government.

Nalco Company and certain affiliates (collectively "Nalco") were named as a defendant in a series of class action and individual plaintiff lawsuits arising from this event. The plaintiffs in these matters claimed damages under products liability, tort and other theories. Nalco was also named as a third party defendant in certain matters. Nalco was indemnified in these matters by another of the defendants.

All but one of these cases have been administratively transferred to a judge in the United States District Court for the Eastern District of Louisiana with other related cases under In Re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010, Case No. 10-md-02179 (E.D. La.) (the "MDL"). The remaining case was Franks v. Sea Tow of South Miss, Inc., et al, Cause No. A2402-10-228 (Circuit Court of Harrison County Mississippi). The Franks case was dismissed in May 2014.

Nalco Company, the incident defendants and the other responder defendants have been named as third party defendants by Transocean Deepwater Drilling, Inc. and its affiliates (the "Transocean Entities") (In re the Complaint and Petition of Triton Asset Leasing GmbH, et al, MDL No. 2179, Civil Action 10-2771). In April and May 2011, the Transocean Entities, Cameron International Corporation, Halliburton Energy Services, Inc., M-I L.L.C., Weatherford U.S., L.P. and Weatherford International, Inc. (collectively, the "Cross Claimants") filed cross claims in MDL 2179 against Nalco Company and other unaffiliated cross defendants. The Cross Claimants generally allege, among other things, that if they are found liable for damages resulting from the Deepwater Horizon explosion, oil spill and/or spill response, they are entitled to indemnity or contribution from the cross defendants.

On November 28, 2012, the Federal Court in the MDL entered an order dismissing all claims against Nalco. Because claims remain pending against other defendants, the Court's decision is not a "final judgment" for purposes of appeal. Plaintiffs will have 30 days after entry of final judgment to appeal the Court's decision. We cannot predict whether there will be an appeal of the dismissal, the involvement we might have in these matters in the future or the potential for future litigation. However, if an appeal by plaintiffs in these lawsuits is brought and won, these suits could have a material adverse affect on our consolidated results of operations, financial position or cash flows.

Our growth depends upon our ability to successfully compete with respect to value, innovation and customer support.

Our competitive market is made up of numerous global, national, regional and local competitors. Our ability to compete depends in part upon our ability to maintain a superior technological capability and to continue to identify, develop and commercialize innovative, high value-added products for niche applications. There can be no assurance that we will be able to accomplish this or that technological developments by our competitors will not place certain of our products at a competitive disadvantage in the future. In addition, certain of the new products that we have under development will be offered in markets in which we do not currently compete, and there can be no assurance that we will be able to compete successfully in those new markets. If we fail to introduce new technologies on a timely basis, we may lose market share and our consolidated results of operations, financial position or cash flows could be adversely affected.

Our results can be adversely affected by difficulties in securing the supply of certain raw materials or by fluctuations in the cost of raw materials.

The prices of raw materials used in our business can fluctuate from time to time, and in recent years we have experienced periods of increased raw material costs. Changes in raw material prices, unavailability of adequate and reasonably priced raw materials or substitutes for those raw materials, or the inability to obtain or renew supply agreements on favorable terms can adversely affect our consolidated results of operations, financial position or cash flows. In addition, volatility and disruption in economic activity and conditions could disrupt or delay the performance of our suppliers and thus impact our ability to obtain raw materials at favorable prices or on favorable terms, which may adversely affect our business.

We have substantial indebtedness which will impact our financial flexibility.

As of December 31, 2015, we had net debt (total debt minus cash and cash equivalents) of approximately \$6.4 billion. Our substantial indebtedness may adversely affect our business, consolidated results of operations and financial position, including in the following respects:



Table of Contents

- requiring us to dedicate a substantial portion of our cash flows to debt service obligations, thereby potentially reducing the availability of cash flows to pay cash dividends and to fund working capital, capital expenditures, acquisitions, investments and other general operating requirements and opportunities;
- limiting our ability to obtain additional financing to fund our working capital requirements, capital expenditures, acquisitions, investments, debt service obligations and other general operating requirements;
- placing us at a relative competitive disadvantage compared to competitors that have less debt;
- limiting flexibility to plan for, or react to, changes in the businesses and industries in which we operate, which may adversely affect our operating results and ability to meet our debt service obligations; and
- increasing our vulnerability to adverse general economic and industry conditions.

In addition, as of December 31, 2015 approximately \$2.2 billion of our debt is floating rate debt. A one percentage point increase in the average interest rate on our floating rate debt would increase future interest expense by approximately \$22 million per year. Accordingly, a significant spike in interest rates would adversely affect our consolidated results of operations and cash flows.

If we incur additional indebtedness, the risks related to our substantial indebtedness may intensify.

If we are unsuccessful in integrating acquisitions, our business could be adversely affected.

As part of our long-term strategy, we seek to acquire complementary businesses. There can be no assurance that we will find attractive acquisition candidates or succeed at effectively managing the integration of acquired businesses into existing businesses. If the underlying business performance of such acquired businesses deteriorates, the expected synergies from such transactions do not materialize or we fail to successfully integrate new businesses into our existing businesses, our consolidated results of operations, financial position or cash flows could be adversely affected.

We enter into multi-year contracts with customers that can impact our results.

Our multi-year contracts with some of our customers include terms affecting our pricing flexibility. There can be no assurance that these restraints will not have an adverse impact on our margins and consolidated results of operations.

Consolidation of our customers and vendors can affect our results.



Customers and vendors in the foodservice, hospitality, travel, healthcare, food processing and pulp and paper industries, as well as other industries we serve, have consolidated in recent years and that trend may continue. This consolidation could have an adverse impact on our ability to retain customers and on our margins and consolidated results of operations.

Severe public health outbreaks may adversely impact our business.

Our business could be adversely affected by the effect of a public health epidemic. The United States and other countries have experienced, and may experience in the future, public health outbreaks such as Zika virus, Avian Flu, SARS and H1N1 influenza. A prolonged occurrence of a contagious disease such as these could result in a significant downturn in the foodservice, hospitality and travel industries and also may result in health or other government authorities imposing restrictions on travel further impacting our end markets. Any of these events could result in a significant drop in demand for some of our products and services and adversely affect our business.

We incur significant expenses related to the amortization of intangible assets and may be required to report losses resulting from the impairment of goodwill or other assets recorded in connection with the Nalco and Champion transactions and other acquisitions.

Ecolab expects to continue to complete selected acquisitions and joint venture transactions in the future. In connection with acquisition and joint venture transactions, applicable accounting rules generally require the tangible and intangible assets of the acquired business to be recorded on the balance sheet of the acquiring company at their fair values. Intangible assets other than goodwill are required to be amortized over their estimated useful lives and this expense may be significant. Any excess in the purchase price paid by the acquiring company over the fair value of tangible and intangible assets of the acquired business is recorded as goodwill. If it is later determined that the anticipated future cash flows from the acquired business may be less than the carrying values of the assets and goodwill of the acquired business, the assets or goodwill may be deemed to be impaired. In this case, the acquiring company may be required under applicable accounting rules to write down the value of the assets or goodwill on its balance sheet to reflect the extent of the impairment. This write-down of assets or goodwill is generally recognized as a non-cash expense in the statement of operations of the acquiring company for the accounting period during which the write down occurs. As of December 31, 2015, we had goodwill of \$6.5 billion which is maintained in various reporting units, including goodwill from the Nalco and Champion transactions which resulted in the addition of \$4.5 billion and \$1.0 billion of goodwill, respectively. If we determine that any of the assets or goodwill recorded in connection with the Nalco and Champion transactions or any other prior or future acquisitions or joint venture transactions have become impaired, we will be required to record a loss resulting from the impairment. Impairment losses could be significant and could adversely affect our consolidated results of operations and financial position.

Table of Contents

Future events may impact our deferred tax position, including the utilization of foreign tax credits and undistributed earnings of international affiliates that are considered to be reinvested indefinitely.

We evaluate the recoverability of deferred tax assets and the need for deferred tax liabilities based on available evidence. This process involves significant management judgment about assumptions that are subject to change from period to period based on changes in tax laws or variances between future projected operating performance and actual results. We are required to establish a valuation allowance for deferred tax assets if we determine, based on available evidence at the time the determination is made, that it is more likely than not that some portion or all of the deferred tax assets will not be realized. In making this determination, we evaluate all positive and negative evidence as of the end of each reporting period. Future adjustments (either increases or decreases), to the deferred tax asset valuation allowance are determined based upon changes in the expected realization of the net deferred tax assets. The realization of the deferred tax assets ultimately depends on the existence of sufficient taxable income in either the carry-back or carry-forward periods under the tax law. Due to significant estimates used to establish the valuation allowance and the potential for changes in facts and circumstances, it is reasonably possible that we will be required to record adjustments to the valuation allowance in future reporting periods. Changes to the valuation allowance or the amount of deferred tax liabilities could adversely affect our consolidated results of operations or financial position. Further, should the Company change its assertion regarding the permanent reinvestment of the undistributed earnings of international affiliates, a deferred tax liability may need to be established.

A chemical spill or release could adversely impact our business.

As a manufacturer and supplier of chemical products, there is a potential for chemicals to be accidentally spilled, released or discharged, either in liquid or gaseous form, during production, transportation, storage or use. Such a release could result in environmental contamination as well as a human or animal health hazard. Accordingly, such a release could have a material adverse effect on our consolidated results of operations, financial position or cash flows.

Extraordinary events may significantly impact our business.

The occurrence of (a) litigation or claims, (b) the loss or insolvency of a major customer or distributor, (c) war (including acts of terrorism or hostilities which impact our markets), (d) natural or manmade disasters, (e) water shortages or (f) severe weather conditions affecting the energy, foodservice, hospitality and travel industries may have a material adverse effect on our business.

Defense of litigation, particularly certain types of actions such as antitrust, patent infringement, wage hour and class action lawsuits, can be costly and time consuming even if ultimately successful, and if not successful could have a material adverse effect on our consolidated results of operations, financial position or cash flows.

While we have a diverse customer base and no customer or distributor constitutes 10 percent or more of our consolidated revenues, we do have customers and independent, third-party distributors, the loss of which could have a material adverse effect on our consolidated results of operations or cash flows for the affected earnings periods.

War (including acts of terrorism or hostilities), natural or manmade disasters, water shortages or severe weather conditions affecting the energy, foodservice, hospitality, travel, health care, food processing, pulp and paper, mining, steel and other industries can cause a downturn in the business of our customers, which in turn can have a material adverse effect on our consolidated results of operations, financial position or cash flows.

#### Item 1B. Unresolved Staff Comments.

We have no unresolved comments from the staff of the Securities and Exchange Commission.

#### Item 2. Properties.

Our manufacturing philosophy is to manufacture products wherever an economic, process or quality assurance advantage exists or where proprietary manufacturing techniques dictate in-house production. Currently, most products that we sell are manufactured at our facilities. We position our manufacturing locations and warehouses in a manner to permit ready access to our customers.

Our manufacturing facilities produce chemical products as well as medical devices and equipment for all of our businesses, although the businesses constituting the Other segment purchase the majority of their products and equipment from outside suppliers. Our chemical production process consists of producing intermediates via basic reaction chemistry and subsequently blending and packaging those intermediates with other purchased raw materials into finished products in powder, solid and liquid form. Our devices and equipment manufacturing operations consist of producing chemical product dispensers and injectors and other mechanical equipment, medical devices, dishwasher racks, related sundries, dish machine refurbishment and water monitoring and maintenance equipment system from purchased components and subassemblies.

The following table profiles our more significant physical properties with approximately 70,000 square feet or more with ongoing production activities. In general, manufacturing facilities located in the United States serve our U.S.

markets and facilities located outside of the United States serve our International markets. However, most of the United States facilities do manufacture products for export.

20

---

Table of Contents

## PLANT PROFILES

Location	Approximate Size (Sq. Ft.)	Segment	Majority Owned or Leased
Joliet, IL USA	610,000	Global Institutional, Global Industrial	Owned
Tai Cang, CHINA	450,000	Global Institutional	Owned
Sugar Land, TX USA	350,000	Global Energy, Global Industrial	Owned
South Beloit, IL USA	313,000	Global Institutional, Global Industrial, Other	Owned
Chalons, FRANCE	280,000	Global Institutional, Global Industrial	Owned
Clearing, IL USA	270,000	Global Energy, Global Industrial	Owned
Jurong Island, SINGAPORE	250,000	Global Energy, Global Industrial	Owned
Garland, TX USA	239,000	Global Institutional, Global Industrial	Owned
Martinsburg, WV USA	228,000	Global Institutional, Global Industrial	Owned
Elwood City, PA USA	222,000	Global Energy, Global Industrial	Owned
Weavergate, UNITED KINGDOM	222,000	Global Industrial, Global Institutional	Owned
Greensboro, NC USA	193,000	Global Institutional	Owned
Fresno, TX USA	192,000	Global Energy	Owned
Nieuwegein, NETHERLANDS	168,000	Global Institutional, Global Industrial	Owned
La Romana, DOMINICAN REPUBLIC	160,000	Global Institutional	Leased
Tessenderlo, BELGIUM	153,000	Global Institutional	Owned
Cheltenham, AUSTRALIA	145,000	Global Institutional, Global Industrial	Owned
Suzano, BRAZIL	142,000	Global Energy, Global Industrial	Owned
McDonough, GA USA	141,000	Global Institutional, Global Industrial	Owned
Darra, AUSTRALIA	138,000	Global Institutional, Global Industrial	Owned
Corsicana, TX USA	137,000	Global Energy	Owned
Burlington, Ontario, CANADA	136,000	Global Energy, Global Industrial	Owned
Eagan, MN USA	133,000	Global Institutional, Global Industrial, Other	Owned
Huntington, IN USA	127,000	Global Institutional, Global Industrial	Owned
Rozzano, ITALY	126,000	Global Institutional, Global Industrial	Owned
City of Industry, CA USA	125,000	Global Institutional, Global Industrial	Owned
Garyville, LA USA	122,000	Global Energy, Global Industrial	Owned
Mississauga, CANADA	120,000	Global Institutional, Global Industrial	Leased
Aberdeen, UNITED KINGDOM	118,000	Global Energy	Owned
Elk Grove Village, IL USA	115,000	Global Institutional	Leased
Nanjing, CHINA	112,000	Global Energy, Global Industrial	Owned
Biebesheim, GERMANY	109,000	Global Energy, Global Industrial	Owned
Fort Worth, TX USA	101,000	Global Institutional	Leased
Johannesburg, SOUTH AFRICA	100,000	Global Institutional, Global Industrial	Owned
Hamilton, NEW ZEALAND	96,000	Global Institutional, Global Industrial	Owned
Calgary, Alberta, CANADA	94,000	Global Energy	Owned
Kwinana, AUSTRALIA	87,000	Global Institutional, Global Industrial	Owned

Edgar Filing: ECOLAB INC. - Form 10-K

Revesby, AUSTRALIA	87,000	Global Institutional, Global Industrial	Owned
Yangsan, KOREA	85,000	Global Energy, Global Industrial	Owned
Cisterna, ITALY	80,000	Global Industrial	Owned
Rovigo, ITALY	77,000	Global Institutional	Owned
Cuautitlan, MEXICO	76,000	Global Institutional, Global Industrial	Owned
Barueri, BRAZIL	75,000	Global Institutional, Global Industrial	Leased
Mullingar, IRELAND	74,000	Global Institutional, Global Industrial	Leased
Mosta, MALTA	73,000	Global Institutional	Leased

Generally, our manufacturing facilities are adequate to meet our existing in-house production needs. We continue to invest in our plant sites to maintain viable operations and to add capacity as necessary to meet business imperatives. A new leased facility in the Dominican Republic is expected to be completed in 2016 and will service our Global Institutional segment.

Most of our manufacturing plants also serve as distribution centers. In addition, we operate distribution centers around the world, most of which are leased, and utilize third party logistics service providers to facilitate the distribution of our products and services.

Ecolab's current corporate headquarters is comprised of three adjacent multi-storied buildings located in downtown St. Paul, Minnesota. The main 19-story building was constructed to our specifications and is leased through June 30, 2018. Thereafter, it is subject to multiple renewals at our option. The second building is leased through 2019 with additional options available. The third building is owned. The corporate headquarters includes an employee training center. Ecolab acquired the 17-story North Tower from The Travelers Indemnity Company in downtown St. Paul, Minnesota on August 4, 2015. The Company intends to move from its existing three buildings to this building over the next two years. A 90 acre campus in Eagan, Minnesota is owned and provides for future growth. The Eagan facility houses a significant research and development center, a data center and training facilities as well as several of our administrative functions.

Table of Contents

We also have a significant business presence in Naperville, Illinois, where our Water and Paper business units maintain their principal administrative offices and research center. As discussed in Part II, Item 8, Note 6, “Debt and Interest” of this Form 10-K, the Company acquired the beneficial interest in the trust owning these facilities during 2015. Our Energy business maintains administrative and research facilities in Sugar Land, Texas and additional research facilities in Fresno, Texas. Additionally, the business leases administrative space in Houston, Texas. In December 2013, we announced the construction of a new 133,000 square-foot headquarters building adjacent to the existing Sugar Land operations scheduled for completion in early 2016 and renovation of the existing 45,000 square-foot research facilities in Sugar Land. The administrative and research development and engineering employees from Houston and Fresno will relocate to the new facilities upon completion.

Significant regional administrative and/or research facilities are located in Leiden, Netherlands, Campinas, Brazil, and Pune, India, which we own, and in Monheim, Germany, Singapore, Shanghai, China, and Zurich, Switzerland, which we lease. We also have a network of small leased sales offices in the United States and, to a lesser extent, in other parts of the world.

Item 3. Legal Proceedings.

Discussion of legal matters is incorporated by reference from Part II, Item 8, Note 15, “Commitments and Contingencies,” of this Form 10-K and should be considered an integral part of Part I, Item 3, “Legal Proceedings.”

Other matters arising under laws relating to protection of the environment are discussed at Part I, Item 1(c) above, under the heading “Environmental and Regulatory Considerations.”

Item 4. Mine Safety Disclosures.

Not applicable.





Table of Contents

## PART II

## Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

## Market Information

Our Common Stock is listed on the New York Stock Exchange under the symbol “ECL.” The Common Stock is also traded on an unlisted basis on certain other United States exchanges. The high and low sales prices of our Common Stock on the consolidated transaction reporting system during 2015 and 2014 were as follows:

Quarter	2015		2014	
	High	Low	High	Low
First	\$ 117.00	\$ 97.78	\$ 111.83	\$ 97.65
Second	118.27	110.03	111.57	101.82
Third	117.69	103.09	118.46	107.31
Fourth	122.48	109.64	115.39	101.26

The closing Common Stock price on the New York Stock Exchange on January 29, 2016 was \$107.87.

## Holders

On January 29, 2016, we had 7,274 holders of Common Stock of record.

## Dividends

We have paid Common Stock dividends for 79 consecutive years. Quarterly cash dividends of \$0.275 per share were declared in February, May and August 2014. Cash dividends of \$0.33 per share were declared in December 2014, and February, May and August 2015. A dividend of \$0.35 per share was declared in December 2015.

## Issuer Purchases of Equity Securities

Period	(a) Total number of shares purchased (1)	(b) Average price paid per share (2)	(c) Number of shares purchased as part of publicly announced plans or programs (3)	(d) Maximum number of shares that may yet be purchased under the plans or programs (3)
October 1-31, 2015	13,125	\$ 120.0834	-	22,968,559
November 1-30, 2015	84,500	118.5605	-	22,968,559
December 1-31, 2015	133,929	117.8573	70,000	22,898,559
Total	231,554	118.2401	70,000	22,898,559

(1) Includes 161,554 shares reacquired from employees and/or directors to satisfy the exercise price of stock options or shares surrendered to satisfy minimum statutory tax obligations under our stock incentive plans.

(2) The average price paid per share includes brokerage commissions associated with publicly announced plan purchases plus the value of such other reacquired shares.

(3) As announced on August 23, 2011, the Finance Committee of our Board of Directors, via delegation by our Board of Directors, authorized the repurchase of up to 10,000,000 shares of Common Stock contingent upon completion of the merger with Nalco. As announced on February 24, 2015, our Board of Directors authorized the repurchase of up to an additional 20,000,000 shares. The Company also announced on February 24, 2015 a \$1.0 billion share repurchase program under the existing share repurchase authorizations. Subject to market conditions, we expect to repurchase all shares under these authorizations, for which no expiration date has been established, in open market or privately negotiated transactions, including pursuant to Rule 10b5-1 and accelerated share repurchase program.

Table of Contents

Performance Graph

The following chart assumes investment of \$100 in Ecolab Common Stock, the Standard & Poor's 500 Index and an index comprised of the company's self-selected composite peer group on December 31, 2010, and reinvestment of all dividends.

The companies comprising the peer group are set forth below. The peer group has remained the same for the past two years. Further information regarding this peer group can be found in our definitive Proxy Statement to be filed on or about March 18, 2016.

PEER GROUP:

3M Co.	Eastman Chemical Co.
Air Products and Chemicals Inc.	Halliburton Co.
Airgas Inc.	Monsanto Co.
Ashland Inc.	National Oilwell Varco Inc.
Baker Hughes Inc.	PPG Industries Inc.
Cameron International Corp.	Praxair Inc.
Celanese Corp.	Schlumberger Ltd.
Danaher Corp.	Sealed Air Corp.
Dow Chemical Company	Sherwin-Williams Co.
E.I. du Pont de Nemours and Co.	Weatherford International plc

Table of Contents

## Item 6. Selected Financial Data.

December 31, millions, except  
per share amounts and  
employees

	2015	2014	2013	2012	2011
<b>OPERATIONS</b>					
Net sales (including special (gains) and charges (1))	\$ 13,545.1	\$ 14,280.5	\$ 13,253.4	\$ 11,838.7	\$ 6,798.5
Cost of sales (including special (gains) and charges (1)(2))	7,223.5	7,679.1	7,161.2	6,385.4	3,475.6
Selling, general and administrative expenses (2)	4,345.5	4,577.6	4,360.3	4,018.3	2,438.1
Special (gains) and charges	414.8	68.8	171.3	145.7	131.0
Operating income	1,561.3	1,955.0	1,560.6	1,289.3	753.8
Net interest expense (including special (gains) and charges (1))	243.6	256.6	262.3	276.7	74.2
Income before income taxes	1,317.7	1,698.4	1,298.3	1,012.6	679.6
Provision for income taxes	300.5	476.2	324.7	311.3	216.3
Net income including noncontrolling interest	1,017.2	1,222.2	973.6	701.3	463.3
Less: Net income (loss) attributable to noncontrolling interest (including special (gains) and charges (1))	15.1	19.4	5.8	(2.3)	0.8
Net income attributable to Ecolab	\$ 1,002.1	\$ 1,202.8	\$ 967.8	\$ 703.6	\$ 462.5
Diluted earnings per share, as reported (GAAP)	\$ 3.32	\$ 3.93	\$ 3.16	\$ 2.35	\$ 1.91
Diluted earnings per share, as adjusted (Non-GAAP) (3)	\$ 4.37	\$ 4.18	\$ 3.54	\$ 2.98	\$ 2.54
Weighted-average common shares outstanding - basic	296.4	300.1	299.9	292.5	236.9
Weighted-average common shares outstanding - diluted	301.4	305.9	305.9	298.9	242.1
<b>SELECTED INCOME STATEMENT RATIOS</b>					
Gross margin	46.7	46.2	46.0	46.1	48.9
Selling, general and administrative expenses	32.1	32.1	32.9	33.9	35.9
Operating income	11.5	13.7	11.8	10.9	11.1
Income before income taxes	9.7	11.9	9.8	8.6	10.0
Net income attributable to Ecolab	7.4	8.4	7.3	5.9	6.8
Effective income tax rate	22.8	28.0	25.0	30.7	31.8

Edgar Filing: ECOLAB INC. - Form 10-K

FINANCIAL POSITION

	\$	\$	\$	\$	\$
Current assets (4)	4,447.5	4,853.0	4,698.4	4,892.0	5,396.0
Property, plant and equipment, net	3,228.3	3,050.6	2,882.0	2,409.1	2,295.4
Goodwill, intangible and other assets (5)	10,965.9	11,523.8	12,027.4	10,234.5	10,460.1
	\$	\$	\$	\$	\$
Total assets	18,641.7	19,427.4	19,607.8	17,535.6	18,151.5
	\$	\$	\$	\$	\$
Current liabilities (4) (5)	4,764.4	4,367.9	3,487.5	3,052.4	3,166.3
Long-term debt (5)	4,260.2	4,843.4	6,016.0	5,699.7	6,580.0
Postretirement health care and pension benefits	1,117.1	1,188.5	795.6	1,220.5	1,173.4
Other liabilities	1,519.6	1,645.5	1,899.3	1,402.9	1,490.7
Total liabilities	11,661.3	12,045.3	12,198.4	11,375.5	12,410.4
Ecolab shareholders' equity	6,909.9	7,315.9	7,344.3	6,077.0	5,666.7
Noncontrolling interest	70.5	66.2	65.1	83.1	74.4
Total equity	6,980.4	7,382.1	7,409.4	6,160.1	5,741.1
	\$	\$	\$	\$	\$
Total liabilities and equity	18,641.7	19,427.4	19,607.8	17,535.6	18,151.5

SELECTED CASH FLOW INFORMATION

	\$	\$	\$	\$	\$
Cash provided by operating activities	1,999.8	1,815.6	1,559.8	1,203.0	685.5
Cash used for investing activities	(915.8)	(848.3)	(2,078.7)	(487.9)	(2,024.3)
Cash provided by (used for) financing activities	(1,150.9)	(1,071.0)	(292.6)	(1,393.6)	2,933.8
Depreciation and amortization	859.5	872.0	816.2	714.5	395.7
Capital expenditures	771.0	748.7	625.1	574.5	341.7
Cash dividends declared per common share	1.340	1.155	0.965	0.830	0.725

SELECTED FINANCIAL MEASURES/OTHER

	\$	\$	\$	\$	\$
Total debt	6,465.5	6,548.2	6,875.8	6,505.2	7,603.0
Total debt to capitalization	48.1 %	47.0 %	48.1 %	51.4 %	57.0 %
	\$	\$	\$	\$	\$
Book value per common share	23.35	24.40	24.39	20.62	19.41
Return on beginning equity	13.8 %	16.5 %	15.8 %	12.2 %	21.7 %
Dividends per share/diluted earnings per common share	40.4 %	29.4 %	30.5 %	35.3 %	38.0 %
Net interest coverage	6.4	7.6	5.9	4.7	10.2
	\$	\$	\$	\$	\$
Year end market capitalization	33,852.7	31,340.6	31,399.4	21,190.5	16,879.0
Annual common stock price range	\$ 122.48 - 97.78	\$ 118.46 - 97.65	\$ 108.34 - 71.99	\$ 72.79 - 57.44	\$ 58.13 - 43.81

Number of employees	47,145	47,430	45,415	40,860	40,200
---------------------	--------	--------	--------	--------	--------

On April 10, 2013 and on December 1, 2011, the company completed its acquisition of Champion and merger with Nalco, respectively, which significantly impacts the comparability of certain 2011 through 2014 financial data against 2011.

(1) Net sales includes special charges of \$29.6 in 2011; Cost of sales includes special charges of \$80.6 in 2015, \$14.3 in 2014, \$43.2 in 2013, \$93.9 in 2012, \$8.9 in 2011; Net interest expense includes special charges of \$2.5 in 2013, \$19.3 in 2012 and \$1.5 in 2011; Net income attributable to non-controlling interest includes special charges of \$12.8 in 2015, \$0.5 in 2013 and \$4.5 in 2012.

(2) Effective in the first quarter of 2014, certain employee related costs from the company's recently acquired business that were historically presented within cost of sales were revised and reclassified to SG&A. These immaterial revisions were made to conform with management's view of the respective costs within the global organizational model. Total costs reclassified were \$78.9 and \$98.1 in 2013 and 2012, respectively.

(3) Amounts exclude the impact of special (gains) and charges, discrete tax items and for 2011, post merger legacy Nalco activity.

(4) During 2015, the company changed its accounting policy for presenting derivatives subject to master netting agreements with the same counterparties, resulting in a reduction in its December 31, 2014 current assets and current liabilities.

(5) During 2015, the company early adopted the accounting guidance related to simplifying the presentation of debt issue costs, resulting in reductions to other assets, current liabilities and long-term debt across the 2011 to 2014 years presented.

## Table of Contents

### Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following management discussion and analysis ("MD&A") provides information that we believe is useful in understanding the operating results, cash flows and financial condition of Ecolab Inc. ("Ecolab", "the company", "we" or "our"). We provide quantitative information about the material sales drivers including the impact of changes in volume and pricing and the effect of acquisitions and changes in foreign currency at the corporate level, and the quantitative impact of acquisitions and changes in foreign currency at the segment level. We also provide quantitative information regarding special (gains) and charges, discrete tax items and other significant factors we believe are useful for understanding our results. Such quantitative drivers are supported by comments meant to be qualitative in nature. Qualitative factors are generally ordered based on estimated significance.

The discussion should be read in conjunction with the consolidated financial information and related notes included in this Form 10-K. Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). This discussion contains various "Non-GAAP Financial Measures" and also contains various "Forward-Looking Statements" within the meaning of the Private Securities Litigation Reform Act of 1995. We refer readers to the statements and information set forth in the sections entitled "Non-GAAP Financial Measures" at the end of this MD&A, and "Forward-Looking Statements" and "Risk Factors" within Items 1 and 1A of this Form 10-K.

#### Comparability of Results

#### Fixed Currency Foreign Exchange Rates

We evaluate the sales and operating income performance of our non-U.S. dollar functional currency international operations based on fixed currency exchange rates, which eliminate the impact of exchange rate fluctuations on our international operations. Fixed currency amounts are updated annually at the beginning of each year based on translation into U.S. dollars at foreign currency exchange rates established by management, with all periods presented using such rates. Fixed currency exchange rates are generally based on existing market rates at the time they are established.

#### Impact of Acquisitions and Divestitures

#### 2015 versus 2014

To provide a more meaningful period-over-period comparison, our 2015 versus 2014 acquisition adjusted growth rates exclude the results of our acquired businesses from the first twelve months post acquisition, exclude the results of the divested businesses from the twelve months prior to divestiture, and exclude our Venezuelan results of operations from both 2015 and 2014.

#### 2014 versus 2013

On April 10, 2013, we completed our acquisition of privately held Champion Technologies and its related company Corsicana Technologies (collectively “Champion”). The Champion business became part of our Global Energy reportable segment in the second quarter of 2013. The pro forma impact of the Champion acquisition was not material to our consolidated financial statements; therefore, pro forma information is not presented.

Specific to the Champion transaction, due to the rapid pace at which the business has been integrated within our Global Energy segment, including all customer selling activity, discrete financial data specific to the legacy Champion business is no longer available for post-acquisition periods. As such, to allow for a more meaningful 2014 versus 2013 comparison, specific to the Champion transaction, Champion’s results for the period prior to acquisition in 2013 have been included for purposes of providing acquisition adjusted growth rates. All other acquisitions and divestitures continue to be handled consistent with the mechanics described in the 2015 versus 2014 discussion above. The 2014 versus 2013 acquisition adjusted growth rates do not exclude the Venezuelan results of operations from either 2014 or 2013.

#### EXECUTIVE SUMMARY

In 2015, we delivered mid-single digit adjusted earnings per share growth in spite of declines in the energy and emerging markets and significant currency headwinds, including the devaluation of our Venezuelan Bolivares Fuertes (“bolivar”) businesses throughout 2015. Our Global Institutional, Global Industrial and Other segments delivered strong results, which more than offset weaker Global Energy results. We continued to drive positive adjusted fixed currency operating growth and margin trends through product cost savings, synergies and appropriate pricing.

Through our focused actions, we once again delivered superior operating results for our shareholders in 2015 while continuing to build our future opportunities. Our performance underscored the strength and long-term potential of our business, our people and our strategies.





## Table of Contents

### Sales

Reported sales declined 5% to \$13.5 billion in 2015 from \$14.3 billion in 2014. Sales were negatively impacted by unfavorable foreign currency exchange rates compared to the prior year. When measured in fixed rates of foreign currency exchange, fixed currency sales increased 1% compared to the prior year. See the section entitled Non-GAAP Financial Measures within this MD&A for further information on our Non-GAAP measures and the Net Sales table on page 32 and the Sales by Reportable Segment table on page 39 for reconciliation information.

### Gross Margin

Our reported gross margin was 46.7% of sales for 2015, which compared to 2014 reported gross margin of 46.2%. Excluding the impact of special (gains) and charges included in cost of sales from both 2015 and 2014, our adjusted gross margin was 47.3% in 2015 and 46.3% in 2014. See the section entitled Non-GAAP Financial Measures within this MD&A for further information on our Non-GAAP measures and the Cost of Sales and Gross Margin table on page 33 for reconciliation information.

### Operating Income

Reported operating income decreased 20% to \$1.6 billion in 2015, compared to \$2.0 billion in 2014. Adjusted operating income, excluding the impact of special (gains) and charges, increased 1% in 2015. When measured in fixed rates of foreign currency exchange, adjusted fixed currency operating income increased 7%. See the section entitled Non-GAAP Financial Measures within this MD&A for further information on our Non-GAAP measures and the Operating Income table on page 37 and Operating Income by Reportable Segment table on page 39 for reconciliation information.

### Earnings Per Share

Reported diluted earnings per share decreased 16% to \$3.32 in 2015 compared to \$3.93 in 2014. Special (gains) and charges had an impact on both years, driven primarily by Venezuelan related actions in 2015 and restructuring charges, acquisition and integration related costs, and other gains and charges in both 2015 and 2014. Adjusted diluted earnings per share, which exclude the impact of special (gains) and charges and discrete tax items from both 2015 and 2014 increased 5% to \$4.37 in 2015 compared to \$4.18 in 2014. See the section entitled Non-GAAP Financial Measures within this MD&A for further information on our Non-GAAP measures, and the Diluted Earnings Attributable to Ecolab Per Common Share table on page 38 for reconciliation information.

## Balance Sheet

We remain committed to our stated objective of having an investment grade balance sheet, supported by our current credit ratings of BBB+/Baa1 by the major ratings agencies, and to achieving “A” range ratings metrics. We believe that our strong balance sheet has allowed us continued access to capital at attractive rates.

## Net Debt to EBITDA

Our net debt to earnings before interest, taxes, depreciation and amortization (“EBITDA”) was 2.6 and 2.2 for 2015 and 2014, respectively. Our net debt to adjusted EBITDA, defined as the sum of EBITDA and special (gains) and charges impacting EBITDA, was 2.2 for both 2015 and 2014. We view these measures as an important indicator of our creditworthiness and demonstrates our ability to generate earnings sufficient to service our debt. See the section entitled Non-GAAP Financial Measures within this MD&A for further information on our Non-GAAP measures, and the Net Debt to EBITDA table on page 42 for reconciliation information.

## Cash Flow

Cash flow from operating activities was \$2.0 billion in 2015 compared to \$1.8 billion in 2014. We continued to generate strong cash flow from operations, allowing us to fund our ongoing operations, acquisitions, investments in our business, debt repayments, pension obligations and return cash to our shareholders through share repurchases and dividend payments. See the section entitled Cash Flows within this MD&A for further information.

## Dividends

We increased our quarterly cash dividend 6% in December 2015 to an indicated annual rate of \$1.40 per share. The increase represents our 24th consecutive annual dividend rate increase and the 79th consecutive year we have paid cash dividends. Our outstanding dividend history reflects our continued growth and development, strong cash flows, solid financial position and confidence in our business prospects for the years ahead.

## Restructuring Initiatives

Restructuring charges were substantially completed during 2015 under our two open restructuring plans, the Combined Plan and the Energy Restructuring Plan. The plans were commenced in 2011 and 2013, respectively, to reduce our global workforce, leverage and simplify our supply chain, reduce our distribution center locations and other facilities and strengthen our position in the global energy market. See the section entitled Restructuring Charges within this MD&A for further information.

## Table of Contents

### Venezuela Activities

As a result of the increasing currency controls, importation restrictions, workforce regulations, pricing constraints and local capitalization requirements, we deconsolidated our Venezuelan subsidiaries effective as of the end of the fourth quarter of 2015, and began accounting for the investments in our Venezuelan subsidiaries using the cost method of accounting effective in the first quarter of 2016. This action, coupled with the devaluations of our Venezuelan Water and Paper businesses during the second quarter of 2015 and our Venezuelan Food & Beverage and Institutional and bolivar portion of our Venezuelan Energy businesses during the third quarter of 2015, resulted in a total charge of \$289.3 million (\$246.8 million after tax), and \$235.7 million net of the impact from noncontrolling interest, during 2015.

### CRITICAL ACCOUNTING ESTIMATES

Our consolidated financial statements are prepared in accordance with U.S. GAAP. We have adopted various accounting policies to prepare the consolidated financial statements in accordance with U.S. GAAP. Our significant accounting policies are disclosed in Note 2 of the Notes to the Consolidated Financial Statements (“Notes”).

Preparation of our consolidated financial statements, in conformity with U.S. GAAP, requires us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates are considered to be critical if they meet both of the following criteria: (1) the estimate requires assumptions to be made about matters that are highly uncertain at the time the accounting estimate is made, and (2) different estimates that the company reasonably could have used for the accounting estimate in the current period, or changes in the accounting estimate that are reasonably likely to occur from period to period, have a material impact on the presentation of the company’s financial condition or results of operations.

Besides estimates that meet the “critical” estimate criteria, we make many other accounting estimates in preparing our financial statements and related disclosures. All estimates, whether or not deemed critical, affect reported amounts of assets, liabilities, revenues or expenses as well as disclosures of contingent assets and liabilities. Estimates are based on experience and other information available prior to the issuance of the financial statements. Materially different results can occur as circumstances change and additional information becomes known, even from estimates not deemed critical. Our critical accounting estimates include the following:

### Revenue Recognition

We recognize revenue on product sales at the time evidence of an arrangement exists, title to the product and risk of loss transfers to the customer, the price is fixed and determinable and collection is reasonably assured. We recognize revenue on services as they are performed. While we employ a sales and service team to ensure our customers' needs are best met in a high quality way, the majority of our revenue is generated from product sales. Our service businesses and service offerings are discussed in Note 17.

Our sales policies do not provide for general rights of return. We record estimated reductions to revenue for customer programs and incentive offerings including pricing arrangements, promotions and other volume-based incentives at the time the sale is recorded. We also record estimated reserves for anticipated uncollectible accounts and for product returns and credits at the time of sale, as discussed below. Depending on market conditions, we may increase customer incentive offerings, which could reduce gross profit margins at the time the incentive is offered.

#### Valuation Allowances and Accrued Liabilities

##### Allowances for Doubtful Accounts

We estimate our allowance for doubtful accounts by analyzing accounts receivable balances by age and applying historical write-off and collection trend rates. In addition, our estimates also include separately providing for customer balances based on specific circumstances and credit conditions, and when it is deemed probable that the balance is uncollectible. We estimate our sales returns and allowances by analyzing historical returns and credits, and apply these trend rates to calculate estimated reserves for future credits. Actual results could differ from these estimates under different assumptions.

Our allowance for doubtful accounts balance was \$75 million and \$77 million, as of December 31, 2015 and 2014, respectively. These amounts include our allowance for sales returns and credits of \$15 million as of both December 31, 2015 and 2014. Our bad debt expense as a percent of reported net sales was 0.2% in 2015, 2014 and 2013. We believe that it is reasonably likely that future results will be consistent with historical trends and experience. However, if the financial condition of our customers were to deteriorate, resulting in an inability to make payments, or if unexpected events, economic downturns, or significant changes in future trends were to occur, additional allowances may be required.

## Table of Contents

### Accrued Liabilities

Our business and operations are subject to extensive environmental laws and regulations governing, among other things, air emissions, wastewater discharges, the use and handling of hazardous substances, waste disposal and the investigation and remediation of soil and groundwater contamination. As with other companies engaged in similar manufacturing activities and providing similar services, some risk of environmental liability is inherent in our operations.

We record liabilities related to pending litigation, environmental claims and other contingencies when a loss is probable and can be reasonably estimated. Estimates used to record such liabilities are based on our best estimate of probable future costs. We record the amounts that represent the points in the range of estimates that we believe are most probable or the minimum amount when no amount within the range is a better estimate than any other amount. Potential insurance reimbursements generally are not anticipated in our accruals for environmental liabilities or other insured losses. Expected insurance proceeds are recorded as receivables when recovery is probable. While the final resolution of litigation and environmental contingencies could result in amounts different than current accruals, and therefore have an impact on our consolidated financial results in a future reporting period, we believe the ultimate outcome will not have a significant effect on our consolidated financial position.

For additional information on our commitments and contingencies, see Note 15.

### Actuarially Determined Liabilities

#### Pension and Postretirement Healthcare Benefit Plans

The measurement of our pension and postretirement benefit obligations are dependent on a variety of assumptions determined by management and used by our actuaries. These assumptions affect the amount and timing of future contributions and expenses.

The significant assumptions used in developing the required estimates are the discount rate, expected return on assets, projected salary and health care cost increases and mortality table.

- The discount rate assumptions for the U.S. plans are assessed using a yield curve constructed from a subset of bonds yielding greater than the median return from a population of non-callable, corporate

bond issues rated Aa by Moody's Investor Services or AA by Standard & Poors. The discount rate is calculated by matching the plans' projected cash flows to the bond yield curve. For 2015, we measured service and interest costs utilizing a single weighted-average discount rate derived from the yield curve used to measure the plan obligations. For 2016, we elected to measure service and interest costs by applying the specific spot rates along that yield curve to the plans' liability cash flows. We believe the new approach provides a more precise measurement of service and interest costs by aligning the timing of the plans' liability cash flows to the corresponding spot rates on the yield curve. This change does not affect the measurement of our plan obligations or the funded status of our plans. In determining our U.S. pension obligations for 2015, our discount rate increased to 4.51% from 4.14% at year-end 2014. In determining our U.S. postretirement health care obligation for 2015, our discount rate increased to 4.38% from 4.08% at year-end 2014.

- The expected rate of return on plan assets reflects asset allocations, investment strategies and views of investment advisors, and represents our expected long-term return on plan assets. Our weighted-average expected return on U.S. plan assets used for determining both the 2015 and 2016 U.S. pension and U.S. postretirement health care expenses was 7.75%.
- Projected salary and health care cost increases are based on our long-term actual experience, the near term outlook and assumed inflation. Our weighted-average projected salary increase used in determining both the 2015 and 2016 U.S. pension expenses was 4.32%. as of both December 31, 2015 and 2014. For postretirement benefit measurement purposes as of December 31, 2015, the annual rates of increase in the per capita cost of covered health care were assumed to be 7.25%. The rates are assumed to decrease each year until they reach 5% in 2027 and remain at those levels thereafter.
- In determining our U.S. pension and U.S. postretirement health care obligation for 2015, we utilized the RP-2014 mortality table adjusting back to 2006 using MP-2014, and then projected forward using projection scale MP-2015.

The effects of actual results differing from our assumptions, as well as changes in assumptions, are reflected in the unrecognized actuarial loss and amortized over future periods and, therefore, will generally affect our recognized expense in future periods. Significant differences in actual experience or significant changes in assumptions may materially affect future pension and other postretirement obligations. The unrecognized net actuarial loss on our U.S. qualified and non-qualified pension plans decreased to \$513 million as of December 31, 2015 from \$556 million as of December 31, 2014 (both before tax), primarily due to amortization of prior year net actuarial losses.



Table of Contents

The effect of a decrease in the discount rate or decrease in the expected return on assets assumption as of December 31, 2015, on the December 31, 2015 funded status and 2016 expense is shown below, assuming no changes in benefit levels and no amortization of gains or losses for our significant U.S. plans:

(millions)	Effect on U.S. Pension Plans		
	Assumption Change	Increase in Recorded Obligation \$	Higher 2016 Expense \$
Discount rate	-0.25 pts	67.6	6.4
Expected return on assets	-0.25 pts	N/A	4.4

(millions)	Effect on U.S. Postretirement Health Care Benefits Plans		
	Assumption Change	Increase in Recorded Obligation \$	Higher 2016 Expense \$
Discount rate	-0.25 pts	7.0	0.5
Expected return on assets	-0.25 pts	N/A	0.0

Our international pension obligations and underlying plan assets represent approximately one third of our global pension plans, with the majority of the amounts held in the U.K. and Eurozone countries. We use assumptions similar to our U.S. plan assumptions to measure our international pension obligations. However, the assumptions used vary by country based on specific local country requirements and information.

See Note 16 for further discussion concerning our accounting policies, estimates, funded status, contributions and overall financial positions of our pension and postretirement plan obligations.

## Self Insurance

Globally we have high deductible insurance policies for property and casualty losses. We are insured for losses in excess of these deductibles and have recorded both a liability and an offsetting receivable for amounts in excess of these deductibles. We are self-insured for health care claims for eligible participating employees, subject to certain deductibles and limitations. We determine our liabilities for claims on an actuarial basis. A change in these actuarial assumptions would have an immaterial impact to our reported results.

## Restructuring

Our restructuring activities are associated with plans to enhance our efficiency, effectiveness and sharpen the competitiveness of our businesses. These restructuring plans include costs associated with significant actions involving employee-related severance charges, contract termination costs and asset write-downs and disposals. Employee termination costs are largely based on policies and severance plans, and include personnel reductions and related costs for severance, benefits and outplacement services. These charges are reflected in the quarter in which the actions are probable and the amounts are estimable, which is when management approves the associated actions. Contract termination costs include charges to terminate leases prior to the end of their respective terms and other contract termination costs. Asset write-downs and disposals include leasehold improvement write-downs, other asset write-downs associated with combining operations and disposal of assets.

Restructuring charges have been included as a component of cost of sales, special (gains) and charges and net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income. Amounts included as a component of cost of sales include supply chain related severance and other asset write-downs associated with combining operations. Restructuring liabilities have been classified as a component of both other current and other noncurrent liabilities on the Consolidated Balance Sheet. During 2015, we incurred approximately \$100 million under our two active plans (Combined and Energy). Restructuring charges were substantially completed within both plans during the fourth quarter of 2015. Our restructuring liability balance was \$90 million and \$76 million as of December 31, 2015 and 2014, respectively.

For additional information on our current restructuring activities, see Note 3.

## Income Taxes

Judgment is required to determine the annual effective income tax rate, deferred tax assets and liabilities, any valuation allowances recorded against net deferred tax assets and uncertain tax positions.

## Table of Contents

### Effective Income Tax Rate

Our effective income tax rate is based on annual income, statutory tax rates and tax planning available in the various jurisdictions in which we operate. Our annual effective income tax rate includes the impact of reserve provisions. We recognize the largest amount of tax benefit that is greater than 50% likely of being realized upon settlement with a taxing authority. We adjust these reserves in light of changing facts and circumstances. During interim periods, this expected annual rate is then applied to our year-to-date operating results. In the event that there is a significant discrete item recognized in our interim operating results, the tax attributable to that item would be separately calculated and recorded in the same period.

Tax regulations require items to be included in our tax returns at different times than the items are reflected in our financial statements. As a result, the effective income tax rate reflected in our financial statements differs from that reported in our tax returns. Some of these differences are permanent, such as expenses that are not deductible on our tax return, and some are temporary differences, such as depreciation expense.

### Deferred Tax Assets and Liabilities and Valuation Allowances

Temporary differences create deferred tax assets and liabilities. Deferred tax assets generally represent items that can be used as a tax deduction or credit in our tax return in future years for which we have already recorded the tax benefit in our income statement. We establish valuation allowances for our deferred tax assets when the amount of expected future taxable income is not likely to support the utilization of the entire deduction or credit. Relevant factors in determining the realizability of deferred tax assets include historical results, future taxable income, the expected timing of the reversal of temporary differences, tax planning strategies and the expiration dates of the various tax attributes. Deferred tax liabilities generally represent items for which we have already taken a deduction in our tax return, but have not yet recognized that tax benefit in our financial statements.

U.S. deferred income taxes are not provided on certain unremitted foreign earnings that are considered permanently reinvested. Undistributed earnings of foreign subsidiaries are considered to have been reinvested indefinitely or are available for distribution with foreign tax credits available to offset the amount of applicable income tax and foreign withholding taxes that might be payable on earnings. It is impractical to determine the amount of incremental taxes on an ongoing basis that might arise if all undistributed earnings were distributed.

### Uncertain Tax Positions

A number of years may elapse before a particular tax matter, for which we have established a reserve, is audited and finally resolved. The number of tax years with open tax audits varies depending on the tax jurisdiction. The Internal Revenue Service (“IRS”) has completed its examinations of our federal income tax returns (Ecolab and Nalco) through 2012. To date, the 2012 U.S. income tax return of Champion has not been audited. Our Ecolab U.S. federal (including Nalco and Champion) income tax returns for the years 2013 and 2014 are currently under audit. In addition to the U.S. federal examinations, we have ongoing audit activity in several U.S. state and foreign jurisdictions.

The tax positions we take are based on our interpretations of tax laws and regulations in the applicable federal, state and international jurisdictions. We believe that our tax returns properly reflect the tax consequences of our operations, and that our reserves for tax contingencies are appropriate and sufficient for the positions taken. Because of the uncertainty of the final outcome of these examinations, we have reserved for potential reductions of tax benefits (including related interest and penalties) for amounts that do not meet the more-likely-than-not thresholds for recognition and measurement as required by authoritative guidance. The tax reserves are reviewed throughout the year, taking into account new legislation, regulations, case law and audit results. Settlement of any particular issue could result in offsets to other balance sheet accounts, cash payments or receipts and/or adjustments to tax expense. The majority of our tax reserves are presented in the balance sheet within other non-current liabilities. Our gross liability for uncertain tax positions was \$75 million and \$79 million as of December 31, 2015 and 2014, respectively.

For additional information on income taxes, see Note 12.

## Long-Lived Assets, Intangible Assets and Goodwill

### Long-Lived and Intangible Assets

We periodically review our long-lived and amortizable intangible assets, the net value of which was \$6.5 billion and \$6.6 billion as of December 31, 2015 and 2014, respectively, for impairment and to assess whether significant events or changes in business circumstances indicate that the carrying value of the assets may not be recoverable. Such circumstances may include a significant decrease in the market price of an asset, a significant adverse change in the manner in which the asset is being used or in its physical condition or history of operating or cash flow losses associated with the use of the asset. Impairment losses could occur when the carrying amount of an asset exceeds the anticipated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss to be recorded, if any, is calculated as the excess of the asset’s carrying value over its estimated fair value.

During 2015, as part of the actions taken regarding our Venezuelan businesses, we wrote-off customer relationship intangible assets and other long-lived assets. See Note 3 for additional information regarding Venezuela. Also during 2015, we impaired certain long-lived assets related to a product line within one of our U.S. plants. See Note 3 for additional information regarding this asset impairment.



## Table of Contents

We use the straight-line method to recognize amortization expense related to our amortizable intangible assets, including our customer relationships. We consider various factors when determining the appropriate method of amortization for our customer relationships, including projected sales data, customer attrition rates and length of key customer relationships.

Globally, we have a broad customer base. Our retention rate of significant customers has aligned with our acquisition assumptions, including the customer base acquired in our recent Nalco and Champion transactions, which make up the majority of our unamortized customer relationships. Our historical retention rate, coupled with our consistent track record of keeping long-term relationships with our customers, supports our expectation of consistent sales generation for the foreseeable future from the acquired customer base. Our customer retention rate and history of maintaining long-term relationships with our significant customers are not expected to change in the future. Additionally, other less certain post-acquisition operational assumptions related to future capital investments and working capital, as well as the impact of discount rate assumptions, induce variability and uncertainty in the pattern of economic benefits of our acquired customer relationships. If our customer retention rate or other post-acquisition operational activities changed materially, we would evaluate the financial impact and any corresponding triggers which could result in an acceleration of amortization or impairment of our customer relationship intangible assets.

In addition, we periodically reassess the estimated remaining useful lives of our long-lived and amortizable intangible assets. Changes to estimated useful lives would impact the amount of depreciation and amortization expense recorded in earnings. We have experienced no significant changes in the carrying value or estimated remaining useful lives of our long-lived or amortizable intangible assets.

As part of the Nalco merger, we added the “Nalco” trade name as an indefinite life intangible asset, the total value of which was \$1.2 billion as of December 31, 2015 and 2014. The carrying value of the indefinite life trade name was subject to annual impairment testing, using the qualitative assessment method, during the second quarter of 2015. Based on this testing, no adjustment to the carrying value was necessary. Additionally, no events during the second half of 2015 indicated a need to update to our conclusions reached during the second quarter of 2015.

## Goodwill

We had total goodwill of \$6.5 billion and \$6.7 billion as of December 31, 2015 and 2014, respectively. We test our goodwill for impairment at the operating unit level on an annual basis during the second quarter. Our operating units are aligned with our ten operating segments.

For our 2015 impairment assessment, in order to refresh the estimated fair value of all ten of our operating units, we elected to bypass the qualitative assessment and perform a quantitative test. The two-step quantitative process involved comparing the estimated fair value of each operating unit to the operating unit’s carrying value, including

goodwill. If the fair value of an operating unit exceeds its carrying value, goodwill of the operating unit is considered not to be impaired, and the second step of the impairment test is unnecessary. If the carrying amount of the operating unit exceeds its fair value, the second step of the goodwill impairment test would be performed to measure the amount of impairment loss to be recorded, if any.

Our goodwill impairment assessment for 2015 indicated the fair value of each of our operating units exceeded their respective carrying amount by a significant margin. If circumstances change significantly, we would also test an operating unit's goodwill for impairment during interim periods between our annual tests. As a result of the Venezuela deconsolidation, we updated our goodwill impairment assessment for the Global Energy reportable segment during the fourth quarter of 2015, which indicated no impairment, and a continued significant margin of fair value exceeding carrying value.

## RESULTS OF OPERATIONS

### Net Sales

				Percent Change	
(millions)	2015	2014	2013	2015	2014
	\$	\$	\$		
Reported GAAP net sales	13,545.1	14,280.5	13,253.4	(5)%	8%
Effect of foreign currency translation	305.0	(623.3)	(756.8)		
	\$	\$	\$		
Non-GAAP fixed currency sales	13,850.1	13,657.2	12,496.6	1%	9%

Reported net sales for 2015 decreased 5%, negatively impacted by the effect of foreign currency translation. Fixed currency sales increased 1% in 2015.

Reported net sales for 2014 increased 8%, with growth benefiting from the Champion acquisition. Foreign currency negatively impacted reported sales growth in 2014 as fixed currency sales increased 9%. Acquisition adjusted fixed currency sales increased 5% in 2014.

Table of Contents

The percentage change components of the year-over-year sales increase are as follows:

(percent)	2015	2014
Volume	0 %	4 %
Price changes	0	1
Acquisition adjusted fixed currency sales increase	0	5
Acquisitions & divestitures	1	4
Fixed currency sales increase	1	9
Foreign currency translation	(7)	(1)
Reported GAAP net sales increase (decrease)	(5)%	8 %

Note: Amounts do not necessarily sum due to rounding.

## Cost of Sales (“COS”) and Gross Margin

	2015		2014		2013	
(millions/percent)	COS	Gross Margin	COS	Gross Margin	COS	Gross Margin
Reported GAAP COS and gross margin	\$ 7,223.5	46.7%	\$ 7,679.1	46.2%	\$ 7,161.2	46.0%
Special (gains) and charges	80.6	0.6	14.3	0.1	43.2	0.3
Non-GAAP adjusted COS and gross margin	\$ 7,142.9	47.3%	\$ 7,664.8	46.3%	\$ 7,118.0	46.3%

Our COS values and corresponding gross profit margin (“gross margin”) are shown in the previous table. Our gross margin is defined as sales less cost of sales divided by sales.

Our reported gross margin was 46.7%, 46.2% and 46.0% for 2015, 2014 and 2013, respectively. Our 2015, 2014 and 2013 reported gross margins were negatively impacted by special (gains) and charges of \$80.6 million, \$14.3 million and \$43.2 million, respectively. Special (gains) and charges items impacting COS are shown within the special (gains) and charges table on page 34.

Excluding the impact of special (gains) and charges, our 2015 adjusted gross margin was 47.3% compared against a 2014 adjusted gross margin of 46.3%. The increase was due primarily to delivered product cost savings and synergies.



Excluding the impact of special (gains) and charges, our adjusted gross margin was 46.3% for both 2014 and 2013. The adjusted gross margin across 2014 and 2013 was impacted by the growth within Global Energy, including the impact of the Champion acquisition, which generally has a lower gross margin compared to our other segments, which offset pricing gains.

Selling, General and Administrative Expenses (“SG&A”)

(percent)	2015	2014	2013
SG&A Ratio	32.1 %	32.1 %	32.9 %

The consistent SG&A ratio (SG&A expenses as a percentage of reported net sales) comparing 2015 against 2014 resulted from the impact of net synergies and cost savings actions which were offset by investments in the business.

The reduction in SG&A ratio when comparing 2014 against 2013 resulted from increased sales leverage, net synergies and cost savings actions.

Table of Contents

## Special (Gains) and Charges

Special (gains) and charges reported on the Consolidated Statement of Income included the following items:

(millions)	2015	2014	2013
Cost of sales			
	\$	\$	\$
Restructuring charges	16.5	13.9	6.6
Venezuela related charges	33.3	-	-
Inventory costs	(14.5)	-	-
Inventory reserves	20.6	-	-
Fixed asset impairment	24.7	-	-
Recognition of inventory fair value step-up	-	0.4	36.6
Subtotal	80.6	14.3	43.2
Special (gains) and charges			
Restructuring charges	83.8	69.2	83.4
Champion acquisition and integration costs	17.1	19.9	49.7
Nalco merger and integration costs	1.6	8.5	18.6
Venezuela related charges	256.0	-	23.2
(Gains) losses related to litigation activities, sale of businesses, settlements and other	56.3	(28.8)	(3.6)
Subtotal	414.8	68.8	171.3
Operating income subtotal	495.4	83.1	214.5
Interest expense, net			
Acquisition debt costs	-	-	2.5
Net income attributable to noncontrolling interest			
Restructuring charges	(1.7)	-	-
Venezuela related charges	(11.1)	-	(0.5)
Subtotal	(12.8)	-	(0.5)
	\$	\$	\$
Total special (gains) and charges	482.6	83.1	216.5

For segment reporting purposes, special (gains) and charges have been included in our corporate segment, which is consistent with our internal management reporting.

## Restructuring Charges

## Energy Restructuring Plan

In April 2013, following the completion of the acquisition of Champion we commenced plans to undertake restructuring and other cost-saving actions to realize our acquisition-related cost synergies as well as streamline and strengthen our position in the global energy market (the “Energy Restructuring Plan”). Actions associated with the acquisition to improve the effectiveness and efficiency of the business included a reduction of the combined business’s current global workforce. Actions also included leveraging and simplifying our global supply chain, including the reduction of plant, distribution center and redundant facility locations and product line optimization.

Restructuring charges within the Energy Restructuring Plan were substantially completed during the fourth quarter of 2015. Certain immaterial actions may continue into 2016. Ongoing cash payments will continue into 2016. Cumulative restructuring charges of \$82 million (\$59 million after tax), are materially consistent with our expectation of \$80 million (\$55 million after tax).

We recorded restructuring charges of \$47.2 million (\$33.0 million after tax), \$31.3 million net of the impact from noncontrolling interest, or \$0.10 per diluted share, \$9.5 million (\$6.4 million after tax) or \$0.02 per diluted share and \$27.4 million (\$19.4 million after tax) or \$0.06 per diluted share during 2015, 2014 and 2013, respectively. As a result of the ownership structure of certain entities holding Energy Restructuring charges, we reflected \$1.7 million of the 2015 charges as a component of net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income.

Net cash payments under the Energy Restructuring Plan were \$11.1 million during 2015 and \$31.4 million from 2013 through 2014. The majority of cash payments under this plan are related to severance, with the current accrual expected to be paid over a period of a few months to several quarters. We anticipate the remaining cash expenditures will be funded from operating activities.

During 2015 the Energy Restructuring Plan achieved approximately \$45 million of incremental savings as compared to 2014. Cumulative cost savings from this plan, along with synergies achieved in connection with the acquisition, were \$125 million in 2015. We anticipate annualized cumulative cost savings and synergies of \$150 million by the end of 2016.

Table of Contents

Restructuring charges have been included as a component of cost of sales, special (gains) and charges and net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income. Further details related to our restructuring charges are included in Note 3.

Combined Restructuring Plan

In February 2011, we commenced a comprehensive plan to substantially improve the efficiency and effectiveness of our European business, as well as to undertake certain restructuring activities outside of Europe, historically referred to as the “2011 Restructuring Plan”. Additionally, in January 2012 and following the merger with Nalco, we formally commenced plans to undertake restructuring actions related to the reduction of our global workforce and optimization of our supply chain and office facilities, including planned reduction of plant and distribution center locations, historically referred to as the “Merger Restructuring Plan”. During the first quarter of 2013, we determined that because the objectives of the plans discussed above were aligned, the previously separate restructuring plans should be combined into one plan.

The combined restructuring plan (the “Combined Plan”) combines opportunities and initiatives from both plans and continues to follow the original format of the Merger Restructuring Plan by focusing on global actions related to optimization of the supply chain and office facilities, including reductions of the global workforce, plant and distribution center locations.

Restructuring charges within the Combined Plan were substantially completed during the fourth quarter of 2015. Certain immaterial actions may continue into 2016. Ongoing cash payments will continue into 2016. Cumulative restructuring charges of \$404 million (\$310 million after tax), are materially consistent with our expectation of \$400 million (\$300 million after tax).

We recorded restructuring charges of \$53.0 million (\$44.2 million after tax) or \$0.15 per diluted share, \$73.5 million (\$58.5 million after tax) or \$0.19 per diluted share and \$63.6 million (\$48.3 million after tax) or \$0.16 per diluted share during 2015, 2014 and 2013, respectively.

Net cash payments under the Combined Plan were \$42.1 million during 2015 and \$261.0 million from 2011 through 2014. The majority of cash payments under the Combined Plan are related to severance, with the current accrual expected to be paid over a period of a few months to several quarters. We anticipate the remaining cash expenditures will continue to be funded from operating activities.

During 2015, the Combined Plan achieved approximately \$60 million of incremental savings as compared to 2014. Cumulative cost savings from this plan, along with annual cost saving and synergies, were \$395 million in 2015. We anticipate annualized cumulative cost savings and synergies of \$420 million by the end of 2016.

Restructuring charges have been included as a component of cost of sales, special (gains) and charges and net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income. Further details related to our restructuring charges are included in Note 3.

#### Non-Restructuring Special (Gains) and Charges

##### Champion acquisition and integration costs

As a result of the Champion acquisition completed in 2013, we incurred charges of \$17.1 million (\$10.7 million after tax) or \$0.04 per diluted share, \$19.9 million (\$12.8 million after tax) or \$0.04 per diluted share and \$88.8 million (\$61.4 million) or \$0.20 per diluted share, during 2015, 2014 and 2013, respectively.

Champion acquisition and integration related costs have been included as a component of cost of sales, special (gains) and charges and net interest expense on the Consolidated Statement of Income. Amounts within cost of sales include the recognition of fair value step-up in Champion international inventory, which is maintained on a FIFO basis, and Champion U.S. inventory which was associated with the adoption of LIFO and integration into an existing LIFO pool. Amounts within special (gains) and charges include acquisition costs and integration charges. Amounts within net interest expense include the interest expense through the April 2013 close date of the Champion transaction of our \$500 million public debt issuance in December 2012 as well as amortizable fees to secure term loans and short-term debt, all of which were initiated to fund the Champion acquisition.

##### Nalco merger and integration costs

As a result of the Nalco merger completed in 2011, we incurred charges of \$1.6 million (\$1.3 million after tax) or less than \$0.01 per diluted share, \$8.5 million (\$7.0 million after tax), or \$0.02 per diluted share and \$18.6 million (\$14.2 million after tax), or \$0.05 per diluted share during 2015, 2014 and 2013, respectively.

Nalco merger and integration charges have been included as a component of special (gains) and charges on the Consolidated Statement of Income. Amounts within special (gains) and charges include merger and integration charges.



Table of Contents

Venezuela

As of the end of 2015, the increasingly restrictive exchange control regulations and reduced access to dollars through official currency exchange markets have resulted in an other-than-temporary lack of exchangeability between the Venezuelan bolivar and the U.S. dollar. This has significantly impacted our ability to effectively manage our Venezuelan businesses, including restrictions on the ability of our Venezuelan businesses to settle U.S. dollar-denominated obligations. The currency controls, coupled with importation restrictions, workforce regulations, pricing constraints and local capitalization requirements have significantly influenced our ability to make and execute operational decisions regarding our businesses in Venezuela. The inability of our Venezuelan businesses to pay dividends, which remain subject to Venezuelan government approvals, has continued to restrict our ability to realize the earnings generated out of our Venezuelan businesses. We expect the conditions described above will continue for the foreseeable future. Further, during the fourth quarter of 2015, given our high level of intercompany receivables, we pursued cash basis transactions to limit additional investment.

As a result of these factors, we concluded that effective as of the end of the fourth quarter of 2015, we do not meet the U.S. GAAP accounting criteria for control over our Venezuelan subsidiaries. Therefore, we deconsolidated our Venezuelan subsidiaries effective as of the end of the fourth quarter of 2015, and began accounting for the investments in our Venezuelan subsidiaries using the cost method of accounting effective in the first quarter of 2016. This action resulted in a charge of \$123.4 million (\$80.9 million after tax) or \$0.27 per diluted share during the fourth quarter of 2015, to reduce the value of the cost method investments to their estimated fair values, resulting in a full impairment. The fourth quarter 2015 charge included \$85 million of intercompany receivables, as well as net assets of our Venezuelan businesses and accumulated foreign currency.

The decision to deconsolidate our Venezuelan subsidiaries was preceded by the remeasurement of our Venezuelan Water and Paper net assets during the second quarter of 2015 at the Marginal Currency System (“SIMADI”) exchange rate and the remeasurement of our Venezuelan Food & Beverage and Institutional net assets and bolivar portion of our Venezuelan Energy net assets at the SIMADI exchange rate during the third quarter of 2015. The combination of these actions resulted in charges of \$165.9 million (\$165.9 million after tax) through the first three quarters of 2015. As a result of the ownership structure of our Food & Beverage and Institutional operations in Venezuela, we reflected \$11.1 million of the above charges as a component of net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income, resulting in a net charge of \$154.8 million.

The total charges during 2015 related to our actions in Venezuela were \$289.3 million (\$246.8 million after tax), \$235.7 million net of the impact from noncontrolling interest, or \$0.78 per share.

On February 8, 2013, the Venezuelan government devalued its currency from 4.3 bolivares to 1 U.S. dollar to 6.3 bolivars to 1 U.S. dollar, resulting in a charge during 2013 of \$22.7 million (\$16.1 million after tax), or \$0.05 per diluted share, due to the remeasurement of the local balance sheet.

#### Other special (gains) and charges

During 2015, we recorded a charge of \$24.7 million (\$15.4 million after tax), or \$0.05 per diluted share, related to a fixed asset impairment, consisting of certain production equipment and buildings within one of our U.S. plants, resulting from lower than anticipated production. Also during 2015, we improved estimates related to our inventory reserves and product costing, resulting in a net pre-tax charge of approximately \$6 million. Separately, the actions resulted in a charge of \$20.6 million (\$15.9 million after tax), or \$0.05 per diluted share, related to inventory reserve calculations, partially offset by a gain of \$14.5 million (\$12.2 million after tax), or \$0.04 per diluted share, related to the capitalization of certain cost components into inventory. These items have been included as a component of cost of sales on the Consolidated Statement of Income.

Also during 2015, we recognized a net charge of \$56.3 million (\$34.5 million after tax), or \$0.11 per diluted share, primarily made up of litigation related charges and the recognition of a loss on the sale of a portion of our Ecovation business, offset partially by the recovery of funds deposited into escrow as part of the Champion transaction. The net charges have been included as a component of special (gains) and charges on the Consolidated Statement of Income.

During 2014, we recorded a special gain of \$28.4 million (\$23.3 million after tax), or \$0.08 per diluted share, as a result of a favorable licensing settlement and other settlement gains, the consolidation of the Emirates National Chemicals Company LLC (“Emochem”) entity and removal of the corresponding equity method investment and the disposition of a business. The net charges have been included as a component of special (gains) and charges on the Consolidated Statement of Income.

Further details related to our non-restructuring special (gains) and charges are included in Note 3.



Table of Contents

## Operating Income and Operating Income Margin

				Percent Change	
(millions)	2015	2014	2013	2015	2014
Reported GAAP operating income	\$ 1,561.3	\$ 1,955.0	\$ 1,560.6	(20)%	25%
Special (gains) and charges	495.4	83.1	214.5		
Non-GAAP adjusted operating income	2,056.7	2,038.1	1,775.1	1	15
Effect of foreign currency translation	44.0	(82.0)	(98.0)		
Non-GAAP adjusted fixed currency operating income	\$ 2,100.7	\$ 1,956.1	\$ 1,677.1	7%	17%
(percent)	2015	2014	2013		
Reported GAAP operating income margin	11.5%	13.7%	11.8%		
Non-GAAP adjusted operating income margin	15.2%	14.3%	13.4%		
Non-GAAP adjusted fixed currency operating income margin	15.2%	14.3%	13.4%		

Reported operating income decreased 20% when comparing 2015 to 2014 and increased 25% when comparing 2014 to 2013. Our reported operating income for 2015, 2014 and 2013 was impacted by special (gains) and charges. Excluding the impact of special (gains) and charges from all three years, 2015 adjusted operating income increased 1% when compared to 2014 adjusted operating income and 2014 adjusted operating income increased 15% when compared to 2013 adjusted operating income. As shown in the previous table, foreign currency translation had a negative impact on adjusted operating income growth for both 2015 and 2014, as adjusted fixed currency operating income increased 7% for 2015 and 17% for 2014.

The 2015 adjusted fixed currency operating income increase and the improving adjusted fixed currency operating margin trend was driven by delivered product cost savings and synergies, which more than offset investment in the business and other costs.

The 2014 adjusted fixed currency operating income increase and the improving adjusted fixed currency operating margin trend was driven by sales volume increases, pricing gains, net cost savings and synergies. The impact of acquisitions and divestitures added approximately 2 percentage points to our 2014 adjusted fixed currency operating income growth rate.

## Interest Expense, Net

(millions)	2015	2014	2013	Percent Change	
				2015	2014
	\$	\$	\$		
Reported GAAP interest expense, net	243.6	256.6	262.3	(5)%	(2)%
Special (gains) and charges	-	-	2.5		
	\$	\$	\$		
Non-GAAP adjusted interest expense, net	243.6	256.6	259.8	(5)%	(1)%

Reported net interest expense totaled \$243.6 million, \$256.6 million and \$262.3 million during 2015, 2014 and 2013, respectively.

Special (gains) and charges reported within net interest expense in 2013 included the interest expense of our \$500 million public debt issuance in December 2012 through the April 2013 close date of the Champion acquisition, as well as amortizable fees to secure term loans and short-term debt, all of which were initiated to fund the Champion acquisition.

The decrease in 2015 net interest expense compared to 2014 net interest expense was driven primarily by lower interest rates paid on outstanding debt. The decrease in 2014 adjusted net interest expense compared to 2013 adjusted net interest expense was due primarily to lower comparable outstanding debt, offset partially by increased net expense related to our foreign currency hedging program and other interest-related fees.

#### Provision for Income Taxes

The following table provides a summary of our tax rate:

(percent)	2015	2014	2013
Reported GAAP tax rate	22.8 %	28.0 %	25.0%
Tax rate impact of:			
Special gains and charges	(0.4)	(0.1)	0.4
Discrete tax items	3.5	(0.7)	2.7
Non-GAAP adjusted tax rate	25.9 %	27.2 %	28.1 %

Our reported tax rate for 2015, 2014 and 2013 includes the tax impact of special gains and charges and discrete tax items. Depending on the nature of our special gains and charges and discrete tax items, our reported tax rate may not be consistent on a period to period basis, as amounts included in our special gains and charges are derived from tax jurisdictions with rates that vary from our overall non-GAAP adjusted tax rate.

Table of Contents

Our 2015 reported tax rate includes \$105.7 million of net tax benefits on special gains and charges and net benefits of \$63.3 million associated with discrete tax items. Our 2014 reported tax rate includes \$21.6 million of net tax benefits on special gains and charges and net expense of \$13.2 million associated with discrete tax items. Our 2013 reported tax rate includes \$60.1 million of net tax benefits on special gains and charges and net benefits of \$41.7 million associated with discrete tax items. The corresponding impact of these items on the reported tax rate is shown in the table above.

Net benefits related to discrete tax items in 2015 were driven primarily by the release of \$20.6 million of valuation allowances based on the realizability of foreign deferred tax assets and our ability to recognize a worthless stock deduction of \$39.0 million for the tax basis in a wholly-owned domestic subsidiary.

Net expense related to discrete tax items in 2014 was driven primarily by an update to non-current tax liabilities for certain global tax audits, an adjustment related to the re-characterization of intercompany payments between our U.S. and foreign affiliates, the remeasurement of certain deferred tax assets and liabilities resulting from changes in our deferred state tax rate, recognizing adjustments from filing our 2013 U.S. federal and state tax returns, net changes of valuation allowances based on the realizability of foreign deferred tax assets and the impact from other foreign country audit settlements.

Net benefits related to discrete tax items in 2013 were driven primarily by the net release of valuation allowances related to the realizability of foreign deferred tax assets of \$11.5 million, the remeasurement of certain deferred tax assets and liabilities of \$11.3 million and recognizing adjustments from filing our 2012 U.S. federal and state tax returns of \$11.0 million. The remaining net discrete tax items relate primarily to recognizing settlements related to prior year income tax audits, law changes within a foreign jurisdiction, the retroactive extension during first quarter 2013 of the U.S. R&D credit for 2012, foreign audit adjustments and other adjustments to deferred tax assets and liabilities.

The decrease in our adjusted effective tax rate from 2013 to 2015 was impacted by global tax planning projects. The decrease in our 2014 adjusted effective tax rate compared to 2013 was also impacted by favorable geographic income mix.

## Net Income Attributable to Ecolab

(millions)	2015	2014	2013	Percent Change	
				2015	2014

Edgar Filing: ECOLAB INC. - Form 10-K

Reported GAAP net income	\$ 1,002.1	\$ 1,202.8	\$ 967.8	(17)%	24%
Adjustments:					
Special (gains) and charges, after tax	376.9	61.5	156.4		
Discrete tax net expense (benefit)	(63.3)	13.2	(41.7)		
Non-GAAP adjusted net income	\$ 1,315.7	\$ 1,277.5	\$ 1,082.5	3%	18%

Diluted Earnings Attributable to Ecolab Per Common Share (EPS)

				Percent Change	
(dollars)	2015	2014	2013	2015	2014
	\$	\$	\$		
Reported GAAP diluted EPS	3.32	3.93	3.16	(16)%	24%
Adjustments:					
Special (gains) and charges	1.25	0.20	0.51		
Discrete tax net expense (benefit)	(0.21)	0.04	(0.14)		
Non-GAAP adjusted diluted EPS	\$ 4.37	\$ 4.18	\$ 3.54	5%	18%

Note: Per share amounts do not necessarily sum due to rounding.

Reported net income attributable to Ecolab totaled \$1,002.1 million, \$1,202.8 million and \$967.8 million during 2015, 2014 and 2013, respectively, which resulted in reported diluted earnings per share of \$3.32, \$3.93 and \$3.16 for the corresponding periods.

Amounts for 2015, 2014 and 2013 include special (gains) and charges and discrete tax items. Excluding special (gains) and charges and the impact of discrete tax items from 2015, 2014 and 2013, adjusted net income and adjusted diluted earnings per share increased 3% and 5%, respectively, when comparing 2015 to 2014 and both increased 18%, when comparing 2014 to 2013.

Currency translation has had significant unfavorable impact on reported and adjusted diluted earnings per share comparability across 2013 to 2015, with headwinds of approximately \$0.30 per share for 2015 compared to 2014 and approximately \$0.07 per share for 2014 compared to 2013.



Table of Contents

## SEGMENT PERFORMANCE

The non-U.S. dollar functional international amounts included within our reportable segments are based on translation into U.S. dollars at the fixed currency exchange rates used by management for 2015. The difference between the fixed currency exchange rates and the actual currency exchange rates is reported as “effect of foreign currency translation” in the following tables. All other accounting policies of the reportable segments are consistent with U.S. GAAP and the accounting policies described in Note 2. Additional information about our reportable segments is included in Note 17.

Fixed currency net sales and operating income for 2015, 2014 and 2013 for our reportable segments are shown in the following tables.

## Net Sales

(millions)	2015	2014	2013	Percent Change	
				2015	2014
	\$	\$	\$		
Global Industrial	4,857.8	4,623.2	4,487.3	5 %	3 %
Global Institutional	4,393.2	4,157.9	3,998.0	6	4
Global Energy	3,825.7	4,145.0	3,320.1	(8)	25
Other	773.4	731.1	691.2	6	6
Subtotal at fixed currency	13,850.1	13,657.2	12,496.6	1	9
Effect of foreign currency translation	(305.0)	623.3	756.8		
	\$	\$	\$		
Total reported net sales	13,545.1	14,280.5	13,253.4	(5)%	8 %

## Operating Income

(millions)	2015	2014	2013	Percent Change	
				2015	2014
	\$	\$	\$		
Global Industrial	692.7	605.1	575.9	14 %	5 %
Global Institutional	900.7	800.8	753.5	12	6
Global Energy	550.7	612.5	435.0	(10)	41
Other	132.0	113.4	102.8	16	10
Corporate	(670.8)	(258.8)	(404.6)		
Subtotal at fixed currency	1,605.3	1,873.0	1,462.6	(14)	28

Edgar Filing: ECOLAB INC. - Form 10-K

Effect of foreign currency translation	(44.0)	82.0	98.0		
	\$	\$	\$		
Total reported operating income	1,561.3	1,955.0	1,560.6	(20)%	25%

Global Industrial

	2015	2014	2013		
Net Sales					
	\$	\$	\$		
Sales at fixed currency (millions)	4,857.8	4,623.2	4,487.3		
Percentage change at fixed currency	5	3		%	%
Acquisition adjusted percentage change at fixed currency	3	3		%	%
Percentage change at public currency	(4)	1		%	%
Operating Income					
	\$	\$	\$		
Operating income at fixed currency (millions)	692.7	605.1	575.9		
Percentage change at fixed currency	14	5		%	%
Acquisition adjusted percentage change at fixed currency	13	4		%	%
Percentage change at public currency	5	3		%	%
Operating income margin at fixed currency	14.3	13.1	12.8	%	%

Net Sales

Fixed currency sales growth for our Global Industrial segment in both 2015 and 2014 was driven by volume gains and pricing. At a regional level, the 2015 sales increase was impacted by strong growth in Latin America and Middle East/Africa (“MEA”), moderate growth in Europe and modest gains in North America. Regional results for 2014 were impacted by strong growth in Latin America, with moderate growth in MEA and modest gains in Asia Pacific and North America.



Table of Contents

At an operating unit level, Water fixed currency sales increased 6% in 2015 (increase of 3% acquisition adjusted), with good growth in the light and heavy industries, which offset slower sales in the mining industry. Fixed currency sales increased 5% in 2014, (increase of 4% acquisition adjusted) led by gains in heavy, light and mining. Food & Beverage fixed currency sales increased 6% in 2015 (increase of 5% acquisition adjusted), benefiting from share gains. Growth was led by the beverage and brewing market, with modest gains in the dairy and food markets. Fixed currency sales increased 4% in 2014, (increase of 3% acquisition adjusted) driven by gains in agri, dairy and beverage and brewing. Paper fixed currency sales increased 1% in 2015 (increase of 2% acquisition adjusted), impacted by new account gains and continued technology penetration. Fixed currency sales were flat in 2014 (decrease of 2% acquisition adjusted) with unfavorable volume impact from below capacity plant utilization at customer locations and customer plant closures. Textile Care fixed currency sales increased 5% in 2015, impacted by new accounts and customer penetration within North America and Europe. Fixed currency sales decreased 1% in 2014, impacted by lower comparable sales in Europe.

## Operating Income

Fixed currency operating income growth in 2015 and the corresponding operating margin increase benefited from delivered product cost savings, synergies and pricing gains, which more than offset investments in the business. Fixed currency operating income growth in 2014 and the corresponding operating margin increase benefited from pricing gains, sales volume increases and net cost savings.

## Global Institutional

	2015		2014		2013
Net Sales					
	\$		\$		\$
Sales at fixed currency (millions)	4,393.2		4,157.9		3,998.0
Percentage change at fixed currency	6	%	4	%	
Acquisition adjusted percentage change at fixed currency	5	%	4	%	
Percentage change at public currency	0	%	3	%	
Operating Income					
	\$		\$		\$
Operating income at fixed currency (millions)	900.7		800.8		753.5
Percentage change at fixed currency	12	%	6	%	
Acquisition adjusted percentage change at fixed currency	13	%	7	%	
Percentage change at public currency	8	%	6	%	
Operating income margin at fixed currency	20.5	%	19.3	%	18.8
					%

## Net Sales

Fixed currency sales growth for our Global Institutional segment in both 2015 and 2014 benefited from volume increases and pricing gains. At a regional level, the 2015 sales increase was led by strong growth in Asia Pacific and MEA, good growth in North America and Latin America, and modest gains in Europe. The 2014 sales increase was led by strong growth in Latin America, and good gains in Asia Pacific and North America, which collectively offset slower sales in Europe.

At an operating unit level, Institutional fixed currency sales increased 6% in 2015, as sales initiatives, new accounts and globalization of our leading technologies continued to drive growth. Global lodging experienced moderate growth, while foodservice trends remained soft. Fixed currency sales increased 4% in 2014, benefiting from new accounts, sales initiatives and effective product programs. Specialty fixed currency sales increased 7% in 2015. Quick service sales remained solid, benefiting from new accounts and new product penetration; our food retail business showed good sales growth. Fixed currency sales increased 8% in 2014, driven by solid results from both of our quick service and food retail businesses. Healthcare fixed currency sales increased 2% in 2015, benefiting from new account growth, customer penetration and product introductions. Fixed currency sales increased 1% in 2014, driven by new account growth and product introductions.

## Operating Income

Fixed currency operating income growth in 2015 and the corresponding operating margin increase benefited from pricing gains, sales volume increases and delivered product cost savings, which more than offset investments in the business. Fixed currency operating income growth in 2014 and the corresponding operating margin increase benefited from the net impact of pricing gains, sales volume increases and net cost savings.

Table of Contents

## Global Energy

	2015		2014		2013
Net Sales					
	\$		\$		\$
Sales at fixed currency (millions)	3,825.7		4,145.0		3,320.1
Percentage change at fixed currency	(8)	%	25	%	
Acquisition adjusted percentage change at fixed currency	(9)	%	10	%	
Percentage change at public currency	(13)	%	23	%	
Operating Income					
	\$		\$		\$
Operating income at fixed currency (millions)	550.7		612.5		435.0
Percentage change at fixed currency	(10)	%	41	%	
Acquisition adjusted percentage change at fixed currency	(13)	%	33	%	
Percentage change at public currency	(16)	%	35	%	
Operating income margin at fixed currency	14.4	%	14.8	%	13.1
					%

## Net Sales

Lower 2015 fixed currency sales for our Global Energy segment were negatively impacted by volume reductions and lower pricing. The decrease in 2015 fixed currency sales primarily reflected significant reductions in our well stimulation business and slightly lower sales in our production business; these more than offset growth in our downstream business. Continued growth in our international regions was offset by soft North America results, reflecting the reduction in North America drilling and well completion activity, customer spending and price reductions.

Fixed currency sales growth in 2014 was impacted by the Champion acquisition. The acquisition adjusted fixed currency sales increase reflected double-digit growth in our upstream business, led by strong international performance and good growth in North America. Deepwater and on-shore conventional sources produced solid results. Sales growth in our downstream business resulted from improved international performance and market share gains in North America.

## Operating Income

Fixed currency operating income reductions in 2015 and the corresponding operating margin slippage were driven by sales volume declines and lower pricing, which more than offset delivered product cost savings and synergies.

Fixed currency operating income growth in 2014 was impacted by the Champion acquisition. Acquisition adjusted fixed currency operating income and the corresponding operating income margin increase were largely driven by sales volume increases and business mix changes, with the corresponding benefit to operating income. The remainder of the increase can largely be attributed to the net impact of pricing gains, synergies, investments in the business and other costs.

#### Other

	2015	2014	2013
Net Sales			
	\$	\$	\$
Sales at fixed currency (millions)	773.4	731.1	691.2
Percentage change at fixed currency	6 %	6 %	
Acquisition adjusted percentage change at fixed currency	6 %	5 %	
Percentage change at public currency	2 %	6 %	
Operating Income			
	\$	\$	\$
Operating income at fixed currency (millions)	132.0	113.4	102.8
Percentage change at fixed currency	16 %	10 %	
Acquisition adjusted percentage change at fixed currency	17 %	11 %	
Percentage change at public currency	12 %	12 %	
Operating income margin at fixed currency	17.1 %	15.5 %	14.9 %

#### Net Sales

Fixed currency sales growth for our Other segment in both 2015 and 2014 was driven by volume increases and pricing gains. At a regional level, the 2015 sales increase was led by good growth in Latin America, North America and Asia Pacific, with moderate gains in Europe. The 2014 sales increase was led by strong growth in Latin America and Asia Pacific. North America had good sales gains.

## Table of Contents

At an operating unit level, Pest Elimination fixed currency sales increased 7% in 2015, impacted by continued gains in the foodservice market, benefiting from customer penetration and new service offerings. Fixed currency sales increased 5% in 2014 benefiting from gains in the food and beverage and foodservice markets. Equipment Care fixed currency sales increased 7% in 2015, driven by increases in both service and parts sales, benefiting from new customer additions. Fixed currency sales increased 7% in 2014, with service and installed parts sales increases benefiting the growth.

## Operating Income

Fixed currency operating income growth in both 2015 and 2014, and the corresponding operating margin increases, benefited from pricing gains and sales volume increases, which more than offset other cost increases.

## Corporate

Consistent with our internal management reporting, the Corporate segment includes intangible asset amortization specifically from the Nalco merger and in 2013 certain integration costs for both the Nalco and Champion transactions. The Corporate segment also includes special (gains) and charges reported on the Consolidated Statement of Income. Items included within special (gains) and charges are shown in the table on page 34.

## FINANCIAL POSITION & LIQUIDITY

### Financial Position

Total assets were \$18.6 billion as of December 31, 2015, compared to total assets of \$19.4 billion as of December 31, 2014. The negative impact of foreign currency exchange rates on the value of our foreign assets translated into U.S. dollars as of December 31, 2015 and the impact of intangible asset amortization more than offset the increase in assets from acquisitions and ongoing business activities.

Total liabilities were \$11.7 billion as of December 31, 2015, compared to total liabilities of \$12.0 billion as of December 31, 2014. Total debt was \$6.5 billion as of both December 31, 2015 and 2014. See further discussion of our debt activity within the Liquidity and Capital Resources section of this MD&A.

Our net debt to EBITDA and net debt to adjusted EBITDA are shown in the following table. We view our net debt to EBITDA and net debt to adjusted EBITDA ratios as important indicators of our creditworthiness. EBITDA and adjusted EBITDA are non-GAAP measures. As shown below, EBITDA is defined as the sum of net income including non-controlling interest, provision for income taxes, net interest expense, depreciation and amortization. Adjusted EBITDA is defined as the sum of EBITDA and special (gains) and charges impacting EBITDA.

	2015	2014	2013
(ratio)			
Net debt to EBITDA	2.6	2.2	2.8
Net debt to adjusted EBITDA	2.2	2.2	2.5
(millions)			
Net Debt			
	\$	\$	\$
Total debt	6,465.5	6,548.2	6,875.8
Cash	92.8	209.6	339.2
	\$	\$	\$
Net debt	6,372.7	6,338.6	6,536.6
EBITDA			
	\$	\$	\$
Net income including non-controlling interest	1,017.2	1,222.2	973.6
Provision for income taxes	300.5	476.2	324.7
Interest expense, net	243.6	256.6	262.3
Depreciation	559.5	558.1	514.2
Amortization	300.0	313.9	302.0
EBITDA	2,420.8	2,827.0	2,376.8
Special (gains) and charges impacting EBITDA	495.4	83.1	214.5
	\$	\$	\$
Adjusted EBITDA	2,916.2	2,910.1	2,591.3

Table of Contents

## Cash Flows

## Operating Activities

(millions)	2015	2014	2013	Dollar Change	
				2015	2014
	\$	\$	\$	\$	\$
Cash provided by operating activities	1,999.8	1,815.6	1,559.8	184.2	255.8

We continue to generate strong cash flow from operations, allowing us to fund our ongoing operations, acquisitions, investments in the business, debt repayments and pension obligations and return cash to our shareholders through dividend payments and share repurchases.

Comparability of cash generated from operating activities across 2013 to 2015 was impacted by various factors, including the following:

- Increased income, adjusted for the non-cash impact of the Venezuela charges, the fixed asset impairment and other charges.
- Fluctuations in accounts receivable, inventories and accounts payable (“working capital”), the combination of which increased \$119 million, \$212 million and \$127 million in 2015, 2014 and 2013 respectively. The cash flow impact across the three years from accounts receivable was driven by changes in sales volumes and timing of collections. The cash flow impact across the three years from inventories was impacted by timing of purchases and production and usage levels, and from accounts payable was impacted by volume of purchases and timing of payments.
- Payment of certain non-recurring items in 2013 related to liabilities assumed with the Champion acquisition.

Pension and postretirement plan contributions, cash activity related to restructuring, cash paid for income taxes and cash paid for interest are shown in the following table.

(millions)	2015	2014	2013	Dollar Change	
				2015	2014
	\$	\$	\$	\$	\$
Pensions and postretirement plan contributions					

Edgar Filing: ECOLAB INC. - Form 10-K

	64.9	76.7	80.0	(11.8)	(3.3)
Restructuring payments	53.2	82.7	120.6	(29.5)	(37.9)
Income tax payments	533.1	522.0	434.2	11.1	87.8
Interest payments	237.2	255.5	258.9	(18.3)	(3.4)

Investing Activities

	Dollar Change				
(millions)	2015	2014	2013	2015	2014
	\$	\$	\$	\$	\$
Cash used for investing activities	(915.8)	(848.3)	(2,087.7)	(67.5)	1,239.4

Cash used for investing activities is primarily impacted by the timing of business acquisitions and dispositions as well as from capital investments in the business.

Total cash paid for acquisitions, net of cash acquired and net of cash received from dispositions, in 2015, 2014 and 2013 was \$265 million, \$72 million and \$1.4 billion, respectively. The Champion acquisition accounted for \$1.3 billion of the net cash paid for acquisitions in 2013. Our acquisitions and divestitures across 2015, 2014 and 2013 are discussed further in Note 4. We continue to target strategic business acquisitions which complement our growth strategy and expect to continue to make capital investments and acquisitions in the future to support our long-term growth.

We continue to make capital investments in the business, including process control and monitoring equipment, equipment used by our customers to dispense our products and manufacturing facilities. Total capital expenditures, including software, were \$815 million, \$794 million and \$662 million in 2015, 2014 and 2013, respectively.

Investing related cash flows in 2015 were also impacted by settlement of a net investment hedge and receipt of Champion related escrow funds.

Financing Activities

	Dollar Change				
(millions)	2015	2014	2013	2015	2014
	\$	\$	\$	\$	\$
Cash used for financing activities	(1,150.9)	(1,071.0)	(292.6)	(79.9)	(778.4)





Table of Contents

Our cash flows from financing activities primarily reflect the issuances and repayment of debt, common stock repurchases, proceeds from common stock issuances related to our equity incentive programs, dividend payments and acquisition-related contingent consideration.

Our 2015 debt financing activities included the issuance of \$300 million 1.55%, \$300 million 2.25% and €575 million 2.63% fixed rate senior notes; the scheduled repayment of our \$250 million 4.88% and \$500 million 1.00% senior notes; and repayment of \$275 million of term loan borrowings. Net repayments of commercial paper and notes payable led to a net decrease of \$312 million during 2015.

Our 2014 debt financing activities included the repayment of \$400 million of term loan borrowings, over the course of 2014, and the scheduled repayment of our \$500 million 2.38% senior notes. Net borrowings of commercial paper and notes payable led to a net cash inflow of \$600 million during 2014.

Our 2013 debt financing activities included \$900 million of term loan borrowings initiated in connection with the Champion transaction, the scheduled repayment of our €125 million Series A notes (\$170 million) in December 2013, the redemption of debt acquired through the Champion transaction and repayment of \$100 million of term loan borrowings. Net repayments of commercial paper and notes payable led to a net cash outflow of \$278 million during 2013.

Shares are repurchased for the purpose of partially offsetting the dilutive effect of our equity compensation plans and stock issued in acquisitions and to efficiently return capital to shareholders.

In February 2015, we announced a \$1.0 billion share repurchase program, of which \$382 million remains to be repurchased as of December 31, 2015. We expect the program to be completed by mid-2016. During 2015, we repurchased a total of \$755 million of shares, which includes \$300 million of shares through the ASR program discussed further in Note 10. During 2014 and 2013, we repurchased \$429 million and \$308 million of shares, respectively. Cash proceeds and tax benefits from stock option exercises provide a portion of the funding for repurchase activity.

In December 2015, we increased our indicated annual dividend rate by 6%. This represents the 24th consecutive year we have increased our dividend. We have paid dividends on our common stock for 79 consecutive years. Cash dividends declared per share of common stock, by quarter, for each of the last three years were as follows:

First	Second	Third	Fourth
-------	--------	-------	--------

Edgar Filing: ECOLAB INC. - Form 10-K

	Quarter	Quarter	Quarter	Quarter	Year
	\$	\$	\$	\$	\$
2015	0.330	0.330	0.330	0.350	1.340
2014	0.275	0.275	0.275	0.330	1.155
2013	0.230	0.230	0.230	0.275	0.965

Comparability of dividends paid across 2013 to 2015 was impacted by the dividend rate increase noted in the above table, as well as the payment timing of dividends declared in the fourth quarter of 2013 and 2012.

Financing activities for 2014 also included an acquisition-related contingent consideration payment of \$86 million made to Champion's former shareholders.

### Liquidity and Capital Resources

We currently expect to fund all of our cash requirements which are reasonably foreseeable for 2016, including scheduled debt repayments, new investments in the business, share repurchases, dividend payments, possible business acquisitions and pension contributions, with cash from operating activities, cash reserves available in certain foreign jurisdictions and additional short-term and/or long-term borrowings. We continue to expect our operating cash flow to remain strong.

As of December 31, 2015, we had \$92.8 million of cash and cash equivalents on hand, of which \$88.3 million was held outside of the U.S.

We have recorded deferred tax liabilities of \$25.8 million and \$37.4 million as of December 31, 2015 and 2014, respectively, for pre-acquisition foreign earnings associated with the Nalco merger and Champion acquisition that we intend to repatriate. These liabilities were recorded as part of the respective purchase price accounting of each transaction. We consider the remaining portion of our foreign earnings to be indefinitely reinvested in foreign jurisdictions and we have no intention to repatriate such funds. We continue to be focused on building our global business and these funds are available for use by our international operations. To the extent the remaining portion of the foreign earnings would be repatriated, such amounts would be subject to income tax or foreign withholding tax liabilities that may be fully or partially offset by foreign tax credits, both in the U.S. and in various applicable foreign jurisdictions.

As of December 31, 2015 we had a \$2.0 billion multi-year credit facility, which expires in December 2019. The credit facility has been established with a diverse syndicate of banks. There were no borrowings under our credit facility as of December 31, 2015 and 2014.

The credit facility supports our \$2.0 billion U.S. commercial paper program and \$200 million European commercial paper program. Combined borrowing under these two commercial paper programs may not exceed \$2.0 billion. As of December 31, 2015, we had \$605 million in outstanding U.S. commercial paper, with an average annual interest rate of 0.7%, and no amounts outstanding under our European commercial paper program. As of December 31, 2015, both programs were rated A-2 by Standard & Poor's and P-2 by Moody's.

Table of Contents

Additionally, we have other committed and uncommitted credit lines of \$766 million with major international banks and financial institutions to support our general global funding needs, including with respect to bank supported letters of credit, performance bonds and guarantees. Approximately \$570 million of these credit lines was unutilized and available for use as of year-end 2015.

Our long-term debt issuance and repayment activity is discussed in the Cash Flow - Financing Activities section of this MD&A.

As of December 31, 2015, our short-term borrowing program was rated A-2 by Standard & Poor's and P-2 by Moody's.

As of December 31, 2015, Standard & Poor's and Moody's rated our long-term credit at BBB+ (positive outlook) and Baa1 (stable outlook), respectively. A reduction in our credit ratings could limit or preclude our ability to issue commercial paper under our current programs, or could also adversely affect our ability to renew existing, or negotiate new, credit facilities in the future and could increase the cost of these facilities. Should this occur, we could seek additional sources of funding, including issuing additional term notes or bonds. In addition, we have the ability, at our option, to draw upon our \$2.0 billion of committed credit facility prior to termination.

We are in compliance with our debt covenants and other requirements of our credit agreements and indentures.

A schedule of our obligations as of December 31, 2015 under various notes payable, long-term debt agreements, operating leases with noncancelable terms in excess of one year and interest obligations are summarized in the following table:

(millions)	Total	Payments Due by Period			More Than 5 Years
		Less Than 1 Year	2-3 Years	4-5 Years	
Notes payable	\$ 31	\$ 31	\$ -	\$ -	\$ -
Commercial paper	605	605	-	-	-
Long-term debt	5,824	1,568	1,067	321	2,868
Capital lease obligations	6	1	1	1	3
Operating leases	434	102	150	102	80
Interest*	1,800	199	297	262	1,042
Total	\$ 8,700	\$ 2,506	\$ 1,515	\$ 686	\$ 3,993

\*Interest on variable rate debt was calculated using the interest rate at year-end 2015.

As of December 31, 2015, our gross liability for uncertain tax positions was \$85 million. We are not able to reasonably estimate the amount by which the liability will increase or decrease over an extended period of time or whether a cash settlement of the liability will be required. Therefore, these amounts have been excluded from the schedule of contractual obligations.

We are not required to make any contributions to our U.S. pension and postretirement healthcare benefit plans in 2016 based on plan asset values as of December 31, 2015. We are required to fund certain international pension benefit plans in accordance with local legal requirements. We estimate contributions to be made to our international plans will approximate \$42 million in 2016. These amounts have been excluded from the schedule of contractual obligations.

We lease certain sales and administrative office facilities, distribution centers, research and manufacturing facilities and other equipment under longer-term operating leases. Vehicle leases are generally shorter in duration. Vehicle leases have guaranteed residual value requirements that have historically been satisfied primarily by the proceeds on the sale of the vehicles.

Except for the approximately \$196 million utilized under the bank lines noted previously supporting domestic and international commercial relationships and transactions, we do not have significant unconditional purchase obligations or significant other commercial commitments.

#### Off-Balance Sheet Arrangements

Other than operating leases, we do not have any off-balance sheet financing arrangements. See Note 13 for information on our operating leases. Through the normal course of business, we have established various joint ventures that have not been consolidated within our financial statements as we are not the primary beneficiary. The joint ventures help us meet local ownership requirements, achieve quicker operational scale, expand our ability to provide customers a more fully integrated offering or provide other benefits to our business or customers. These entities have not been utilized as special purposes entities, which are sometimes established for the purpose of facilitating off-balance sheet financial arrangements or other contractually narrow or limited purposes. As such, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in such relationships.

## Table of Contents

### Market Risk

We enter into contractual arrangements (derivatives) in the ordinary course of business to manage foreign currency exposure and interest rate risks. We do not enter into derivatives for speculative or trading purposes. Our use of derivatives is subject to internal policies that provide guidelines for control, counterparty risk, and ongoing monitoring and reporting, and is designed to reduce the volatility associated with movements in foreign exchange and interest rates on our income statement and cash flows.

We enter into foreign currency forward contracts to hedge certain intercompany financial arrangements, and to hedge against the effect of exchange rate fluctuations on transactions related to cash flows denominated in currencies other than U.S. dollars. We use net investment hedges as hedging instruments to manage risks associated with our investments in foreign operations. As of December 31, 2015, we had €175 million and €575 million senior notes and a €25 million forward contract designated as net investment hedges.

We manage interest expense using a mix of fixed and floating rate debt. To help manage borrowing costs, we may enter into interest rate swap agreements. Under these arrangements, we agree to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional principal amount. As of December 31, 2015, we had interest rate swaps outstanding with notional values of \$1,675 million.

See Note 8 for further information on our hedging activity.

Based on a sensitivity analysis (assuming a 10% adverse change in market rates) of our foreign exchange and interest rate derivatives and other financial instruments, changes in exchange rates or interest rates would not materially affect our financial position and liquidity. The effect on our results of operations would be substantially offset by the impact of the hedged items.

## GLOBAL ECONOMIC AND POLITICAL ENVIRONMENT

### Oil Markets and Global Energy Investments

During 2015, approximately 28% of our sales were generated from our Global Energy segment, the results of which, as noted further below, are subject to volatility in the oil and gas commodity markets.

## Energy Markets

Oil prices remained sharply lower in 2015 when compared to 2014, with continued supply pressures negatively impacting exploration and production investments, particularly in North America. Additionally, we experienced pricing headwinds in 2015 when compared to 2014. Demand for oil and overall energy consumption has remained consistent.

Lower oil prices slowed our 2015 Global Energy segment results. Our global footprint and broad business portfolio within the Global Energy segment, as well as our strong execution capabilities are expected to provide the required resilience to outperform in the current market. As such, we continue to remain confident in the long-term growth prospects of the segment.

As petroleum derived materials are key inputs to many of our chemical products, lower oil prices will continue to provide benefits across our segments in the form of lower raw material costs.

## Energy Investments

We have a joint venture in Kazakhstan, which we acquired as part of the Champion transaction that holds a contract to supply production chemicals for use in the Kashagan oil project, a Caspian Sea shallow water oil field. The startup of production at the Kashagan project has been significantly delayed and output was indefinitely halted after pipeline failures were discovered in October 2013. We anticipate that the pipelines will be repaired and production restarted; however, if this does not occur, or does not occur in a timely manner, we believe the impact of such events would not have a material adverse effect on our consolidated financial position or results of operations. Our remaining inventory investment is \$10 million, which is a reduction of approximately \$15 million from the third quarter of 2015. The reduction resulted from the sale of inventory during the fourth quarter of 2015.

## Global Economies

Approximately half of our sales are outside of the United States. Our international operations subject us to changes in economic conditions and foreign currency exchange rates as well as political uncertainty in some countries which could impact future operating results.

## Global Foreign Currency Markets



During 2015, the U.S. dollar continued to strengthen against most global currencies, impacting our comparative results against 2014. We anticipate the trend to continue into 2016. As described in Note 8, we utilize our derivative program to mitigate risks associated with certain foreign currency exposures and our investments in foreign operations.

## Table of Contents

### Russia and Ukraine

The ongoing political turmoil, economic sanctions, as well as the depressed oil markets, have led to foreign currency pressure as well as higher localized interest rates within Russia and Ukraine. We have experienced no significant impact from these trends, and will continue to monitor the economic and political trends within the region. Net sales within Russia and Ukraine are approximately 1% of our consolidated net sales. Assets held in Russia and Ukraine at November 30, 2015 represented less than 1% of our consolidated assets.

### Venezuela

Venezuela is a country experiencing a highly inflationary economy as defined under U.S. GAAP. As a result, the U.S. dollar has been the functional currency for our subsidiaries in Venezuela. Prior to the deconsolidation of our Venezuelan subsidiaries, any currency remeasurement adjustments for non-U.S. dollar denominated monetary assets and liabilities held by our subsidiaries and other transactional foreign exchange gains and losses were reflected in earnings.

The Venezuelan government has maintained currency controls since 2003 and has directed a series of formal currency devaluations, the last of which established the Venezuelan currency at 6.3 bolivares to 1 U.S. dollar. During the last two years, the Venezuelan government has taken the following actions:

- In 2013, the establishment of a new foreign exchange mechanism known as the “Complementary System of Foreign Currency Acquirement” (“SICAD 1”). It operates similar to an auction system and allows entities to exchange a limited number of bolivares for U.S. dollars at a bid rate established via weekly auctions. As of November 30, 2015, the fiscal year end for our international operations, the SICAD 1 exchange rate closed at 13.5 bolivares to 1 U.S. dollar.
- In January 2014, the replacement of the Commission for the Administration of Foreign Exchange (“CADIVI”) with a new foreign currency administration, the National Center for Foreign Commerce (“CENCOEX”), which did not impact the official fixed currency exchange rate of 6.3 bolivares to 1 U.S. dollar.
- In March 2014, the establishment of SICAD 2, which operated similar to SICAD 1.
- In February 2015, SICAD 2 was replaced by SIMADI. The SIMADI exchange rate at November 30, 2015 was 199.5 bolivares to 1 U.S. dollar.

The exchange mechanisms discussed above have become increasingly illiquid, and we believe that significant uncertainty continues to exist regarding the exchange mechanisms in Venezuela.

As of the end of 2015, the increasingly restrictive exchange control regulations and reduced access to dollars through official currency exchange markets have resulted in an other-than-temporary lack of exchangeability between the

Venezuelan bolivar and the U.S. dollar. This has significantly impacted our ability to effectively manage our Venezuelan businesses, including restrictions on the ability of our Venezuelan businesses to settle U.S. dollar-denominated obligations. The currency controls, coupled with importation restrictions, workforce regulations, pricing constraints and local capitalization requirements have significantly influenced our ability to make and execute operational decisions regarding our businesses in Venezuela. The inability of our Venezuelan businesses to pay dividends, which remain subject to Venezuelan government approvals, has continued to restrict our ability to realize the earnings generated out of our Venezuelan businesses. We expect the conditions described above will continue for the foreseeable future. Further, during the fourth quarter of 2015, given our high level of intercompany receivables, we pursued cash basis transactions to limit additional investment.

As a result of these factors, we concluded that effective as of the end of the fourth quarter of 2015, we do not meet the U.S. GAAP accounting criteria for control over our Venezuelan subsidiaries. Therefore, we deconsolidated our Venezuelan subsidiaries effective as of the end of the fourth quarter of 2015, and began accounting for the investments in our Venezuelan subsidiaries using the cost method of accounting effective in the first quarter of 2016. This action resulted in a charge of \$123.4 million (\$80.9 million after tax) or \$0.27 per diluted share during the fourth quarter of 2015, to reduce the value of the cost method investments to their estimated fair values, resulting in a full impairment. The fourth quarter 2015 charge included \$85 million of intercompany receivables, as well as net assets of our Venezuelan businesses and accumulated foreign currency.

Beginning in 2016, we will exclude the operating results of our Venezuelan subsidiaries from our consolidated financial statements and record revenue related to the sale of inventory to our Venezuelan subsidiaries to the extent that cash is received for those sales. Any dividends received from our Venezuelan subsidiaries will be recorded as income upon receipt of cash.

The decision to deconsolidate our Venezuelan subsidiaries was preceded by the remeasurement of our Venezuelan Water and Paper net assets during the second quarter of 2015 at the SIMADI exchange rate and the remeasurement of our Venezuelan Food & Beverage and Institutional net assets and bolivar portion of our Venezuelan Energy net assets at the SIMADI exchange rate during the third quarter of 2015. The combination of these actions resulted in charges of \$165.9 million (\$165.9 million after tax) through the first three quarters of 2015. As a result of the ownership structure of our Food & Beverage and Institutional operations in Venezuela, we reflected \$11.1 million of the above charges as a component of net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income, resulting in a net charge of \$154.8 million.

The total charges during 2015 related to our actions in Venezuela were \$278.2 million (\$235.7 million after tax), \$235.7 million net of the impact from noncontrolling interest, or \$0.78 per diluted share.

During 2015, Venezuelan net sales represented approximately 2% of our consolidated net sales and Venezuelan operating income represented approximately 4% of our consolidated operating income.



Table of Contents

NEW ACCOUNTING PRONOUNCEMENTS

Information regarding new accounting pronouncements is included in Note 2.

SUBSEQUENT EVENTS

During January 2016, we issued \$800 million of debt securities consisting of a three year 2.00% fixed rate noted for a par amount of \$400 million and a seven year 3.25% fixed rate note for a par amount of \$400 million. The proceeds were used to repay a portion of our outstanding commercial paper, repay the remaining term loan balance of \$125 million and for general corporate purposes.

Also during January 2016, we entered into an interest rate swap agreement that converted our \$400 million 2.00% debt mentioned above from a fixed rate to a floating rate interest rate. The interest rate swap was designated as a fair value hedge.

Also during January 2016, we purchased certain assets of Keedak Limited, an oilfield chemical distributor in Nigeria. Pre-acquisition sales of the acquired business are approximately \$15 million.

During February 2016, we entered into an accelerated stock repurchase agreement with a financial institution to repurchase \$300 million of our common stock.

NON-GAAP FINANCIAL MEASURES

This MD&A includes financial measures that have not been calculated in accordance with U.S. GAAP. These non-GAAP measures include:

Fixed currency sales

Acquisition adjusted fixed currency sales

Adjusted cost of sales

Adjusted gross margin

Fixed currency operating income

Adjusted operating income

Adjusted operating income margin

Adjusted fixed currency operating income

Adjusted fixed currency operating income margin

EBITDA

Adjusted EBITDA

Adjusted net interest expense

Adjusted tax rate

Adjusted net income

Adjusted diluted earnings per share

We provide these measures as additional information regarding our operating results. We use these non-GAAP measures internally to evaluate our performance and in making financial and operational decisions, including with respect to incentive compensation. We believe that our presentation of these measures provides investors with greater transparency with respect to our results of operations and that these measures are useful for period-to-period comparison of results.

We include in special (gains) and charges items that are unusual in nature and significant in amount. In order to better allow investors to compare underlying business performance period-to-period, we provide adjusted cost of sales, adjusted gross margin, adjusted operating income, adjusted operating income margin, adjusted fixed currency operating income, adjusted fixed currency operating income margin, adjusted EBITDA, adjusted net interest expense, adjusted net income and adjusted diluted earnings per share, which exclude special (gains) and charges and discrete tax items. The exclusion of special (gains) and charges and discrete tax items in such adjusted amounts help provide a better understanding of underlying business performance.

EBITDA is defined as the sum of net income including non-controlling interest, provision for income taxes, net interest expense, depreciation and amortization. Adjusted EBITDA is defined as the sum of EBITDA and special (gains) and charges impacting operating income. EBITDA and adjusted EBITDA are used as inputs to our net debt to EBITDA and net debt to adjusted EBITDA ratios, which we view as important indicators of our creditworthiness.

The adjusted tax rate measure promotes period-to-period comparability of the underlying effective tax rate because it excludes the tax rate impact of special (gains) and charges and discrete tax items which do not necessarily reflect costs associated with historical trends or expected future results.

Table of Contents

We evaluate the performance of our international operations based on fixed currency rates of foreign exchange. Fixed currency sales, acquisition adjusted fixed currency sales, fixed currency operating income and adjusted fixed currency operating income measures eliminate the impact of exchange rate fluctuations on our sales, acquisition adjusted sales, operating income, adjusted operating income and acquisition adjusted operating income, respectively, and promote a better understanding of our underlying sales and operating income trends. Fixed currency amounts are based on translation into U.S. dollars at fixed foreign currency exchange rates established by management at the beginning of 2015. Fixed currency exchange rates are generally based on existing market rates at the time they are established.

Acquisition adjusted growth rates generally exclude the results of any acquired business from the first twelve months post acquisition and exclude the results of divested businesses from the twelve months prior to divestiture. Presentation of 2015 versus 2014 acquisition adjusted growth rates continue to be handled in such a way. In addition, 2015 versus 2014 acquisition adjusted growth rates exclude our Venezuelan results of operations from both 2015 and 2014.

For presentation of 2014 versus 2013 acquisition adjusted growth rates, due to the rapid pace at which the Champion business has been integrated within our Global Energy segment, including all customer selling activity, discrete financial data specific to the legacy Champion business is no longer available for post-acquisition periods. As such, to allow for a more meaningful 2014 versus 2013 comparison, specific to the Champion transaction, Champion's results for the period prior to acquisition in 2013 have been included for purposes of providing acquisition adjusted growth rates. All other acquisitions and divestitures continue to be handled consistent with the mechanics described in the 2015 versus 2014 discussion above. The 2014 versus 2013 acquisition adjusted growth rates do not exclude the Venezuelan results of operations from either 2014 or 2013.

These non-GAAP measures are not in accordance with, or an alternative to U.S. GAAP, and may be different from non-GAAP measures used by other companies. Investors should not rely on any single financial measure when evaluating our business. We recommend that investors view these measures in conjunction with the U.S. GAAP measures included in this MD&A and we have provided reconciliations of reported U.S. GAAP amounts to the non-GAAP amounts.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

See discussion appearing under the headings entitled "Market Risk" and "Global Environment" within the MD&A of this Form 10-K.





Table of Contents

Item 8. Financial Statements and Supplementary Data.

REPORTS OF MANAGEMENT

To our Shareholders:

Management's Responsibility for Financial Statements

Management is responsible for the integrity and objectivity of the consolidated financial statements. The statements have been prepared in accordance with accounting principles generally accepted in the United States of America and, accordingly, include certain amounts based on management's best estimates and judgments.

The Board of Directors, acting through its Audit Committee composed solely of independent directors, is responsible for determining that management fulfills its responsibilities in the preparation of financial statements and maintains internal control over financial reporting. The Audit Committee recommends to the Board of Directors the appointment of the company's independent registered public accounting firm, subject to ratification by the shareholders. It meets regularly with management, the internal auditors and the independent registered public accounting firm.

The independent registered public accounting firm has audited the consolidated financial statements included in this annual report and have expressed their opinion regarding whether these consolidated financial statements present fairly in all material respects our financial position and results of operation and cash flows as stated in their report presented separately herein.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of management, including the principal executive officer and principal financial officer, an evaluation of the design and operating effectiveness of internal control over financial reporting was conducted based on the 2013 framework in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on the evaluation under the framework in Internal Control — Integrated Framework, management concluded that

internal control over financial reporting was effective as of December 31, 2015.

The company's independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of the company's internal control over financial reporting as of December 31, 2015 as stated in their report which is included herein.

Douglas Daniel J. Schmechel  
M.  
Baker, Jr.  
Chairman Chief Financial Officer  
and Chief  
Executive  
Officer

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Ecolab Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, comprehensive income, equity and cash flows present fairly, in all material respects, the financial position of Ecolab Inc. and its subsidiaries at December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013. The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may

deteriorate.

PricewaterhouseCoopers LLP

Minneapolis, Minnesota

February 26, 2016

51

---

Table of Contents

## CONSOLIDATED STATEMENT OF INCOME

Year ended December 31, (millions, except per share amounts)	2015	2014	2013
	\$	\$	\$
Net sales	13,545.1	14,280.5	13,253.4
Operating expenses			
Cost of sales (including special charges of \$80.6 in 2015, \$14.3 in 2014 and \$43.2 in 2013, respectively)	7,223.5	7,679.1	7,161.2
Selling, general and administrative expenses	4,345.5	4,577.6	4,360.3
Special (gains) and charges	414.8	68.8	171.3
Operating income	1,561.3	1,955.0	1,560.6
Interest expense, net (including special charges of \$2.5 in 2013)	243.6	256.6	262.3
Income before income taxes	1,317.7	1,698.4	1,298.3
Provision for income taxes	300.5	476.2	324.7
Net income including noncontrolling interest	1,017.2	1,222.2	973.6
Less: Net income (loss) attributable to noncontrolling interest (including special charges of \$12.8 in 2015, \$0.5 in 2013)	15.1	19.4	5.8
Net income attributable to Ecolab	\$ 1,002.1	\$ 1,202.8	\$ 967.8
Earnings attributable to Ecolab per common share			
	\$	\$	\$
Basic	3.38	4.01	3.23
	\$	\$	\$
Diluted	3.32	3.93	3.16
	\$	\$	\$
Dividends declared per common share	1.340	1.155	0.965
Weighted-average common shares outstanding			
Basic	296.4	300.1	299.9
Diluted	301.4	305.9	305.9

The accompanying notes are an integral part of the consolidated financial statements.

Table of Contents

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

Year ended December 31, (millions)	2015	2014	2013
	\$	\$	\$
Net income including noncontrolling interest	1,017.2	1,222.2	973.6
Other comprehensive income (loss), net of tax			
Foreign currency translation adjustments			
Foreign currency translation	(626.8)	(350.3)	(240.0)
Gain (loss) on net investment hedges	101.3	34.7	(11.4)
Reclassification associated with Venezuelan entities	2.4	-	-
	(523.1)	(315.6)	(251.4)
Derivatives and hedging instruments	11.7	3.9	7.0
Pension and postretirement benefits			
Current period net actuarial income (loss)	(2.3)	(354.8)	337.2
Pension and postretirement prior period service costs and benefits adjustments	4.5	(0.6)	(1.0)
Amortization of net actuarial loss and prior service costs included in net periodic pension and postretirement costs	33.6	12.1	46.7
Reclassification associated with Venezuelan entities	2.2	-	-
	38.0	(343.3)	382.9
Subtotal	(473.4)	(655.0)	138.5
Total comprehensive income, including noncontrolling interest	543.8	567.2	1,112.1
Less: Comprehensive income (loss) attributable to noncontrolling interest	13.1	11.1	(10.2)
	\$	\$	\$
Comprehensive income attributable to Ecolab	530.7	556.1	1,122.3

The accompanying notes are an integral part of the consolidated financial statements.

Table of Contents

## CONSOLIDATED BALANCE SHEET

December 31, (millions, except per share amounts)	2015	2014
<b>ASSETS</b>		
Current assets		
	\$	\$
Cash and cash equivalents	92.8	209.6
Accounts receivable, net	2,390.2	2,626.7
Inventories	1,388.2	1,466.9
Deferred income taxes	250.0	183.2
Other current assets	326.3	366.6
Total current assets	4,447.5	4,853.0
Property, plant and equipment, net	3,228.3	3,050.6
Goodwill	6,490.8	6,717.0
Other intangible assets, net	4,109.2	4,456.8
Other assets	365.9	350.0
	\$	\$
Total assets	18,641.7	19,427.4
<b>LIABILITIES AND EQUITY</b>		
Current liabilities		
	\$	\$
Short-term debt	2,205.3	1,704.8
Accounts payable	1,049.6	1,162.4
Compensation and benefits	509.0	560.4
Income taxes	52.2	88.6
Other current liabilities	948.3	851.7
Total current liabilities	4,764.4	4,367.9
Long-term debt	4,260.2	4,843.4
Postretirement health care and pension benefits	1,117.1	1,188.5
Other liabilities	1,519.6	1,645.5
Total liabilities	11,661.3	12,045.3
Equity (a)		
Common stock	350.3	347.7
Additional paid-in capital	5,086.1	4,874.5
Retained earnings	6,160.3	5,555.1
Accumulated other comprehensive loss	(1,423.3)	(951.9)
Treasury stock	(3,263.5)	(2,509.5)
Total Ecolab shareholders' equity	6,909.9	7,315.9
Noncontrolling interest	70.5	66.2
Total equity	6,980.4	7,382.1
	\$	\$
Total liabilities and equity	18,641.7	19,427.4



- (a) Common stock, 800.0 million shares authorized, \$1.00 par value, 296.0 million shares outstanding at December 31, 2015, 299.9 million shares outstanding at December 31, 2014. Shares outstanding are net of treasury stock.

The accompanying notes are an integral part of the consolidated financial statements.

Table of Contents

## CONSOLIDATED STATEMENT OF CASH FLOWS

Year ended December 31, (millions)	2015	2014	2013
<b>OPERATING ACTIVITIES</b>			
	\$	\$	\$
Net income including noncontrolling interest	1,017.2	1,222.2	973.6
Adjustments to reconcile net income including noncontrolling interest to cash provided by operating activities:			
Depreciation	559.5	558.1	514.2
Amortization	300.0	313.9	302.0
Deferred income taxes	(244.5)	(121.5)	(130.5)
Share-based compensation expense	78.2	71.1	69.6
Excess tax benefits from share-based payment arrangements	(57.8)	(55.9)	(36.6)
Pension and postretirement plan contributions	(64.9)	(76.7)	(80.0)
Pension and postretirement plan expense	113.8	83.9	142.4
Restructuring, net of cash paid	38.4	0.3	(39.8)
Venezuelan charges	289.3	-	23.2
(Gain) loss on sale of businesses	13.7	(4.8)	1.9
Fixed asset impairment	24.7	-	-
Other, net	11.6	7.8	16.4
Changes in operating assets and liabilities, net of effect of acquisitions:			
Accounts receivable	(24.0)	(175.4)	(147.4)
Inventories	(48.6)	(210.8)	(30.5)
Other assets	(69.1)	(106.3)	(68.7)
Accounts payable	(46.1)	174.7	50.6
Other liabilities	108.4	135.0	(0.6)
Cash provided by operating activities	1,999.8	1,815.6	1,559.8
<b>INVESTING ACTIVITIES</b>			
Capital expenditures	(771.0)	(748.7)	(625.1)
Capitalized software expenditures	(44.2)	(45.2)	(37.2)
Property and other assets sold	15.0	10.9	18.1
Acquisitions and investments in affiliates, net of cash acquired	(265.9)	(82.6)	(1,437.7)
Divestiture of businesses	0.5	10.4	(8.3)
Deposit into acquisition related escrow	-	(9.4)	(10.5)
Release from acquisition related escrow	45.6	8.7	13.0
Reduction of cash due to Venezuelan deconsolidation	(4.2)	-	-
Settlement of net investment hedges	108.4	7.6	-
Cash used for investing activities	(915.8)	(848.3)	(2,087.7)
<b>FINANCING ACTIVITIES</b>			
Net issuances (repayments) of commercial paper and notes payable	(312.1)	599.6	(278.3)
Long-term debt borrowings	1,223.7	-	900.1

Edgar Filing: ECOLAB INC. - Form 10-K

Long-term debt repayments	(1,034.7)	(907.8)	(511.2)
Reacquired shares	(755.1)	(428.6)	(307.6)
Dividends paid	(400.7)	(344.4)	(218.1)
Exercise of employee stock options	83.1	65.4	97.0
Excess tax benefits from share-based payment arrangements	57.8	55.9	36.6
Acquisition related liabilities and contingent consideration	(12.9)	(98.7)	(11.3)
Acquisition of noncontrolling interests	-	(8.4)	-
Other, net	-	(4.0)	0.2
Cash used for financing activities	(1,150.9)	(1,071.0)	(292.6)
Effect of exchange rate changes on cash and cash equivalents	(49.9)	(25.9)	1.9
Decrease in cash and cash equivalents	(116.8)	(129.6)	(818.6)
Cash and cash equivalents, beginning of year	209.6	339.2	1,157.8
	\$	\$	\$
Cash and cash equivalents, end of year	92.8	209.6	339.2
<b>SUPPLEMENTAL CASH FLOW INFORMATION</b>			
	\$	\$	\$
Income taxes paid	533.1	522.0	434.2
Interest paid	237.2	255.5	258.9

The accompanying notes are an integral part of the consolidated financial statements.

Table of Contents

## CONSOLIDATED STATEMENT OF EQUITY

	Ecolab Shareholders			OCI (Loss)	Treasury Stock	Ecolab Shareholders' Equity	Non- Controlling Interest	Total Equity
	Common Stock	Additional Paid-in Capital	Retained Earnings					
(in millions)								
Balance, December 31, 2012	\$ 342.1	\$ 4,249.1	\$ 4,020.6	\$ (459.7)	\$ (2,075.1)	\$ 6,077.0	\$ 83.1	\$ 6,160.1
Net income			967.8			967.8	5.8	973.6
Comprehensive income (loss)								
Goodwill impairment				154.5		154.5	(16.0)	138.5
Other comprehensive income (loss)						1,122.3	(10.2)	1,112.1
Share repurchases								
Share-based compensation			(289.4)			(289.4)	(11.4)	(300.8)
Share-based compensation		258.1			284.9	543.0	3.6	546.6
Share-based compensation awards	3.0	184.8			11.2	199.0		199.0
Share-based compensation awards acquired					(307.6)	(307.6)		(307.6)
Balance, December 31, 2013	345.1	4,692.0	4,699.0	(305.2)	(2,086.6)	7,344.3	65.1	7,409.4
Net income			1,202.8			1,202.8	19.4	1,222.2
Comprehensive income (loss)								
Goodwill impairment				(646.7)		(646.7)	(8.3)	(655.0)
Other comprehensive income (loss)						556.1	11.1	567.2
Share repurchases								
Share-based compensation			(346.7)			(346.7)	(14.0)	(360.7)
Share-based compensation							(2.9)	(2.9)
Acquisition of controlling interests		(0.3)				(0.3)	6.9	6.6
Balance, December 31, 2014	2.6	182.8			5.7	191.1		191.1

Stock options awards acquired shares income, December 31, 2014	347.7	4,874.5	5,555.1	(951.9)	(2,509.5)	7,315.9	66.2	7,382.1
Comprehensive income (loss) Availability of Comprehensive income (loss)			1,002.1			1,002.1	15.1	1,017.2
Dividends paid Venezuela consolidation			(396.9)			(396.9)	(8.3)	(405.2)
Stock options awards acquired shares income, December 31, 2015	2.6	205.4			7.3	215.3	(0.5)	215.3
		6.2			(761.3)	(755.1)		(755.1)
	\$ 350.3	\$ 5,086.1	\$ 6,160.3	\$ (1,423.3)	\$ (3,263.5)	\$ 6,909.9	\$ 70.5	\$ 6,980.4

## COMMON STOCK ACTIVITY

Year ended December 31, (shares)	2015		2014		2013	
	Common	Treasury	Common	Treasury	Common	Treasury
Shares, beginning of year	347,724,788	(47,872,332)	345,101,009	(43,965,830)	342,106,581	(47,384,557)
Stock options	1,962,360	151,261	1,850,757	122,455	2,206,661	254,680
Stock awards	652,672	14,745	773,022	8,231	787,767	11,008
Champion acquisition						6,596,444
Reacquired shares		(6,666,403)		(4,037,188)		(3,443,405)
Shares, end of year	350,339,820	(54,372,729)	347,724,788	(47,872,332)	345,101,009	(43,965,830)

The accompanying notes are an integral part of the consolidated financial statements.



Table of Contents

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF BUSINESS

Ecolab Inc. (“Ecolab” or “the company”) is the global leader in water, hygiene and energy technologies and services that protect people and vital resources. The company delivers comprehensive solutions and on-site service to promote safe food, maintain clean environments, optimize water and energy use and improve operational efficiencies for customers in the food, healthcare, energy, hospitality and industrial markets in more than 170 countries.

The company’s cleaning and sanitizing programs and products, pest elimination services, and equipment maintenance and repair services support customers in the foodservice, food and beverage processing, hospitality, healthcare, government and education, retail, textile care and commercial facilities management sectors. The company’s products and technologies are also used in water treatment, pollution control, energy conservation, oil production and refining, steelmaking, papermaking, mining and other industrial processes.

2. SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of the company and all subsidiaries in which the company has a controlling financial interest. Investments in companies, joint ventures or partnerships in which the company does not have control, but has the ability to exercise significant influence over operating and financial policies, are reported using the equity method. Effective as of the end of the fourth quarter of 2015, the company determined that it does not meet the accounting criteria for control over its Venezuelan subsidiaries. Therefore, the company deconsolidated its Venezuelan subsidiaries effective as of the end of the fourth quarter of 2015, and began accounting for the investments in its Venezuelan subsidiaries using the cost method of accounting, effective in the first quarter of 2016. The cost method of accounting is used in circumstances where the company has no substantial influence over the investee, and the investment has no easily determinable fair value. International subsidiaries are included in the financial statements on the basis of their U.S. GAAP November 30 fiscal year-ends to facilitate the timely inclusion of such entities in the company’s consolidated financial reporting. All intercompany transactions and profits are eliminated in consolidation.

Reclassifications

During the third quarter of 2015, the company early-adopted the updated accounting guidance related to simplifying the presentation of debt issue costs, using the retrospective application method. The company updated its December 31, 2014 Consolidated Balance Sheet, resulting in reductions to other assets, short-term debt and long-term debt of \$21.2 million, \$0.6 million and \$20.6 million, respectively. The corresponding footnote disclosures have also been updated to reflect the changes. Debt issuance costs incurred related to the company's credit facility remain within other assets on the Consolidated Balance Sheet. The updated guidance had no impact on previously reported earnings or consolidated cash flows.

As discussed further in Note 8, the company made a policy election regarding gross versus net presentation of its derivatives subject to master netting arrangements, which resulted in a reduction in other current assets and other current liabilities of \$18.1 million within the December 31, 2014 Consolidated Balance Sheet.

#### Use of Estimates

The preparation of the company's financial statements requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from these estimates. The company's critical accounting estimates include revenue recognition, valuation allowances and accrued liabilities, actuarially determined liabilities, restructuring, income taxes and long-lived assets, intangible assets and goodwill.

#### Foreign Currency Translation

Financial position and reported results of operations of the company's international subsidiaries are measured using local currencies as the functional currency. Assets and liabilities of these operations are translated at the exchange rates in effect at each fiscal year end. The translation adjustments related to assets and liabilities that arise from the use of differing exchange rates from period to period are included in accumulated other comprehensive income (loss) in shareholders' equity. Income statement accounts are translated at average rates of exchange prevailing during the year. The company evaluates its international operations based on fixed rates of exchange; however, the different exchange rates from period to period impact the amount of reported income from consolidated operations. The foreign currency fluctuations of any foreign subsidiaries that operate in highly inflationary environments are included in results of operations. Further details related to the highly inflationary environment in Venezuela and the company's actions taken to address the current conditions are included in Note 3.



## Table of Contents

### Concentration of Credit Risk

Credit risk represents the accounting loss that would be recognized at the reporting date if counterparties failed to perform as contracted. The company believes the likelihood of incurring material losses due to concentration of credit risk is remote. The principal financial instruments subject to credit risk are as follows:

**Cash and Cash Equivalents** - The company maintains cash deposits with major banks, which from time to time may exceed insured limits. The possibility of loss related to financial condition of major banks has been deemed minimal. Additionally, the company's investment policy limits exposure to concentrations of credit risk and changes in market conditions.

**Accounts Receivable** - A large number of customers in diverse industries and geographies, as well as the practice of establishing reasonable credit lines, limits credit risk. Based on historical trends and experiences, the allowance for doubtful accounts is adequate to cover potential credit risk losses.

**Foreign Currency and Interest Rate Contracts and Derivatives** - Exposure to credit risk is limited by internal policies and active monitoring of counterparty risks. In addition, the company uses a diversified group of major international banks and financial institutions as counterparties. The company does not anticipate nonperformance by any of these counterparties.

### Cash and Cash Equivalents

Cash equivalents include highly-liquid investments with a maturity of three months or less when purchased.

### Accounts Receivable and Allowance For Doubtful Accounts

Accounts receivable are carried at their face amounts less an allowance for doubtful accounts. Accounts receivable are recorded at the invoiced amount and generally do not bear interest. The company estimates the balance of allowance for doubtful accounts by analyzing accounts receivable balances by age and applying historical write-off and collection trend rates. The company's estimates include separately providing for customer balances based on specific circumstances and credit conditions, and when it is deemed probable that the balance is uncollectible. Account balances are charged off against the allowance when it is determined the receivable will not be recovered.

The company's allowance for doubtful accounts balance also includes an allowance for the expected return of products shipped and credits related to pricing or quantities shipped of \$15 million as of December 31, 2015 and 2014 and \$14 million as of December 31, 2013. Returns and credit activity is recorded directly to sales.

The following table summarizes the activity in the allowance for doubtful accounts:

(millions)	2015	2014	2013
	\$	\$	\$
Beginning balance	77	81	73
Bad debt expense	26	23	28
Write-offs	(22)	(20)	(21)
Other (a)	(6)	(7)	1
	\$	\$	\$
Ending balance	75	77	81

(a) Other amounts are primarily the effects of changes in currency translations and the impact of allowance for returns and credits.

#### Inventory Valuations

Inventories are valued at the lower of cost or market. Certain U.S. inventory costs are determined on a last-in, first-out (LIFO) basis. LIFO inventories represented 39% and 37% of consolidated inventories as of December 31, 2015 and 2014, respectively. LIFO inventories include certain legacy Nalco U.S. inventory acquired at fair value as part of the Nalco merger. All other inventory costs are determined using either the average cost or first-in, first-out (FIFO) methods. Inventory values at FIFO, as shown in Note 5, approximate replacement cost.

During the fourth quarter of 2015, the company improved estimates related to its inventory reserves and product costing, resulting in a net pre-tax charge of approximately \$6 million. Separately, the actions resulted in charge of \$20.6 million related to inventory reserve calculations, partially offset by a gain of \$14.5 million related to the capitalization of certain cost components into inventory. Both of these items are reflected in Note 3.

## Table of Contents

### Property, Plant and Equipment

Property, plant and equipment assets are stated at cost. Merchandising and customer equipment consists principally of various dispensing systems for the company's cleaning and sanitizing products, dishwashing machines and process control and monitoring equipment. Certain dispensing systems capitalized by the company are accounted for on a mass asset basis, whereby equipment is capitalized and depreciated as a group and written off when fully depreciated. The company capitalizes both internal and external costs of development or purchase of computer software for internal use. Costs incurred for data conversion, training and maintenance associated with capitalized software are expensed as incurred. Expenditures for major renewals and improvements, which significantly extend the useful lives of existing plant and equipment, are capitalized and depreciated. Expenditures for repairs and maintenance are charged to expense as incurred. Upon retirement or disposition of plant and equipment, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is recognized in income.

Depreciation is charged to operations using the straight-line method over the assets' estimated useful lives ranging from 5 to 40 years for buildings and leasehold improvements, 3 to 20 years for machinery and equipment and 3 to 15 years for merchandising and customer equipment and capitalized software. The straight-line method of depreciation reflects an appropriate allocation of the cost of the assets to earnings in proportion to the amount of economic benefits obtained by the company in each reporting period. Total depreciation expense was \$560 million, \$558 million and \$514 million for 2015, 2014 and 2013, respectively.

### Goodwill and Other Intangible Assets

#### Goodwill

Goodwill represents the excess of the purchase price over the fair value of identifiable net assets acquired. The company's operating units are aligned with its ten operating segments.

During the second quarter of 2015, the company completed its annual test for goodwill impairment. In order to refresh the estimated fair value of all ten of its operating units, the company elected to bypass the qualitative assessment and perform a quantitative test. The two-step quantitative process involved comparing the estimated fair value of each operating unit to the operating unit's carrying value, including goodwill. If the fair value of an operating unit exceeds its carrying value, goodwill of the operating unit is considered not to be impaired, and the second step of the impairment test is unnecessary. If the carrying amount of the operating unit exceeds its fair value, the second step of the goodwill impairment test would be performed to measure the amount of impairment loss to be recorded, if any.

The company's goodwill impairment assessment for 2015 indicated the fair value of each of its operating units exceeded its carrying amount by a significant margin. If circumstances change considerably, the company would also test an operating unit's goodwill for impairment during interim periods between its annual tests. As a result of Venezuela deconsolidation, the company updated its goodwill impairment assessment for the Global Energy reportable segment, which indicated no impairment, and a continued significant margin of fair value exceeding carrying value. There has been no impairment of goodwill since the adoption of Financial Accounting Standards Board ("FASB") guidance for goodwill and other intangibles on January 1, 2002.

The changes in the carrying amount of goodwill for each of the company's reportable segments are as follows:

(millions)	Global Industrial	Global Institutional	Global Energy	Other	Total
	\$	\$	\$	\$	\$
December 31, 2013	2,729.5	706.6	3,306.2	120.6	6,862.9
Current year business combinations (a)	18.5	-	9.9	4.6	33.0
Prior year business combinations (b)	(0.1)	-	16.9	-	16.8
Dispositions	-	(0.4)	-	(0.2)	(0.6)
Reclassifications (c)	(28.9)	5.0	23.9	-	-
Effect of foreign currency translation	(76.8)	(20.0)	(94.8)	(3.5)	(195.1)
December 31, 2014	2,642.2	691.2	3,262.1	121.5	6,717.0
Current year business combinations (a)	84.2	6.1	45.0	0.9	136.2
Prior year business combinations (b)	0.7	-	-	-	0.7
Dispositions	(0.4)	-	(0.1)	-	(0.5)
Reclassifications (d)	(23.7)	2.9	20.8	-	-
Effect of foreign currency translation	(142.2)	(37.5)	(176.3)	(6.6)	(362.6)
	\$	\$	\$	\$	\$
December 31, 2015	2,560.8	662.7	3,151.5	115.8	6,490.8

- (a) For 2015, the company expects \$45.9 million of the goodwill related to businesses acquired to be tax deductible. For 2014, \$20.7 million of the goodwill related to businesses acquired is expected to be tax deductible.
- (b) Represents purchase price allocation adjustments for acquisitions deemed preliminary as of the end of the prior year.
- (c) Represents immaterial transfers related to certain changes to the company's reportable segments during the first quarter of 2014.
- (d) Represents immaterial reclassifications of 2014 balances to conform to the current year presentation.

Table of Contents

## Other Intangible Assets

As part of the Nalco merger, the company added the “Nalco” trade name as an indefinite life intangible asset. During the second quarter of 2015, using the qualitative assessment method, the company completed its annual test for indefinite life intangible asset impairment. Based on this testing, no adjustment to the \$1.2 billion carrying value of this asset was necessary. Additionally, no events during the second half of 2015 indicated a need to update the company’s conclusions reached during the second quarter of 2015. There has been no impairment of the Nalco trade name intangible asset since it was acquired.

Intangible assets subject to amortization primarily include customer relationships, trademarks, patents and other technology. The fair value of identifiable intangible assets is estimated based upon discounted future cash flow projections and other acceptable valuation methods. Other intangible assets are amortized on a straight-line basis over their estimated economic lives. The weighted-average useful life of amortizable intangible assets was 14 years as of December 31, 2015 and 2014.

The weighted-average useful life by type of amortizable asset at December 31, 2015 is as follows:

(years)

Customer relationships	14
Trademarks	14
Patents	14
Other technology	7

The straight-line method of amortization reflects an appropriate allocation of the cost of the intangible assets to earnings in proportion to the amount of economic benefits obtained by the company in each reporting period. The company evaluates the remaining useful life of its intangible assets that are being amortized each reporting period to determine whether events and circumstances warrant a change to the remaining period of amortization. If the estimate of an intangible asset’s remaining useful life is changed, the remaining carrying amount of the intangible asset will be amortized prospectively over that revised remaining useful life. Total amortization expense related to other intangible assets during the last three years and future estimated amortization is as follows:

(millions)

	\$
2013	293
2014	305
2015	292

2016	294
2017	290
2018	285
2019	272
2020	270

### Long-Lived Assets

The company periodically reviews its long-lived and amortizable intangible assets for impairment and assesses whether significant events or changes in business circumstances indicate that the carrying value of the assets may not be recoverable. Such circumstances may include a significant decrease in the market price of an asset, a significant adverse change in the manner in which the asset is being used or in its physical condition or history of operating or cash flow losses associated with the use of an asset. An impairment loss may be recognized when the carrying amount of an asset exceeds the anticipated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss to be recorded, if any, is calculated by the excess of the asset's carrying value over its fair value. In 2015, as part of the actions taken regarding its Venezuelan businesses, the company wrote-off customer relationship intangible assets and other long-lived assets. See Note 3 for additional information regarding Venezuela. Also during 2015, the company impaired certain long-lived assets related to a product line within one of its U.S. plants. See Note 3 for additional information regarding this asset impairment.

In addition, the company periodically reassesses the estimated remaining useful lives of its long-lived assets. Changes to estimated useful lives would impact the amount of depreciation and amortization recorded in earnings. The company has not experienced significant changes in the carrying value or estimated remaining useful lives of its long-lived or amortizable intangible assets.

### Asset Retirement Obligations

The fair value of a liability for an asset retirement obligation associated with the retirement of tangible long-lived assets is recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. The liability is adjusted to its present value in subsequent periods as accretion expense is recorded. The corresponding asset retirement costs are capitalized as part of the carrying amount of the related long-lived asset and depreciated over the asset's useful life. The company's asset retirement obligation liability was \$10.2 million and \$9.5 million, respectively, at December 31, 2015 and 2014.

## Table of Contents

### Income Taxes

Income taxes are recognized during the period in which transactions enter into the determination of financial statement income, with deferred income taxes being provided for the tax effect of temporary differences between the carrying amount of assets and liabilities and their tax bases. The company records a valuation allowance to reduce its deferred tax assets when uncertainty regarding their realizability exists. Deferred income taxes are provided on the undistributed earnings of foreign subsidiaries except to the extent such earnings are considered to be permanently reinvested in the subsidiary.

The company records liabilities for income tax uncertainties in accordance with the recognition and measurement criteria prescribed in authoritative guidance issued by the FASB.

See Note 12 for additional information regarding income taxes.

### Restructuring Activities

The company's restructuring activities are associated with plans to enhance its efficiency, effectiveness and sharpen its competitiveness. These restructuring plans include net costs associated with significant actions involving employee-related severance charges, contract termination costs and asset write-downs and disposals. Employee termination costs are largely based on policies and severance plans, and include personnel reductions and related costs for severance, benefits and outplacement services. These charges are reflected in the quarter in which the actions are probable and the amounts are estimable, which is when management approves the associated actions. Contract termination costs include charges to terminate leases prior to the end of their respective terms and other contract termination costs. Asset write-downs and disposals include leasehold improvement write-downs, other asset write-downs associated with combining operations and disposal of assets.

See Note 3 for additional information regarding restructuring.

### Revenue Recognition

The company recognizes revenue on product sales at the time evidence of an arrangement exists, title to the product and risk of loss transfers to the customer, the price is fixed and determinable and collection is reasonably assured. The company recognizes revenue on services as they are performed. While the company employs a sales and service team

to ensure customer's needs are best met in a high quality way, the majority of the company's revenue is generated from product sales. The company's service businesses and service offerings are discussed in Note 17.

The company's sales policies do not provide for general rights of return. Critical estimates used in recognizing revenue include the delay between the time that products are shipped, when they are received by customers, when title transfers and the amount of credit memos issued in subsequent periods. The company records estimated reductions to revenue for customer programs and incentive offerings, including pricing arrangements, promotions and other volume-based incentives at the time the sale is recorded. The company also records estimated reserves for anticipated uncollectible accounts and for product returns and credits at the time of sale. Depending on market conditions, the company may increase customer incentive offerings, which could reduce gross profit margins at the time the incentive is offered.

#### Earnings Per Common Share

The difference in the weighted average common shares outstanding for calculating basic and diluted earnings attributable to Ecolab per common share is a result of the dilution associated with the company's equity compensation plans. As noted in the table below, certain stock options, units and awards outstanding under these equity compensation plans were not included in the computation of diluted earnings attributable to Ecolab per common share because they would not have had a dilutive effect.



Table of Contents

The computations of the basic and diluted earnings attributable to Ecolab per share amounts were as follows:

(millions, except per share)	2015	2014	2013
	\$	\$	\$
Net income attributable to Ecolab	1,002.1	1,202.8	967.8
Weighted-average common shares outstanding			
Basic	296.4	300.1	299.9
Effect of dilutive stock options, units and awards	5.0	5.8	6.0
Diluted	301.4	305.9	305.9
Earnings attributable to Ecolab per common share			
	\$	\$	\$
Basic	3.38	4.01	3.23
	\$	\$	\$
Diluted	3.32	3.93	3.16
Anti-dilutive securities excluded from the computation of earnings per share	3.5	3.4	1.8

## Other Significant Accounting Policies

The following table includes a reference to additional significant accounting policies that are described in other notes to the financial statements, including the note number:

Policy	Note
Fair value measurements	7
Derivatives and hedging transactions	8
Share-based compensation	11
Research and development expenditures	14
Legal contingencies	15
Pension and post-retirement benefit plans	16
Reportable segments	17

Table of Contents

## New Accounting Pronouncements

Standard	Date of Issuance	Description	Date of Adoption	Effect on the Financial Statements
Standards that are not yet adopted:				
ASU 2015-02 — Consolidation (Topic 810): Amendments to the Consolidation Analysis	February 2015	Certain factors that previously required reporting entities to consolidate a given legal entity have been eliminated, requiring fewer legal entities to be consolidated under the new guidance.	January 1, 2016	The company does not expect the updated guidance to have a significant impact on future financial statements.
ASU 2015-05 — Intangibles - Goodwill and Other - Internal Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement	April 2015	An entity that is the customer in a cloud computing arrangement that includes a software license should account for the software license element of the arrangement consistent with the acquisition of other software licenses.	January 1, 2016	The company does not expect the updated guidance to have an impact on future financial statements.
ASU 2015-07 - Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or its Equivalent) (a consensus of the Emerging Issues Taskforce)	May 2015	Investments for which fair value is measured at net asset value per share (or its equivalent) using the practical expedient of ASC 820 should not be categorized in the fair value hierarchy. However, the reporting entity should continue to disclose information on such investments.	January 1, 2016	Presentation impact related to pension plan asset disclosures.
ASU 2015-16 - Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments	September 2015	The amendment requires an acquirer to recognize adjustments identified during the measurement period in the reporting period in which the adjustment amounts are determined and to recognize a	January 1, 2016	The company does not expect the updated guidance to have a significant impact on future financial statements.

cumulative catch-up, if any, in the same period on the income statement as a result of the adjustment, calculated as if the accounting had been completed on the acquisition date. The amendment also requires an entity to present separately on the face of the income statement or disclose in the notes the amount of the cumulative adjustment by line item.

ASU 2015-11 - Inventory (Topic 330): Simplifying the Measurement of Inventory)	July 2015	The amendment requires entities to measure inventory under the FIFO or average cost methods at the lower of cost or net realizable value.	January 1, 2017	The company is currently evaluating the impact of adoption.
ASU 2015-17- Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes	November 2015	The amendment requires that all deferred tax assets and liabilities be classified as non-current in the consolidated balance sheet.	January 1, 2017	Presentation impact only related to deferred tax assets and deferred tax liabilities. The company does not expect the updated guidance to have a significant impact on future financial statements.
ASU 2014-09 — Revenue from Contracts with Customers (Topic 606) and ASU 2015-14 - Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date	May 2014	Recognition standard contains principles for entities to apply to determine the measurement of revenue and timing of when the revenue is recognized. The underlying principle of the updated guidance will have entities recognize revenue to depict the transfer of goods or services to customers at an amount that is expected to be received in exchange for those goods or services.	January 1, 2018	The company is currently evaluating the impact of adoption.
Standards that were adopted:				
ASU 2015-03 — Interest - Imputation of Interest (Subtopic 835-30):	April 2015	Debt issuance costs should no longer be recognized as a deferred charge -asset but	July 1, 2015	As discussed in Note 1, the company

Simplifying the Presentation of Debt Issuance Costs and ASU 2015-15 (Subtopic 835-30) - Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements

rather should be recorded as a direct deduction from the carrying amount of the debt liability. The subsequent amendment relates to deferring and presenting debt issuance costs as an asset and subsequently amortizing the deferred debt issuance costs ratably over the term of the line-of-credit arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement.

early-adopted the updated guidance in the third quarter of 2015, resulting in presentation related changes to its deferred financing costs and debt.

No other new accounting pronouncement issued or effective has had or is expected to have a material impact on the company's consolidated financial statements.

Table of Contents

## 3. SPECIAL (GAINS) AND CHARGES

Special (gains) and charges reported on the Consolidated Statement of Income included the following:

(millions)	2015	2014	2013
Cost of sales			
	\$	\$	\$
Restructuring charges	16.5	13.9	6.6
Venezuela related charges	33.3	-	-
Inventory costs	(14.5)	-	-
Inventory reserves	20.6	-	-
Fixed asset impairment	24.7	-	-
Recognition of inventory fair value step-up	-	0.4	36.6
Subtotal	80.6	14.3	43.2
Special (gains) and charges			
Restructuring charges	83.8	69.2	83.4
Champion acquisition and integration costs	17.1	19.9	49.7
Nalco merger and integration costs	1.6	8.5	18.6
Venezuela related charges	256.0	-	23.2
(Gains) losses related to litigation activities, sale of businesses, settlements and other	56.3	(28.8)	(3.6)
Subtotal	414.8	68.8	171.3
Operating income subtotal	495.4	83.1	214.5
Interest expense, net			
Acquisition debt costs	-	-	2.5
Net income attributable to noncontrolling interest			
Restructuring charges	(1.7)	-	-
Venezuela related charges	(11.1)	-	(0.5)
Subtotal	(12.8)	-	(0.5)
	\$	\$	\$
Total special (gains) and charges	482.6	83.1	216.5

For segment reporting purposes, special (gains) and charges are included in the Corporate segment, which is consistent with the company's internal management reporting.

Restructuring charges

Restructuring charges have been included as a component of cost of sales, special (gains) and charges and net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income. Amounts included as a component of cost of sales include supply chain related severance and other asset write-downs associated with combining operations. Restructuring liabilities have been classified as a component of both other current and other noncurrent liabilities on the Consolidated Balance Sheet.

#### Energy Restructuring Plan

In April 2013, following the completion of the acquisition of Champion the company commenced plans to undertake restructuring and other cost-saving actions to realize its acquisition-related cost synergies as well as streamline and strengthen Ecolab's position in the global energy market. Actions associated with the acquisition to improve the effectiveness and efficiency of the business included a reduction of the combined business's current global workforce. Actions also included leveraging and simplifying its global supply chain, including the reduction of plant, distribution center and redundant facility locations and product line optimization.

Restructuring charges within the Energy Restructuring Plan were substantially completed during the fourth quarter of 2015. Certain immaterial actions may continue into 2016. Ongoing cash payments will continue into 2016. Cumulative restructuring charges of \$82 million (\$59 million after tax), are materially consistent with the company's expectation of \$80 million (\$55 million after tax).

The company recorded restructuring charges within net income including noncontrolling interest of \$47.2 million (\$33.0 million after tax), \$9.5 million (\$6.4 million after tax) and \$27.4 million (\$19.4 million after tax) during 2015, 2014 and 2013, respectively. As a result of the ownership structure of certain entities holding Energy Restructuring Plan charges, the company reflected \$1.7 million of the 2015 charges as a component of net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income.

Table of Contents

Restructuring charges and activity related to the Energy Restructuring Plan since inception of the underlying actions include the following:

(millions)	Energy Restructuring Plan			
	Termination Costs	Asset Disposals	Other	Total
2013 - 2014 Activity				
Recorded expense and accrual	\$ 30.8	\$ 4.2	\$ 1.9	\$ 36.9
Cash payments	(29.6)	-	(1.8)	(31.4)
Non-cash charges	-	(4.2)	-	(4.2)
Effect of foreign currency translation	0.8	-	-	0.8
Restructuring liability, December 31, 2014	2.0	-	0.1	2.1
2015 Activity				
Recorded expense and accrual	24.8	9.0	13.4	47.2
Cash payments	(14.7)	3.9	(0.3)	(11.1)
Non-cash charges	-	(12.9)	-	(12.9)
Effect of foreign currency translation	(0.4)	-	-	(0.4)
Restructuring liability, December 31, 2015	\$ 11.7	\$ -	\$ 13.2	\$ 24.9

As shown in the previous table, net cash payments under the Energy Plan were \$11.1 million during 2015 and \$31.4 million from 2013 through 2014. The majority of cash payments under this plan are related to severance, with the current accrual expected to be paid over a period of a few months to several quarters. The company anticipates the remaining cash expenditures will continue to be funded from operating activities.

## Combined Plan

In February 2011, the company commenced a comprehensive plan to substantially improve the efficiency and effectiveness of its European business, as well as to undertake certain restructuring activities outside of Europe, historically referred to as the “2011 Restructuring Plan”. Additionally, in January 2012 and following the merger with Nalco, the company formally commenced plans to undertake restructuring actions related to the reduction of its global workforce and optimization of its supply chain and office facilities, including planned reduction of plant and distribution center locations, historically referred to as the “Merger Restructuring Plan”. During the first quarter of 2013, the company determined that because the objectives of the plans discussed above were aligned, the previously separate restructuring plans should be combined into one plan.

The Combined Plan combines opportunities and initiatives from both plans and continues to follow the original format of the Merger Restructuring Plan by focusing on global actions related to optimization of the supply chain and office

facilities, including reductions of the global workforce, plant and distribution center locations.

Restructuring charges within the Combined Plan were substantially completed during the fourth quarter of 2015. Certain immaterial actions may continue into 2016. Ongoing cash payments will continue into 2016. Cumulative restructuring charges of \$404 million (\$310 million after tax), are materially consistent with the company's expectation of \$400 million (\$300 million after tax).

The company recorded restructuring charges of \$53.0 million (\$44.2 million after tax), \$73.5 million (\$58.5 million after tax) and \$63.6 million (\$48.3 million after tax) during 2015, 2014 and 2013, respectively.

Restructuring charges and activity related to the Combined Plan since inception of the underlying actions include the following:

(millions)	Combined Plan			
	Termination	Asset		
	Costs	Disposals	Other	Total
2011 - 2014 Activity				
Recorded net expense and accrual	\$ 308.8	\$ (1.2)	\$ 43.6	\$ 351.2
Net cash payments	(242.4)	11.7	(30.3)	(261.0)
Non-cash net charges	-	(10.5)	(4.3)	(14.8)
Effect of foreign currency translation	(1.9)	-	-	(1.9)
Restructuring liability, December 31, 2014	64.5	-	9.0	73.5
2015 Activity				
Recorded net expense and accrual	40.9	7.3	4.8	53.0
Net cash payments	(38.9)	4.6	(7.8)	(42.1)
Non-cash net charges	0.6	(11.9)	(0.4)	(11.7)
Effect of foreign currency translation	(7.5)	-	-	(7.5)
Restructuring liability, December 31, 2015	\$ 59.6	\$ -	\$ 5.6	\$ 65.2



Table of Contents

As shown in the previous table, net cash payments under the Combined Plan were \$42.1 million during 2015 and \$261.0 million from 2011 through 2014. The majority of cash payments under the Combined Plan are related to severance, with the current accrual expected to be paid over a period of a few months to several quarters. The company anticipates the remaining cash expenditures will continue to be funded from operating activities.

Non-restructuring special (gains) and charges

Champion acquisition costs

As a result of the Champion acquisition completed in 2013, the company incurred charges of \$17.1 million (\$10.7 million after tax), \$19.9 million (\$12.8 million after tax) and \$88.8 million (\$61.4 million), during 2015, 2014 and 2013, respectively.

Champion acquisition and integration related costs have been included as a component of cost of sales, special (gains) and charges and net interest expense on the Consolidated Statement of Income. Amounts within cost of sales include the recognition of fair value step-up in Champion international inventory, which is maintained on a FIFO basis, and Champion U.S. inventory which was associated with the adoption of LIFO and integration into an existing LIFO pool. Amounts within special (gains) and charges include acquisition costs and integration charges. Amounts within net interest expense include the interest expense through the April 2013 close date of the Champion transaction of the company's \$500 million public debt issuance in December 2012 as well as amortizable fees to secure term loans and short-term debt, all of which were initiated to fund the Champion acquisition.

Nalco merger and integration costs

As a result of the Nalco merger completed in 2011, the company incurred charges of \$1.6 million (\$1.3 million after tax), \$8.5 million (\$7.0 million after tax) and \$18.6 million (\$14.2 million after tax) during 2015, 2014 and 2013, respectively.

Nalco merger and integration charges have been included as a component of special (gains) and charges on the Consolidated Statement of Income, and include merger and integration charges.

Venezuela

Venezuela is a country experiencing a highly inflationary economy as defined under U.S. GAAP. As a result, the U.S. dollar has been the functional currency for the company's subsidiaries in Venezuela. Prior to the deconsolidation of the company's Venezuelan subsidiaries, any currency remeasurement adjustments for non-U.S. dollar denominated monetary assets and liabilities held by the company's subsidiaries and other transactional foreign exchange gains and losses were reflected in earnings.

The Venezuelan government has maintained currency controls since 2003 and has directed a series of formal currency devaluations, the last of which established the Venezuelan currency at 6.3 bolivares to 1 U.S. dollar. During the last two years, the Venezuelan government has taken the following actions:

- In 2013, the establishment a new foreign exchange mechanism known as SICAD 1. It operates similar to an auction system and allows entities to exchange a limited number of bolivares for U.S. dollars at a bid rate established via weekly auctions. As of November 30, 2015, the fiscal year end for the company's international operations, the SICAD 1 exchange rate closed at 13.5 bolivares to 1 U.S. dollar.
- In January 2014, the replacement of CADIVI with a new foreign currency administration, CENCOEX, which did not impact the fixed currency exchange rate of 6.3 bolivares to 1 U.S. dollar.
- In March 2014, the establishment of SICAD 2, which operated similar to SICAD 1.
- In February 2015, SICAD 2 was replaced by SIMADI, a free-floating rate, with an exchange rate at November 30, 2015 of 199.5 bolivares to 1 U.S. dollar.

The exchange mechanisms discussed above have become increasingly illiquid, and the company believes that significant uncertainty continues to exist regarding the exchange mechanisms in Venezuela.

As of the end of 2015, the increasingly restrictive exchange control regulations and reduced access to dollars through official currency exchange markets have resulted in an other-than-temporary lack of exchangeability between the Venezuelan bolivar and the U.S. dollar. This has significantly impacted the company's ability to effectively manage its Venezuelan businesses, including restrictions on the ability of its Venezuelan businesses to settle U.S. dollar-denominated obligations. The currency controls, coupled with importation restrictions, workforce regulations, pricing constraints and local capitalization requirements have significantly influenced the company's ability to make and execute operational decisions regarding its businesses in Venezuela. The inability of the company's Venezuelan businesses to pay dividends, which remain subject to Venezuelan government approvals, has continued to restrict the company's ability to realize the earnings generated out of its Venezuelan businesses. The company expects the conditions described above will continue for the foreseeable future. Further, during the fourth quarter of 2015, given the company's high level of intercompany receivables, it pursued cash basis transactions to limit additional investment.

Table of Contents

As a result of these factors, the company concluded that effective as of the end of the fourth quarter of 2015, it does not meet the U.S. GAAP accounting criteria for control over its Venezuelan subsidiaries. Therefore, the company deconsolidated its Venezuelan subsidiaries effective as of the end of the fourth quarter of 2015, and began accounting for the investments in its Venezuelan subsidiaries using the cost method of accounting, effective in the first quarter of 2016. This action resulted in a charge of \$123.4 million (\$80.9 million after tax) during the fourth quarter of 2015, to reduce the value of the cost method investments to their estimated fair values, resulting in a full impairment. The fourth quarter 2015 charge included \$85 million of intercompany receivables, as well as net assets of the company's Venezuelan businesses and accumulated foreign currency translation.

Beginning in 2016, the company will exclude the operating results of its Venezuelan subsidiaries from its consolidated financial statements and record revenue related to the sale of inventory to its Venezuelan subsidiaries to the extent that cash is received for those sales. Any dividends received from the company's Venezuelan subsidiaries will be recorded as income upon receipt of cash.

The decision to deconsolidate the company's Venezuelan subsidiaries was preceded by the remeasurement of its Venezuelan Water and Paper net assets during the second quarter of 2015 at the SIMADI exchange rate and the remeasurement of its Venezuelan Food & Beverage and Institutional net assets and bolivar portion of its Venezuelan Energy net assets at the SIMADI exchange rate during the third quarter of 2015. The combination of these actions resulted in charges of \$165.9 million (\$165.9 million after tax) through the first three quarters of 2015. As a result of the ownership structure of the company's Food & Beverage and Institutional operations in Venezuela, the company reflected \$11.1 million of the above charges as a component of net income (loss) attributable to noncontrolling interest on the Consolidated Statement of Income, resulting in a net charge of \$154.8 million.

Total charges during 2015 related to the company's actions in Venezuela were \$289.3 million (\$246.8 million after tax), and \$235.7 million net of the impact from noncontrolling interest.

During 2015, Venezuelan net sales represented approximately 2% of the company's consolidated net sales and Venezuelan operating income represented approximately 4% of the company's consolidated operating income.

On February 8, 2013, the Venezuelan government devalued its currency from 4.3 bolivares to 1 U.S. dollar to 6.3 bolivars to 1 U.S. dollar, resulting in a charge during 2013 of \$22.7 million (\$16.1 million after tax), due to the remeasurement of the local balance sheet.

Other special (gains) and charges

During 2015, the company recorded a charge of \$24.7 million (\$15.4 million after tax) related to a fixed asset impairment, consisting of certain production equipment and buildings within one of the company's U.S. plants, resulting from lower than anticipated production. The fair value of the underlying assets was determined using the discounted cash flow method. Also during 2015, the company improved estimates related to its inventory reserves and product costing, resulting in a net pre-tax charge of approximately \$6 million. Separately, the actions resulted in a charge of \$20.6 million (\$15.9 million after tax) related to inventory reserve calculations, partially offset by a gain of \$14.5 million (\$12.2 million after tax) related to capitalization of certain costs components into inventory. These items have been included as a component of cost of sales on the Consolidated Statement of Income.

Also during 2015, the company recognized a net charge of \$56.3 million (\$34.5 million after tax) primarily made up of litigation related charges and the recognition of a loss on the sale of a portion of its Ecovation business, offset partially by the recovery of funds deposited into escrow as part of the Champion transaction. The net charges have been included as a component of special (gains) and charges on the Consolidated Statement of Income.

During 2014, the company recorded a special gain of \$28.4 million (\$23.3 million after tax), as a result of a favorable licensing settlement and other settlement gains, the consolidation of Emochem and removal of the corresponding equity method investment, and the disposition of a business. The net charges have been included as a component of special (gains) and charges on the Consolidated Statement of Income.

#### 4. ACQUISITIONS AND DISPOSITIONS

##### Acquisitions

Ecolab makes acquisitions that align with the company's strategic business objectives. The assets and liabilities of the acquired entities have been recorded as of the acquisition date, at their respective fair values, and are consolidated with the company. The purchase price allocation is based on estimates of the fair value of assets acquired and liabilities assumed. The results of operations related to each acquired entity have been included in the results of the company from the date each entity was acquired. The aggregate purchase price of acquisitions has been reduced for any cash or cash equivalents acquired with the acquisition.

##### Subsequent Event Activity

In January 2016, the company purchased certain assets of Keedak Limited, an oilfield chemical distributor in Nigeria. With pre-acquisition sales of approximately \$15 million, the acquired business will become part of the company's Global Energy reportable segment during the first quarter of 2016.



Table of Contents

2015 Activity

In December 2014, subsequent to the company's fiscal year end for international operations, the company entered into a licensing agreement and business acquisition with Aseptix Health Sciences NV. With pre-acquisition annual sales of less than \$1 million, the acquired business became part of the company's Global Institutional reportable segment during the first quarter of 2015.

In December 2014, subsequent to the company's fiscal year end for international operations, the company acquired Commercial Pest Control Pty Ltd, an Australian commercial pest control company. With pre-acquisition annual sales of less than \$1 million, the acquired business became part of the company's Other segment during the first quarter of 2015.

In April 2015, the company acquired certain assets from Clariant AG, based in Brazil and Argentina. With pre-acquisition annual sales of approximately \$4 million, the acquired business became part of the company's Global Industrial reportable segment during the second quarter of 2015. An immaterial portion of the transaction based in Colombia closed effective September 2015.

In June 2015, the company acquired Jianghai Environmental Protection Co. Ltd ("Jianghai"), an industrial water treatment company headquartered in Changzhou, China. The purchase price of the acquired business was approximately \$190 million. Significant assets acquired include customer relationships, trademarks and other technology, with goodwill calculated as the excess of consideration transferred over the fair value of identifiable net assets acquired. With pre-acquisition annual sales of approximately \$90 million, the acquired business became part of the company's Global Industrial reportable segment during the third quarter of 2015. The company has finalized the majority of the purchase price allocation adjustments as of December 31, 2015. Amounts for certain accounts receivable, certain contingent liabilities, certain plant and equipment valuations, certain deferred tax assets and liabilities, and goodwill remain subject to change. The company expects to finalize remaining purchase price allocation adjustments no later than one year from the acquisition date.

In November 2015, the company completed the acquisition of the U.S. operations of Charlotte, N.C. - based Swisher Hygiene Inc. ("Swisher") for approximately \$40 million. Swisher provides hygiene and sanitizing solutions for the foodservice, hospitality, retail and healthcare markets. Sales in 2014 for the operations included in the agreement were approximately \$176 million. The acquired business became part of the company's Global Institutional reportable segment in the fourth quarter of 2015. The purchase price allocation is preliminary, pending completion of fair value determination of the acquired assets and liabilities. The company expects to finalize remaining purchase price allocation adjustments no later than one year from the acquisition date.

In November 2015, the company acquired Ultra Fab Industries Ltd (“Ultrafab”) for approximately \$115 million. Based in Calgary, Canada, Ultrafab manufactures customized solutions and specialized chemical injection systems for the oil and gas industry. With pre-acquisition sales of approximately \$35 million, the acquired business became part of the company’s Global Energy reportable segment during the fourth quarter of 2015. The purchase price allocation is preliminary, pending completion of fair value determination of the acquired assets and liabilities. The company expects to finalize remaining purchase price allocation adjustments no later than one year from the acquisition date.

#### 2014 Activity

In December 2013, subsequent to the company’s fiscal year end for international operations, the company completed the acquisition of AkzoNobel’s Purate business (“Purate”). Headquartered in Sweden, Purate specializes in global antimicrobial water treatment. Pre-acquisition annual sales of the business were approximately \$23 million. The acquired business became part of the company’s Global Industrial reportable segment during the first quarter of 2014.

In March 2014, the company acquired AK Kraus & Hiller Schädlingsbekämpfung, one of Germany’s leading commercial pest elimination service providers. Pre-acquisition annual sales of the business were approximately \$4 million. The business became part of the company’s Other segment during the second quarter of 2014.

In March 2014, the company purchased the remaining interest in a joint venture held in South Africa. The transaction was not significant to the company’s operations.

In June 2014, the company purchased the remaining interest in a joint venture in Indonesia. The transaction was not significant to the company’s operations.

In July 2014, the company obtained control of Emochem, a joint venture in the United Arab Emirates through an amendment in the related shareholder agreements. This amendment resulted in the company consolidating the entity and removing the related equity method investment. The transaction was not significant to the company’s operations. As discussed in Note 3, the company recognized a \$5.0 million gain during the third quarter of 2014 as a result of this transaction.

In July 2014, the company acquired the chemical division of AKJ Industries, a leading provider of chemical solutions in the coal industry in the U.S. Pre-acquisition annual sales of the business were approximately \$21 million. The business became part of the company’s Global Industrial reportable segment during the third quarter of 2014.

In September 2014, the company acquired certain assets from Oksa Kimya Sanayii. Based in Turkey, the transaction was not significant to the company's operations.

68

---



Table of Contents

In November 2014, the company acquired the dairy hygiene chemical businesses of EXL Laboratories, LLC and Hyprod Canada, providers of cleaning and sanitizing products for use on dairy farms in the U.S. and Canada. Pre-acquisition annual sales of the businesses were approximately \$25 million. The business became part of the company's Global Industrial reportable segment during the fourth quarter of 2014.

## 2013 Activity

In January 2013, the company completed the acquisition of Mexico-based Quimiproducos S.A. de C.V. ("Quimiproducos"), a wholly-owned subsidiary of Fomento Economico Mexicano, S.A.B. de C.V. (commonly known as FEMSA). Quimiproducos produces and supplies cleaning, sanitizing and water treatment goods and services to breweries and beverage companies located in Mexico and Central and South America. Pre-acquisition annual sales of the business were approximately \$43 million. Approximately \$8 million of the purchase price was placed in an escrow account for potential indemnification purposes related to general representations and warranties. During the third quarter of 2014, the escrow balance was paid to the seller. The business became part of the company's Global Industrial reportable segment during the first quarter of 2013.

In April 2013, the company completed the acquisition of Russia-based OOO Master Chemicals ("Master Chemicals"). Master Chemicals sells oil field chemicals to oil and gas producers located throughout Russia and parts of the Ukraine. Pre-acquisition annual sales of the business were approximately \$29 million. Approximately \$3 million of the purchase price was placed in an escrow account for indemnification purposes related to general representations and warranties. During the fourth quarter of 2015, the escrow balance was paid to the seller. The business became part of the company's Global Energy reportable segment during the second quarter of 2013.

## Acquisition Summary

The other acquisitions during 2015, 2014 and 2013 discussed above were not material to the company's consolidated financial statements; therefore, pro forma financial information has not been presented. The aggregate purchase price of acquisitions has been reduced for any cash or cash equivalents acquired with the acquisitions. The components of the cash paid for acquisitions, including acquisition related liability and contingent consideration activity for current and prior year transactions, during 2015, 2014 and 2013, excluding the Champion transaction, are shown in the following table.

(millions)	2015	2014	2013
------------	------	------	------

Edgar Filing: ECOLAB INC. - Form 10-K

Net tangible assets acquired (liabilities assumed) including impact of joint venture consolidation activity	\$	\$	\$
	103.7	18.2	(0.3)
Identifiable intangible assets			
Customer relationships	65.6	32.0	58.8
Patents	6.7	-	1.4
Trademarks	13.5	3.4	-
Non-compete agreements	4.2	-	-
Other technology	8.7	4.5	1.0
Total intangible assets	98.7	39.9	61.2
Goodwill	136.9	32.9	41.7
Total aggregate purchase price	339.3	91.0	102.6
Acquisition related liabilities and contingent consideration	(60.5)	12.3	11.3
	\$	\$	\$
Net cash paid for acquisitions, including contingent consideration	278.8	103.3	113.9

The acquisition related liability activity during 2015 is related to hold-back liabilities and contingent consideration as part of the Jianghai, Swisher and UltraFab acquisitions, payable from the fourth quarter of 2015 through the second quarter of 2017. The 2014 and 2013 contingent consideration activity primarily relates to payments on legacy Nalco acquisitions.

The weighted average useful lives of identifiable intangible assets acquired, excluding the Champion transaction, was 10 years as of both December 2015 and December 2014 and 13 years as of December 2013.

#### Champion Acquisition

On April 10, 2013, the company completed its acquisition of Champion, a global energy specialty products and services company delivering its offerings to the oil and gas industry. The total fair value of cash and stock consideration transferred to acquire all of Champion's stock was approximately \$2.1 billion. Champion's sales for the business acquired by the company were approximately \$1.3 billion in 2012. The business became part of the company's Global Energy reportable segment in the second quarter of 2013.

The company funded the initial cash component of the merger consideration through a \$900 million unsecured term loan, initiated in April 2013, the proceeds from the December 2012 issuance of \$500 million 1.450% senior notes and commercial paper borrowings backed by its syndicated credit facility. See Note 6 for further discussion on the company's debt.



## Table of Contents

The company incurred certain acquisition related costs associated with the transaction that were expensed as incurred and are reflected in the Consolidated Statement of Income. Amounts included in cost of sales relate to recognition of fair value step-up in Champion international inventory, which is maintained on a FIFO basis and Champion U.S. inventory, which was associated with the adoption of LIFO and integration into an existing LIFO pool. Amounts included in special (gains) and charges include acquisition costs, advisory and legal fees and integration charges. Amounts included in net interest expense include the interest expense through the close date of the Champion transaction of the company's \$500 million public debt issuance in December 2012 as well as amortizable fees to secure term loans and short-term debt, all of which were initiated to fund the Champion acquisition.

During the first quarter of 2014 purchase price allocations were finalized, resulting in net adjustments of \$16.9 million to the value of Champion assets acquired and liabilities assumed, with an offset to goodwill. The adjustments primarily related to estimated liabilities, updated property, plant and equipment values and deferred taxes. As the adjustments were not significant, they were recorded in 2014 upon identification.

In accordance with the acquisition agreement, except under limited circumstances, the company was required to pay an additional amount in cash, up to \$100 million in the aggregate, equal to 50% of the incremental tax on the merger consideration as a result of increases in applicable gains and investment taxes after December 31, 2012. In January 2014, in accordance with the above discussion, an additional payment of \$86.4 million was made to the acquired entity's former stockholders.

The company deposited approximately \$100 million of the original Champion purchase price consideration in an escrow account to fund post-closing adjustments to the consideration, and covenant and other indemnification obligations of the acquired entities' former stockholders for a period of two years following the effective date of the acquisition. During 2015, the company reached a settlement of approximately \$35 million regarding the indemnification obligations of the acquired entities' former stockholders. The recovered funds adjusted certain other asset and other liability positions of approximately \$30 million on the company's Consolidated Balance Sheet. Approximately \$4 million was reflected in selling, general and administrative expenses, with the remainder recorded in special (gains) and charges, both within the Consolidated Statement of Income.

## Dispositions

In November 2015, the company sold an immaterial business in Europe that was part of the company's Global Energy reportable segment.

In June 2015, the company sold a portion of its Ecovation business, resulting in a loss of \$13.7 million (\$8.6 after tax), recorded in special (gains) and charges. The business was part of the company's Global Industrial reportable segment.

In April 2014, the company sold an immaterial business in Italy that was part of the company's Global Institutional reportable segment.

In November 2014, the company sold an immaterial business in New Zealand that was part of the company's Other segment.

In August 2013, the company sold substantially all the equipment design and build business of its Mobotec air emissions control business. The Mobotec equipment design and build business had 2012 sales of approximately \$27 million, which were within the company's Global Industrial reportable segment. The company has retained Mobotec's chemical business.

Table of Contents

## 5. BALANCE SHEET INFORMATION

December 31, (millions)	2015	2014
Accounts receivable, net		
	\$	\$
Accounts receivable	2,465.5	2,704.2
Allowance for doubtful accounts	(75.3)	(77.5)
	\$	\$
Total	2,390.2	2,626.7
Inventories		
	\$	\$
Finished goods	929.6	1,044.1
Raw materials and parts	440.9	447.3
Inventories at FIFO cost	1,370.5	1,491.4
FIFO cost to LIFO cost difference	17.7	(24.5)
	\$	\$
Total	1,388.2	1,466.9
Other current assets		
	\$	\$
Prepaid assets	94.6	104.7
Taxes receivable	137.6	133.0
Derivative assets	58.7	57.4
Other current assets	35.4	71.5
	\$	\$
Total	326.3	366.6
Property, plant and equipment, net		
	\$	\$
Land	223.7	199.9
Buildings and improvements	914.9	759.9
Leasehold improvements	81.1	84.6
Machinery and equipment	1,896.7	1,858.1
Merchandising and customer equipment	1,988.1	1,917.5
Capitalized software	479.9	443.9
Construction in progress	371.1	277.5
	5,955.5	5,541.4
Accumulated depreciation	(2,727.2)	(2,490.8)
	\$	\$
Total	3,228.3	3,050.6
Other intangible assets, net		
Cost of intangible assets not subject to amortization:		
	\$	\$
Trade names	1,230.0	1,230.0

Edgar Filing: ECOLAB INC. - Form 10-K

Cost of intangible assets subject to amortization:

	\$	\$
Customer relationships	3,232.3	3,385.7
Trademarks	303.6	311.1
Patents	433.4	434.5
Other technology	213.5	214.0
	4,182.8	4,345.3
Accumulated amortization		
Customer relationships	(945.1)	(794.6)
Trademarks	(104.7)	(91.5)
Patents	(129.0)	(124.9)
Other technology	(124.8)	(107.5)
	\$	\$
Total	4,109.2	4,456.8
Other assets		
	\$	\$
Deferred income taxes	58.3	71.5
Pension	28.0	15.9
Other	279.6	262.6
	\$	\$
Total	365.9	350.0

Table of Contents

December 31, (millions)	2015	2014
Other current liabilities		
	\$	\$
Discounts and rebates	270.5	255.4
Dividends payable	103.6	99.1
Interest payable	24.2	18.9
Taxes payable, other than income	110.5	122.6
Derivative liabilities	31.5	34.0
Restructuring	73.9	66.3
Other	334.1	255.4
	\$	\$
Total	948.3	851.7
Other liabilities		
	\$	\$
Deferred income taxes	1,281.2	1,415.8
Income taxes payable - noncurrent	81.2	86.4
Restructuring	16.2	9.3
Other	141.0	134.0
	\$	\$
Total	1,519.6	1,645.5
Accumulated other comprehensive loss		
	\$	\$
Unrealized gain (loss) on derivative financial instruments, net of tax	9.0	(2.7)
Unrecognized pension and postretirement benefit expense, net of tax	(486.9)	(552.5)
Cumulative translation, net of tax	(945.4)	(396.7)
	\$	\$
Total	(1,423.3)	(951.9)

## 6. DEBT AND INTEREST

The following table provides the components of the company's short-term debt obligations, along with applicable interest rates as of December 31, 2015 and 2014:

	2015	Average	2014	Average
(millions, except interest rates)	Carrying	Interest	Carrying	Interest



Edgar Filing: ECOLAB INC. - Form 10-K

	Value	Rate	Value	Rate
Short-term debt				
	\$		\$	
Commercial paper	605.0	0.70 %	887.8	0.46 %
Notes payable	30.9	3.33 %	62.1	9.65 %
Long-term debt, current maturities	1,569.4		754.9	
	\$		\$	
Total	2,205.3		1,704.8	

As of December 2015, the company had in place a \$2.0 billion multi-year credit facility, which expires in December 2019. The credit facility has been established with a diverse syndicate of banks and supports the company's \$2.0 billion U.S. commercial paper program and the company's \$200 million European commercial paper program. Combined borrowing under these two commercial paper programs may not exceed \$2.0 billion. The company's U.S. commercial paper program, as shown in the previous table, had \$605 million and \$888 million outstanding as of December 31, 2015 and 2014, respectively. The company had no commercial paper outstanding under its European program at December 31, 2015 or 2014.

As of December 31, 2015, the company's short-term borrowing program was rated A-2 by Standard & Poor's and P-2 by Moody's.

Table of Contents

The following table provides the components of the company's long-term debt obligations, along with applicable interest rates as of December 31, 2015 and 2014:

(millions, except interest rates)	Maturity by Year	2015				2014		
		Carrying Value	Average Interest Rate	Effective Interest Rate	Carrying Value	Average Interest Rate	Effective Interest Rate	
Long-term debt								
Description / 2015 Principal Amount								
Seven year 2008 senior notes (\$0 million)	2015	\$ -	- %	- %	\$ 250.0	4.88 %	5.03 %	
Three year 2012 senior notes (\$0 million)	2015	-	- %	- %	499.4	1.00 %	1.02 %	
Term loan (\$125 million)	2016	125.0	1.40 %	1.40 %	399.7	1.37 %	1.37 %	
Series B private placement senior notes (€175 million)	2016	184.9	4.59 %	4.73 %	217.7	4.59 %	4.73 %	
Five year 2011 senior notes (\$1.25 billion)	2016	1,247.3	3.00 %	3.08 %	1,245.3	3.00 %	3.20 %	
Five year 2012 senior notes (\$500 million)	2017	497.9	1.45 %	0.82 %	495.0	1.45 %	1.10 %	
Three year 2015 senior notes (\$300 million)	2018	297.8	1.55 %	0.98 %	-	- %	- %	
Series A private placement senior notes (\$250 million)	2018	248.6	3.69 %	4.32 %	249.3	3.69 %	5.22 %	
Five year 2015 senior notes (\$300 million)	2020	298.1	2.25 %	2.30 %	-	- %	- %	
Ten year 2011 senior notes (\$1.25 billion)	2021	1,243.7	4.35 %	4.43 %	1,242.7	4.35 %	4.43 %	
Series B private placement senior notes (\$250 million)	2023	249.1	4.32 %	4.36 %	249.0	4.32 %	4.36 %	
Ten year 2015 senior notes (€575 million)	2025	601.8	2.63 %	2.99 %	-	- %	- %	
Thirty year 2011 senior notes (\$750 million)	2041	738.3	5.50 %	5.56 %	737.8	5.50 %	5.56 %	
Capital lease obligations		5.6			9.3			
Other		91.5			3.1			
Total debt		5,829.6			5,598.3			
Long-term debt, current maturities		(1,569.4)			(754.9)			
Total long-term debt		\$ 4,260.2			\$ 4,843.4			

Term Loans

In November 2012, the company entered into a \$900 million term loan credit agreement with various banks. In April 2013, in connection with the close of the Champion transaction, the company initiated term loan borrowings of \$900 million. Under the agreement, the term loan bears interest at a floating base rate plus a credit rating based margin. The term loan can be repaid in part or in full at any time without penalty, but in any event must be repaid in full by April 2016. The company repaid \$275 million, \$400 million and \$100 million of term loan borrowings during 2015, 2014 and 2013, respectively. In January 2016, subsequent to the company's year end, it repaid the remaining \$125 million term loan.

#### Public Notes

In January 2016, subsequent to the company's year end, it issued \$800 million of debt securities consisting of a \$400 million aggregate principal three year fixed rate note with a coupon rate of 2.00% and a \$400 million aggregate principal seven year fixed rate note with a coupon rate of 3.25%. The proceeds were used to repay a portion of the company's outstanding commercial paper, repay the remaining term loan balance, and for general corporate purposes.

In July 2015, the company issued a €575 million aggregate principal ten year fixed rate note with a coupon rate of 2.625% (\$602 million as of December 31, 2015). The proceeds were used to repay a portion of the company's outstanding commercial paper.

In January 2015, the company issued \$600 million of debt securities consisting of a \$300 million aggregate principal three year fixed rate note with a coupon rate of 1.55% and a \$300 million aggregate principal five year fixed rate note with a coupon rate of 2.25%. The proceeds were used to repay a portion of the company's outstanding commercial paper and for general corporate purposes.

In December 2012, the company issued a \$500 million aggregate principal five year fixed rate note with a coupon rate of 1.45%. The proceeds were used to finance a portion of the cash consideration paid in connection with the Champion acquisition.

In August 2012, the company issued a \$500 million aggregate principal three year fixed rate note with a coupon rate of 1.00%. The proceeds were used to refinance outstanding commercial paper and for general corporate purposes. The debt was repaid at maturity in August 2015.

In December 2011, the company issued \$3.75 billion aggregate principal of debt securities. The offering was a multi-tranche transaction consisting of three, five, ten and thirty year maturities. Interest rates range from 2.375% to 5.50%. The proceeds were used to repay outstanding commercial paper, which was issued to fund a portion of the

cash component of the Nalco merger, repay the Nalco term loans and fund share repurchases. The \$500 million 2.375% notes were repaid at maturity in December 2014.

In February 2008, the company issued a \$250 million aggregate principal seven year fixed rate note with a coupon rate of 4.875%. The proceeds were used to refinance outstanding commercial paper and for general corporate purposes. The \$250 million 4.875% notes were repaid at maturity in February 2015.

## Table of Contents

The series of notes issued by the company in January 2016, July 2015, January 2015, December 2012 and December 2011, pursuant to public debt offerings (the “Public Notes”) may be redeemed by the company at its option at redemption prices that include accrued and unpaid interest and a make-whole premium. Upon the occurrence of a change of control accompanied by a downgrade of the Public Notes below investment grade rating, within a specified time period, the company will be required to offer to repurchase the Public Notes at a price equal to 101% of the aggregate principal amount thereof, plus any accrued and unpaid interest to the date of repurchase.

The Public Notes are senior unsecured and unsubordinated obligations of the company and rank equally with all other senior and unsubordinated indebtedness of the company.

## Private Notes

In October 2011, the company entered into a Note Purchase Agreement to issue and sell \$500 million aggregate principal private placement senior notes, split into two series: a \$250 million aggregate principal seven year fixed rate note with a coupon rate of 3.69% and a \$250 million aggregate principal twelve year fixed rate note with a coupon rate of 4.32%. Both series of the notes were funded in November 2011. The proceeds were used for general corporate purposes, including partially funding the Nalco merger.

In July 2006, the company entered into a Note Purchase Agreement to issue a €175 million aggregate principal (\$185 million as of December 31, 2015) ten year private placement fixed rate note with a coupon rate of 4.585%. The notes were funded in December 2006.

The series of notes issued by the company in December 2006 and November 2011 pursuant to private debt offerings (the “Private Notes”) may be redeemed by the company at its option at redemption prices that include accrued and unpaid interest and a make-whole premium. Upon the occurrence of specified changes of control involving the company, the company will be required to offer to repurchase the Private Notes at a price equal to 100% of the aggregate principal amount thereof, plus any accrued and unpaid interest to the date of repurchase. Additionally, the company will be required to make a similar offer to repurchase the Private Notes upon the occurrence of specified merger events or asset sales involving the company, when accompanied by a downgrade of the Private Notes below investment grade rating, within a specified time period.

The Private Notes are unsecured senior obligations of the company and rank equal in right of payment with all other senior indebtedness of the company. The Private Notes shall be unconditionally guaranteed by subsidiaries of the company in certain circumstances, as described in the note purchase agreements as amended.

## Other Debt

During 2015, the company acquired the beneficial interest in the trust owning the leased Naperville facility resulting in debt assumption of \$100.2 million and the addition of \$135.2 million in property, plant and equipment. Certain administrative, divisional, and research and development personnel are based at the Naperville facility. Cash paid as a result of the transaction was \$19.8 million. The assumed debt is reflected within the "Other" line of the table above. The assumption of debt and the majority of the property, plant and equipment addition represented non-cash financing and investing activities, respectively.

## Covenants and Future Maturities

The company is in compliance with all covenants under the company's outstanding indebtedness at December 31, 2015.

As of December 31, 2015, the aggregate annual maturities of long-term debt for the next five years were:

(millions)	\$
2016	1,569
2017	510
2018	558
2019	12
2020	310

## Net Interest Expense

Interest expense and interest income incurred during 2015, 2014 and 2013 were as follows:

(millions)	2015	2014	2013
	\$	\$	\$
Interest expense	253.7	268.0	272.8
Interest income	(10.1)	(11.4)	(10.5)
	\$	\$	\$
Interest expense, net	243.6	256.6	262.3

Interest expense generally includes the expense associated with the interest on the company's outstanding borrowings. Interest expense also includes the amortization of debt issuance costs and debt discounts, which are both recognized over the term of the related debt.

Table of Contents

## 7. FAIR VALUE MEASUREMENTS

The company's financial instruments include cash and cash equivalents, investments held in rabbi trusts, accounts receivable, accounts payable, contingent consideration obligations, commercial paper, notes payable, foreign currency forward contracts, interest rate swap contracts and long-term debt.

Fair value is defined as the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. A hierarchy has been established for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring the most observable inputs be used when available. The hierarchy is broken down into three levels:

Level 1 - Inputs are quoted prices in active markets that are accessible at the measurement date for identical assets or liabilities.

Level 2 - Inputs include observable inputs other than quoted prices in active markets.

Level 3 - Inputs are unobservable inputs for which there is little or no market data available.

The carrying amount and the estimated fair value for assets and liabilities measured on a recurring basis were:

December 31 (millions)	2015	Fair Value Measurements		
	Carrying Amount	Level 1	Level 2	Level 3
Assets:				
	\$	\$		
Investments held in rabbi trusts	2.0	2.0	\$ -	\$ -
Foreign currency forward contracts	111.2	-	111.2	-
Contingent consideration	0.3	-	-	0.3
Liabilities:				
Foreign currency forward contracts	35.9	-	35.9	-
Interest rate swap contracts	5.4	-	5.4	-
Contingent consideration	15.9	-	-	15.9



December 31 (millions)	2014			
	Carrying Amount	Fair Value Measurements		
		Level 1	Level 2	Level 3
<b>Assets:</b>				
	\$	\$		
Investments held in rabbi trusts	3.4	3.4	\$ -	\$ -
Foreign currency forward contracts	75.5	-	75.5	-
Contingent consideration	0.3	-	-	0.3
<b>Liabilities:</b>				
Foreign currency forward contracts	27.9	-	27.9	-
Interest rate swap contracts	24.2	-	24.2	-
Contingent consideration	1.6	-	-	1.6

The carrying value of investments held in rabbi trusts is at fair value, which is determined using quoted prices in active markets, and is classified within level 1. The carrying value of foreign currency forward contracts is at fair value, which is determined based on foreign currency exchange rates as of the balance sheet date, and is classified within level 2. The carrying value of interest rate swap contracts is at fair value, which is determined based on current interest rates and forward interest rates as of the balance sheet date and is classified within level 2. For purposes of fair value disclosure above, derivative values are presented gross. See further discussion of gross versus net presentation of the company's derivatives within Note 8.

Contingent consideration obligations are recognized and measured at fair value at the acquisition date. Contingent consideration is classified within level 3 as the underlying fair value is measured based on the probability-weighted present value of the consideration expected to be transferred. The consideration expected to be transferred is based on the company's expectations of various financial measures. The ultimate payment of contingent consideration could deviate from current estimates based on the actual results of these financial measures.

Table of Contents

Changes in the fair value of contingent consideration obligations during 2015 and 2014 were as follows:

(millions)	2015	2014
	\$	\$
Contingent consideration at beginning of year	1.3	16.4
Amount recognized at transaction date	16.0	(0.4)
Losses (gains) recognized in earnings	(0.2)	(0.4)
Settlements	(1.0)	(14.3)
Foreign currency translation	(0.5)	-
	\$	\$
Contingent consideration at end of year	15.6	1.3

The carrying values of accounts receivable, accounts payable, cash and cash equivalents, commercial paper and notes payable approximate fair value because of their short maturities, and as such are classified within level 1.

The fair value of long-term debt is based on quoted market prices for the same or similar debt instruments. The carrying amount and the estimated fair value of long-term debt, including current maturities, held by the company were:

December 31, (millions)	2015 Carrying Amount	Fair Value	2014 Carrying Amount	Fair Value
Long-term debt	\$	\$	\$	\$
(including current maturities)	5,829.6	6,113.6	5,598.3	5,980.9

## 8. DERIVATIVES AND HEDGING TRANSACTIONS

The company uses foreign currency forward contracts, interest rate swaps and foreign currency debt to manage risks associated with foreign currency exchange rates, interest rates and net investments in foreign operations. The company does not hold derivative financial instruments of a speculative nature or for trading purposes. The company records derivatives as assets and liabilities on the balance sheet at fair value. Changes in fair value are recognized immediately in earnings unless the derivative qualifies and is designated as a hedge. Cash flows from derivatives are classified in the statement of cash flows in the same category as the cash flows from the items subject to designated hedge or undesignated (economic) hedge relationships. The company evaluates hedge effectiveness at inception and on an

ongoing basis. If a derivative is no longer expected to be effective, hedge accounting is discontinued. Hedge ineffectiveness, if any, is recorded in earnings.

The company is exposed to credit risk in the event of nonperformance of counterparties for foreign currency forward exchange contracts and interest rate swap agreements. The company monitors its exposure to credit risk by using credit approvals and credit limits and by selecting major international banks and financial institutions as counterparties. The company does not anticipate nonperformance by any of these counterparties, and therefore, recording a valuation allowance against the company's derivative balance is not considered necessary.

### Cash Flow Hedges

The company utilizes foreign currency forward contracts to hedge the effect of foreign currency exchange rate fluctuations on forecasted foreign currency transactions, including inventory purchases and intercompany royalty, management fee and other payments. These forward contracts are designated as cash flow hedges. The effective portions of the changes in fair value of these contracts are recorded in accumulated other comprehensive income ("AOCI") until the hedged items affect earnings, at which time the gain or loss is reclassified into the same line item in the Consolidated Statement of Income as the underlying exposure being hedged. All cash flow hedged transactions are forecasted to occur within the next three years.

The company occasionally enters into forward starting interest rate swap agreements to manage interest rate exposure.

During 2015, the company entered into a series of forward starting interest rate swap agreements to hedge against changes in interest rates that could impact future debt issuances. The agreements were designated and effective as cash flow hedges of the expected interest payments related to the anticipated future debt issuances. The underlying net gain recognized during 2015 was recorded within AOCI. Certain agreements closed in January 2016, in conjunction with the debt issuance discussed in Note 6.

During 2014, the company entered into a series of forward starting interest rate swap agreements in connection with both its U.S. public debt issuance completed in January 2015 and its euro public debt issuance completed in July 2015. The agreements closed in January 2015 and July 2015, in conjunction with the respective U.S. and euro debt issuances discussed in Note 6. During 2011, the company entered into and subsequently closed a series of forward starting interest rate swap agreements in connection with the issuance of its private placement debt. During 2006, the company entered into and subsequently closed two forward starting interest rate swap agreements related to the issuance of its senior euro notes.



Table of Contents

The 2015, 2014, 2011 and 2006 forward starting interest rate swap agreements were designated and effective as cash flow hedges of the expected interest payments related to the debt issuances. The amounts recorded in AOCI for the respective transactions are recognized as part of interest expense over the remaining life of the notes as the forecasted interest transactions occur.

The impact on AOCI and earnings from derivative contracts that qualified as cash flow hedges was as follows:

(millions)		2015	2014	2013
Unrealized gain (loss) recognized into AOCI (effective portion)				
		\$	\$	\$
Foreign currency forward contracts	AOCI (equity)	68.4	26.7	4.7
Interest rate swap contracts	AOCI (equity)	3.6	(22.1)	-
	Total	72.0	4.6	4.7
Gain (loss) recognized in income (effective portion)				
Foreign currency forward contracts	Cost of sales	30.9	6.1	(0.8)
	SG&A	24.7	1.5	-
	Interest expense, net	2.9	-	-
	Total	58.5	7.6	(0.8)
Interest rate swap contracts	Interest expense, net	(5.5)	(4.1)	(4.1)
		\$	\$	\$
	Total	53.0	3.5	(4.9)

Gains and losses recognized in income related to the ineffective portion of the company's cash flow hedges were insignificant during 2015, 2014 and 2013.

## Fair Value Hedges

The company manages interest expense using a mix of fixed and floating rate debt. To help manage exposure to interest rate movements and to reduce borrowing costs, the company may enter into interest rate swaps under which the company agrees to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed upon notional principal amount. The mark-to-market of these fair value hedges is recorded as gains or losses in interest expense and is offset by the gain or loss of the underlying debt instrument, which also is recorded in interest expense. These fair value hedges are highly effective and thus, there is no impact on earnings due to hedge ineffectiveness.

In January 2015, the company entered into interest rate swap agreements that converted its \$300 million 1.55% debt, its \$250 million 3.69% debt and a portion of its \$1.25 billion 3.00% debt from fixed rates to floating interest rates. The interest rate swaps were designated as fair value hedges.

In May 2014, the company entered into an interest rate swap agreement that converted its \$500 million 1.45% debt from a fixed rate to a floating or variable interest rate. The interest rate swap was designated as a fair value hedge.

The impact on earnings from derivative contracts that qualified as fair value hedges was as follows:

(millions)		2015	2014	2013
Gain (loss) on derivative recognized income				
Interest rate swap	Interest expense, net	\$ 0.0	\$ (2.1)	\$ -
Gain (loss) on hedged item recognized income				
Interest rate swap	Interest expense, net	\$ (0.0)	\$ 2.1	\$ -

In January 2016, subsequent to the company's year end, it entered into an interest rate swap agreement that converted its \$400 million 2.00% debt from a fixed rate to a floating rate. The interest rate swap was designated as a fair value hedge.

#### Net Investment Hedges

The company designates its outstanding €175 million and €575 million (total of \$787 million as of year-end 2015) senior notes and related accrued interest as a hedge of existing foreign currency exposures related to net investments the company has in certain euro denominated functional currency subsidiaries.

In addition to the euro-denominated debt designated as net investment hedges, the company also occasionally enters into forward contracts to hedge an additional portion of its net investment in euro denominated functional currency subsidiaries. During 2014, the company entered into forward contracts totaling €570 million, of which €75 million was closed during 2014 and €495 million was closed during 2015. During 2015, the company entered into forward contracts totaling €490 million, of which €105 million was closed during 2015. Also during 2015, the company de-designated €360 million of the forward contracts opened in 2015, and initiated undesigned hedges for €360 million to offset the impact

of the original €360 million forward contracts.

77

---

Table of Contents

The revaluation gains and losses on the euro notes and of the forward contracts, which are designated and effective as hedges of the company's net investments, have been included as a component of the cumulative translation adjustment account.

Total revaluation gains and losses related to the euro notes and forward contracts charged to shareholders' equity were as follows:

(millions)	2015	2014	2013
	\$	\$	\$
Revaluation gains (losses), net of tax	101.3	34.7	(11.4)

## Derivatives Not Designated as Hedging Instruments

The company also uses foreign currency forward contracts to offset its exposure to the change in value of certain foreign currency denominated assets and liabilities held at foreign subsidiaries, primarily receivables and payables, which are remeasured at the end of each period. Although the contracts are effective economic hedges, they are not designated as accounting hedges. Therefore, changes in the value of these derivatives are recognized immediately in earnings, thereby offsetting the current earnings effect of the related foreign currency denominated assets and liabilities.

The impact on earnings from derivative contracts that are not designated as hedging instruments was as follows:

(millions)		2015	2014	2013
Gain (loss) recognized in income		\$	\$	\$
Foreign currency forward contracts	SG&A	15.9	8.6	(1.4)
	Interest expense, net	(8.6)	(9.0)	(6.6)
		\$	\$	\$
	Total	7.3	(0.4)	(8.0)

The amounts recognized in SG&A above offset the earnings impact of the related foreign currency denominated assets and liabilities. The amounts recognized in interest expense above represent the component of the hedging gains (losses) attributable to the difference between the spot and forward rates of the hedges as a result of interest rate differentials.



## Derivative Summary

Certain of the company's derivative transactions are subject to master netting arrangements that allow the company to net settle contracts with the same counterparties. These arrangements generally do not call for collateral and as of the applicable dates presented below, no cash collateral had been received or pledged related to the underlying derivatives.

During 2015, the company made an accounting policy election regarding the presentation of derivatives subject to master netting arrangements with the same counterparties within its Consolidated Balance Sheet. The company previously presented all derivative positions on a gross basis and began presenting derivatives subject to master netting arrangements with the same counterparties on a net basis during the first quarter of 2015. The company reclassified the presentation of derivatives subject to master netting arrangements with the same counterparty as of December 31, 2014 to conform to the new accounting policy which resulted in a reduction in other current assets and other current liabilities of \$18.1 million. The immaterial reclassification had no impact on previously reported earnings or cash flows.

The respective net amounts are included in other current assets, other non-current assets and other current liabilities on the Consolidated Balance Sheet.

(millions)	Asset Derivatives		Liability Derivatives	
	2015	2014	2015	2014
	\$	\$	\$	\$
Gross value of derivatives	111.2	75.5	41.3	52.1
Gross amounts offset in the Consolidated Balance Sheet	(9.8)	(18.1)	(9.8)	(18.1)
Net value of derivatives presented in the Consolidated Balance Sheet	\$ 101.4	\$ 57.4	\$ 31.5	\$ 34.0

The following table summarizes the gross fair value of the company's outstanding derivatives.

(millions)	Asset Derivatives		Liability Derivatives	
	2015	2014	2015	2014
Derivatives designated as hedging instruments:				
	\$	\$	\$	\$
Foreign currency forward contracts	70.2	17.9	3.2	0.6
Interest rate swap contracts	-	-	5.4	24.2

Derivatives not designated as hedging instruments:

Foreign currency forward contracts	41.0	57.6	32.7	27.3
	\$	\$	\$	\$
Total	111.2	75.5	41.3	52.1

Table of Contents

The following table summarized the notional values of the company's outstanding derivatives.

(millions)	Notional Values	
	2015	2014
Foreign currency forward contracts	\$ 4,000	\$ 2,800
Interest rate swap agreements	\$ 1,675	\$ 725
	€ -	€ 400
Net investment hedge contracts (a)	€ 25	€ 495

(a) The net investment hedge contracts exclude the company's euro denominated debt.

## 9. OTHER COMPREHENSIVE INCOME (LOSS) INFORMATION

Comprehensive income (loss) includes net income, foreign currency translation adjustments, unrecognized gains and losses on securities, defined benefit pension and postretirement plan adjustments, gains and losses on derivative instruments designated and effective as cash flow hedges and non-derivative instruments designated and effective as foreign currency net investment hedges that are charged or credited to the accumulated other comprehensive loss account in shareholders' equity.

The following table provides other comprehensive income (loss) information related to the company's derivatives and hedging instruments and pension and postretirement benefits. See Note 8 for additional information related to the company's derivatives and hedging transactions. See Note 16 for additional information related to the company's recognition of net actuarial losses and amortization of prior service benefits.

(millions)	2015	2014	2013
Derivative & Hedging Instruments			

Unrealized gains (losses) on derivative & hedging instruments			
	\$	\$	\$
Amount recognized in AOCI	72.0	4.6	4.7
(Gains) losses reclassified from AOCI into income			
Cost of sales	(30.9)	(6.1)	0.8
SG&A	(24.7)	(1.5)	-
Interest expense, net	2.6	4.1	4.1
	(53.0)	(3.5)	4.9
Translation & other insignificant activity	1.7	-	0.9
Tax impact	(9.0)	2.8	(3.5)
	\$	\$	\$
Net of tax	11.7	3.9	7.0
Pension & Postretirement Benefits			
Amount recognized in AOCI			
	\$	\$	\$
Current period net actuarial income (loss) and prior service costs	2.8	(517.7)	528.2
Amount reclassified from AOCI			
Amortization of net actuarial loss and prior service costs and benefits adjustments	52.0	17.5	72.9
Reclassification associated with Venezuelan entities	3.5	-	-
	58.3	(500.2)	601.1
Tax impact	(20.3)	156.9	(218.2)
	\$	\$	\$
Net of tax	38.0	(343.3)	382.9

The derivative (gains) losses reclassified from AOCI into income, net of tax, were \$(40.6) million, \$(3.0) million and \$3.2 million in 2015, 2014 and 2013, respectively. The pension and postretirement losses reclassified from AOCI into income, net of tax, were \$35.8 million, \$12.1 million and \$46.4 million in 2015, 2014 and 2013, respectively.

## 10. SHAREHOLDERS' EQUITY

Authorized common stock, par value \$1.00 per share, was 800 million shares at December 31, 2015, 2014 and 2013. Treasury stock is stated at cost. Dividends declared per share of common stock were \$1.340 for 2015, \$1.155 for 2014 and \$0.965 for 2013.

The company has 15 million shares, without par value, of authorized but unissued and undesignated preferred stock. The company's former shareholder rights agreement was amended in December 2012 and the rights agreement was terminated as of December 31, 2012. Prior to termination of the rights agreement, 0.4 million shares of preferred stock were designated as Series A Junior Participating Preferred Stock and were reserved for issuance in connection with the rights agreement, with the remaining 14.6 million shares of preferred stock being undesignated. Following termination of the rights agreement, a Certificate of Elimination of the Series A Junior Participating Preferred Stock was filed on January 2, 2013 with the Delaware Secretary of State to restore the 0.4 million shares designated as Series A Junior Participating Preferred Stock to the status of undesignated preferred stock.



Table of Contents

Share Repurchases

In August 2011, the Finance Committee of the company's Board of Directors, via delegation by the company's Board of Directors, authorized the repurchase of 10 million common shares, including shares to be repurchased under Rule 10b5-1, which was contingent upon completion of the merger with Nalco. In February 2015, the company's Board of Directors authorized the repurchase of up to 20 million additional shares of its common stock, including shares to be repurchased under Rule 10b5-1. As of December 31, 2015, 22,898,559 shares remained to be repurchased under the company's repurchase authorization. The company intends to repurchase all shares under its authorization, for which no expiration date has been established, in open market or privately negotiated transactions, subject to market conditions.

In February 2015, under the existing repurchase authorization discussed above, the company announced a \$1.0 billion share repurchase program, of which \$382 million remains to be repurchased as of December 31, 2015. The company expects the program to be completed by mid-2016.

As part of this program, the company entered into an accelerated stock repurchase ("ASR") agreement with a financial institution to repurchase \$300 million of its common stock. Under the ASR, the company received 2,066,293 shares of its common stock in February 2015, which was approximately 80% of the total number of shares the company expected to be repurchased under the ASR, based on the price of the company's common stock at that time.

The final per share purchase price and the total number of shares to be repurchased under the ASR agreement generally were based on the volume-weighted average price of the company's common stock during the term of the agreement. Upon final settlement of the ASR agreement, under certain circumstances, the financial institution was obligated to deliver additional shares to the company or the company was obligated to deliver additional shares of common stock or make a cash payment, at the company's election, to the financial institution. In connection with the finalization of the ASR in April 2015, the company received an additional 555,511 shares of common stock. All shares acquired under the ASR agreement were recorded as treasury stock.

From February 2015 through settlement in April 2015, the ASR was not dilutive to the company's earnings per share calculation. Additionally, the ASR agreement did not trigger the two-class earnings per share methodology. From February 2015 through settlement in April 2015, the unsettled portion of the ASR met the criteria to be accounted for as a forward contract indexed to the company's stock and qualified as an equity transaction.

The initial delivery of shares, as well as the additional receipt of shares at settlement resulted in a reduction to the company's common stock outstanding used to calculate earnings per share, the impact of which was not material.

In accordance with its share repurchase program through open market or private purchases, including the ASR discussed above, the company reacquired 6,267,699 shares, 3,547,334 shares and 3,096,464 shares of its common stock in 2015, 2014 and 2013, respectively. The number of shares repurchased in 2013 includes 1,258,115 shares the company repurchased from the Champion escrow account, with the cash paid to the beneficial shareholders deposited back into escrow. See further discussion of the Champion escrow settlement in Note 4.

In February 2016, separate from the ASR discussed above, the company entered into an ASR agreement with a financial institution to repurchase \$300 million of its common stock.

The company also reacquired 398,704, 489,854 and 346,941 shares withheld for taxes related to the exercise of stock options and the vesting of stock awards and units in 2015, 2014 and 2013, respectively.

### Champion Acquisition

On April 10, 2013, the company issued 6,596,444 shares of common stock for the stock consideration portion of the Champion acquisition. Of the total shares issued, the company deposited 1,258,115 shares, or approximately \$100 million of the total consideration, into an escrow fund to satisfy adjustments to the consideration and indemnification obligations of the acquired company's stockholders. Further information related to the acquisition of Champion is included in Note 4.

## 11. EQUITY COMPENSATION PLANS

The company measures compensation expense for share-based awards at fair value at the date of grant and recognizes compensation expense over the service period for awards expected to vest. The majority of grants to retirement eligible recipients (age 55 with required years of service) are attributed to expense using the non-substantive vesting method and are fully expensed over a six month period following the date of grant. In addition, the company includes a forfeiture estimate in the amount of compensation expense being recognized based on an estimate of the number of outstanding awards expected to vest.

The company's equity compensation plans provide for grants of stock options, performance-based restricted stock units ("PBRsUs") and non-performance-based restricted stock units ("RSUs") and restricted stock awards ("RSAs"). Common shares available for grant as of December 31, 2015, 2014 and 2013 were 15,888,937, 17,999,689 and 20,269,664, respectively. The company generally issues authorized but previously unissued shares to satisfy stock option exercises. The company has a share repurchase program and generally repurchases shares on the open market to help offset the dilutive effect of share-based compensation.





Table of Contents

The company's annual long-term incentive share-based compensation program is made up of 50% stock options and 50% PBRsUs. The company also grants RSUs. The remaining RSAs vested during 2015. Total compensation expense related to all share-based compensation plans was \$78 million (\$54 million net of tax benefit), \$71 million (\$49 million net of tax benefit) and \$70 million (\$48 million net of tax benefit) for 2015, 2014 and 2013, respectively. As of December 31, 2015, there was \$137 million of total measured but unrecognized compensation expense related to non-vested share-based compensation arrangements granted under all of the company's plans. That cost is expected to be recognized over a weighted-average period of 2.1 years.

## Stock Options

Stock options are granted to purchase shares of the company's stock at the average daily share price on the date of grant. These options generally expire within ten years from the grant date. The company generally recognizes compensation expense for these awards on a straight-line basis over the three year vesting period. As previously noted, stock option grants to retirement eligible recipients are attributed to expense using the non-substantive vesting method.

A summary of stock option activity and average exercise prices is as follows:

	2015		2014		2013	
	Number of	Exercise	Number of	Exercise	Number of	Exercise
	Options	Price (a)	Options	Price (a)	Options	Price (a)
		\$		\$		\$
Outstanding, beginning of year	13,169,776	63.88	13,926,256	55.66	15,125,156	48.29
Granted	1,686,816	118.99	1,645,937	107.63	1,640,210	101.22
Exercised	(2,316,025)	46.22	(2,316,918)	44.79	(2,583,026)	40.68
Canceled	(162,195)	99.67	(85,499)	83.81	(256,084)	63.00
		\$		\$		\$
Outstanding, end of year	12,378,372	74.23	13,169,776	63.88	13,926,256	55.66
		\$		\$		\$
Exercisable, end of year	9,248,880	61.18	9,820,826	52.21	10,233,265	46.33
Vested and expected to vest, end of year	12,194,511	73.64				

(a) Represents weighted average price per share.

The total aggregate intrinsic value of options (the amount by which the stock price exceeded the exercise price of the option on the date of exercise) that were exercised during 2015, 2014 and 2013 was \$160 million, \$150 million and \$123 million, respectively.

The total aggregate intrinsic value of options outstanding as of December 31, 2015 was \$514 million, with a corresponding weighted-average remaining contractual life of 6.3 years. The total aggregate intrinsic value of options exercisable as of December 31, 2015 was \$500 million, with a corresponding weighted-average remaining contractual life of 5.3 years. The total aggregate intrinsic value of options vested and expected to vest as of December 31, 2015 was \$513 million, with a corresponding weighted-average remaining contractual life of 6.3 years.

The lattice (binomial) option-pricing model is used to estimate the fair value of options at grant date. The company's primary employee option grant occurs during the fourth quarter. The weighted-average grant-date fair value of options granted and the significant assumptions used in determining the underlying fair value of each option grant, on the date of grant were as follows:

	2015		2014		2013	
Weighted-average grant-date fair value of options granted at market prices	\$		\$		\$	
	25.71		23.18		22.53	
Assumptions						
Risk-free rate of return	1.8	%	1.8	%	1.8	%
Expected life	6	years	6	years	6	years
Expected volatility	22.9	%	22.9	%	23.0	%
Expected dividend yield	1.2	%	1.2	%	1.1	%

The risk-free rate of return is determined based on a yield curve of U.S. treasury rates from one month to ten years and a period commensurate with the expected life of the options granted. Expected volatility is established based on historical volatility of the company's stock price. The expected dividend yield is determined based on the company's annual dividend amount as a percentage of the average stock price at the time of the grant.

Table of Contents

## PBRsUs, RSUs and RSAs

The expense associated with PBRsUs is based on the average of the high and low share price of the company's common stock on the date of grant, adjusted for the absence of future dividends. The awards vest based on the company achieving a defined performance target and with continued service for a three year period. Upon vesting, the company issues shares of its common stock such that one award unit equals one share of common stock. The company assesses the probability of achieving the performance target and recognizes expense over the three year vesting period when it is probable the performance target will be met. PBRsU awards granted to retirement eligible recipients are attributed to expense using the non-substantive vesting method. The awards are generally subject to forfeiture in the event of termination of employment.

The expense associated with shares of non-performance based RSUs and RSAs is based on the average of the high and low share price of the company's common stock on the date of grant, adjusted for the absence of future dividends and is amortized on a straight-line basis over the periods during which the restrictions lapse. The company currently has RSUs that vest over periods between 12 and 84 months. The remaining RSAs vested during 2015. The awards are generally subject to forfeiture in the event of termination of employment.

A summary of non-vested PBRsUs and restricted stock activity is as follows:

	PBRsU Awards	Grant Date Fair Value (a) \$	RSAs and RSUs	Grant Date Fair Value (a) \$
December 31, 2012	2,091,272	53.65	797,213	56.79
Granted	342,207	99.63	109,212	90.56
Vested / Earned	(594,366)	47.60	(249,093)	53.59
Canceled	(88,844)	57.71	(35,311)	56.20
		\$		\$
December 31, 2013	1,750,269	64.49	622,021	64.04
Granted	373,337	103.10	109,665	102.62
Vested / Earned	(503,324)	47.98	(306,830)	55.83
Canceled	(27,048)	74.09	(23,785)	73.01
		\$		\$
December 31, 2014	1,593,234	78.59	401,071	80.33
Granted	368,373	114.31	103,841	112.90
Vested / Earned	(468,317)	52.97	(212,576)	67.70
Canceled	(49,101)	90.97	(19,101)	81.06
		\$		\$
December 31, 2015	1,444,189	95.59	273,235	102.49

(a) Represents weighted average price per share.

## 12. INCOME TAXES

Income before income taxes consisted of:

(millions)	2015	2014	2013
	\$	\$	\$
United States	733.0	937.7	725.8
International	584.7	760.7	572.5
	\$	\$	\$
Total	1,317.7	1,698.4	1,298.3

The provision for income taxes consisted of:

(millions)	2015	2014	2013
	\$	\$	\$
Federal and state	241.4	344.3	301.3
International	303.6	253.4	153.9
Total current	545.0	597.7	455.2
Federal and state	(185.4)	(67.7)	(124.0)
International	(59.1)	(53.8)	(6.5)
Total deferred	(244.5)	(121.5)	(130.5)
	\$	\$	\$
Provision for income taxes	300.5	476.2	324.7

Table of Contents

The company's overall net deferred tax assets and deferred tax liabilities were comprised of the following:

December 31 (millions)	2015	2014
Deferred tax assets		
	\$	\$
Other accrued liabilities	172.7	122.9
Loss carryforwards	62.4	86.0
Share-based compensation	75.2	70.9
Pension and other comprehensive income	309.0	357.3
Foreign tax credits	31.3	15.6
Other, net	78.5	78.2
Valuation allowance	(31.8)	(74.2)
Total	697.3	656.7
Deferred tax liabilities		
Property, plant and equipment basis differences	267.5	269.2
Intangible assets	1,227.7	1,392.2
Unremitted foreign earnings	25.8	37.4
Other, net	158.4	126.1
Total	1,679.4	1,824.9
	\$	\$
Net deferred tax liabilities balance	(982.1)	(1,168.2)

As of December 31, 2015 the company has tax effected federal, state and international net operating loss carryforwards of \$0.8 million, \$6.0 million and \$55.6 million, respectively, which will be available to offset future taxable income. The state loss carryforwards expire from 2016 to 2035. For the international loss carryforwards, \$24.8 million expire from 2016 to 2035 and \$30.8 million have no expiration.

The company had valuation allowances on certain deferred tax assets of \$31.8 million and \$74.2 million at December 31, 2015 and 2014, respectively. During 2015, the company determined sufficient positive income trends existed to conclude it was more likely than not it would be able to realize the benefits of the net operating losses and other deferred tax assets within certain underlying foreign entities for which valuation allowances had been recorded, thus resulting in a \$20.6 million valuation allowance release. The reduction in the valuation allowance from year end 2014 to year end 2015 was also driven by current year utilization and foreign currency translation.

The company's U.S. foreign tax credit carryforward of \$31.3 million has a ten-year carryforward period and will expire between 2018 and 2025 if not utilized.

The company has a tax holiday in one foreign jurisdiction that resulted in tax reductions during 2015, 2014 and 2013. The company received a permit of operation, which expires in July 2021, from the National Council of Free Zones of

Exportation for the Dominican Republic. Companies operating under the Free Zones are not subject to income tax in the Dominican Republic on export income. The tax reduction as the result of the permit for 2015 was \$4.8 million, or approximately \$0.02 per diluted share. The impact of the tax holiday was similar during 2014 and 2013.

A reconciliation of the statutory U.S. federal income tax rate to the company's effective income tax rate is as follows:

	2015	2014	2013
Statutory U.S. rate	35.0 %	35.0 %	35.0 %
State income taxes, net of federal benefit	0.4	1.6	1.1
Foreign operations	(8.1)	(6.1)	(4.5)
Domestic manufacturing deduction	(2.7)	(2.0)	(2.6)
R&D credit	(1.0)	(0.7)	(1.4)
Change in valuation allowance	(1.7)	(0.1)	(1.0)
Nondeductible deal costs	(0.1)	-	0.2
Audit settlements and refunds	(0.7)	0.2	(0.8)
Venezuela charges	4.5	-	-
Worthless stock deduction	(3.0)	-	-
Other, net	0.2	0.1	(1.0)
Effective income tax rate	22.8 %	28.0 %	25.0 %

As of December 31, 2015 and 2014, the company has recorded deferred tax liabilities of \$25.8 million and \$37.4 million, respectively, on foreign earnings of the legacy Nalco entities and legacy Champion entities that the company intends to repatriate. The deferred tax liabilities originated based on purchase accounting decisions made in connection with the Nalco merger and Champion acquisition and were the result of extensive studies required to calculate the impact at the purchase date.

U.S. deferred income taxes are not provided on certain other unremitted foreign earnings that are considered permanently reinvested which as of December 31, 2015 and 2014 were approximately \$1.8 billion for both periods. These earnings are considered to be reinvested indefinitely or available for distribution with foreign tax credits to offset the amount of applicable income tax and foreign withholding taxes that may be payable on remittance. It is impractical due to the complexities associated with its hypothetical calculation to determine the amount of incremental taxes that might arise if all undistributed earnings were distributed.

Table of Contents

The company files income tax returns in the U.S. federal jurisdiction and various U.S. state and international jurisdictions. With few exceptions, the company is no longer subject to state and foreign income tax examinations by tax authorities for years before 2011. The IRS has completed examinations of the company's U.S. federal income tax returns (Ecolab and Nalco) through 2012. To date, the 2012 U.S. income tax return of Champion has not been audited. The company's Ecolab U.S. federal (including Nalco and Champion) income tax returns for the years 2013 and 2014 are currently under audit. In addition to the U.S. federal examination, there is ongoing audit activity in several U.S. state and foreign jurisdictions. The company anticipates changes to its uncertain tax positions due to closing of various audit years mentioned above. The company does not believe these changes will result in a material impact during the next twelve months. Decreases in the company's gross liability could result in offsets to other balance sheet accounts, cash payments, and/or adjustments to tax expense. The occurrence of these events and/or other events not included above within the next twelve months could change depending on a variety of factors and result in amounts different from above.

During 2015, the company recognized net benefits related to discrete tax items of \$63.3 million. The net benefits were driven primarily by the release of \$20.6 million of valuation allowances, as previously discussed, and the ability to recognize a worthless stock deduction of \$39.0 million for the tax basis in a wholly-owned domestic subsidiary.

During 2014, the company recognized net expense related to discrete tax items of \$13.2 million. The net expense in 2014 was driven primarily by an update to non-current tax liabilities for certain global tax audits, an adjustment related to the re-characterization of intercompany payments between its U.S. and foreign affiliates, the remeasurement of certain deferred tax assets and liabilities resulting from changes in its deferred state tax rate, recognizing adjustments from filing its 2013 U.S. federal and state tax returns, net changes of valuation allowances based on the realizability of foreign deferred tax assets and the impact from other foreign country audit settlements.

During 2013, the company recognized net benefits related to discrete taxes of \$41.7 million. The net benefit in 2013 was driven primarily by the net release of valuation allowances related to the realizability of foreign deferred tax assets of \$11.5 million, the remeasurement of certain deferred tax assets and liabilities of \$11.3 million and recognizing adjustments from filing its 2012 U.S. federal and state tax returns of \$11.0 million. The remaining discrete tax items relate primarily to recognizing settlements related to prior year income tax audits, law changes within a foreign jurisdiction, the retroactive extension during first quarter 2013 of the U.S. R&D credit for 2012, foreign audit adjustments and other adjustments to deferred tax assets and liabilities.

A reconciliation of the beginning and ending amount of gross liability for unrecognized tax benefits is as follows:

(millions)	2015	2014	2013
	\$	\$	\$
Balance at beginning of year	78.7	98.7	93.1
Additions based on tax positions related to the current year	5.8	5.3	9.1

Edgar Filing: ECOLAB INC. - Form 10-K

Additions for tax positions of prior years	0.9	5.2	6.1
Reductions for tax positions of prior years	(8.8)	(17.8)	(15.6)
Reductions for tax positions due to statute of limitations	(1.6)	(0.2)	(3.6)
Settlements	(4.2)	(9.0)	(0.7)
Assumed in connection with acquisitions	8.0	-	9.8
Foreign currency translation	(4.2)	(3.5)	0.5
	\$	\$	\$
Balance at end of year	74.6	78.7	98.7

The total amount of unrecognized tax benefits, if recognized would have affected the effective tax rate by \$59.2 million as of December 31, 2015, \$64.0 million as of December 31, 2014 and \$90.9 million as of December 31, 2013.

The company recognizes interest and penalties related to unrecognized tax benefits in its provision for income taxes. During 2015 the company released \$1.4 million related to interest and penalties and during 2014 and 2013, it accrued \$6.6 million and \$1.8 million in interest and penalties, respectively. The company had \$13.1 million and \$14.5 million of accrued interest, including minor amounts for penalties, at December 31, 2015 and 2014, respectively.



Table of Contents

## 13. RENTALS AND LEASES

The company leases sales and administrative office facilities, distribution centers, research and manufacturing facilities, as well as vehicles and other equipment under operating leases. Total rental expense under the company's operating leases was \$221 million in 2015, \$237 million in 2014 and \$217 million in 2013. As of December 31, 2015, identifiable future minimum payments with non-cancelable terms in excess of one year were:

(millions)	\$
2016	102
2017	83
2018	67
2019	59
2020	43
Thereafter	80
	\$
Total	434

The company enters into operating leases for vehicles whose non-cancelable terms are one year or less in duration with month-to-month renewal options. These leases have been excluded from the table above. The company estimates payments under such leases will approximate \$55 million in 2016. These vehicle leases have guaranteed residual values that have historically been satisfied by the proceeds on the sale of the vehicles.

## 14. RESEARCH AND DEVELOPMENT EXPENDITURES

Research expenditures that relate to the development of new products and processes, including significant improvements and refinements to existing products, are expensed as incurred. Such costs were \$191 million in 2015, \$197 million in 2014 and \$188 million in 2013. The company did not participate in any material customer sponsored research during 2015, 2014 or 2013.

## 15. COMMITMENTS AND CONTINGENCIES

The company is subject to various claims and contingencies related to, among other things, workers' compensation, general liability (including product liability), automobile claims, health care claims, environmental matters and lawsuits. The company is also subject to various claims and contingencies related to income taxes, which are covered

in Note 12. The company also has contractual obligations including lease commitments, which are covered in Note 13.

The company records liabilities where a contingent loss is probable and can be reasonably estimated. If the reasonable estimate of a probable loss is a range, the company records the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. The company discloses a contingent liability even if the liability is not probable or the amount is not estimable, or both, if there is a reasonable possibility that a material loss may have been incurred.

#### Insurance

Globally, the company has high deductible insurance policies for property and casualty losses. The company is insured for losses in excess of these deductibles, subject to policy terms and conditions and has recorded both a liability and an offsetting receivable for amounts in excess of these deductibles. The company is self-insured for health care claims for eligible participating employees, subject to certain deductibles and limitations. The company determines its liabilities for claims on an actuarial basis.

#### Litigation and Environmental Matters

The company and certain subsidiaries are party to various lawsuits, claims and environmental actions that have arisen in the ordinary course of business. These include from time to time antitrust, commercial, patent infringement, product liability and wage hour lawsuits, as well as possible obligations to investigate and mitigate the effects on the environment of the disposal or release of certain chemical substances at various sites, such as Superfund sites and other operating or closed facilities. The company has established accruals for certain lawsuits, claims and environmental matters. The company currently believes that there is not a reasonably possible risk of material loss in excess of the amounts accrued related to these legal matters. Because litigation is inherently uncertain, and unfavorable rulings or developments could occur, there can be no certainty that the company may not ultimately incur charges in excess of recorded liabilities. A future adverse ruling, settlement or unfavorable development could result in future charges that could have a material adverse effect on the company's results of operations or cash flows in the period in which they are recorded. The company currently believes that such future charges related to suits and legal claims, if any, would not have a material adverse effect on the company's consolidated financial position.

## Table of Contents

### Environmental Matters

The company is currently participating in environmental assessments and remediation at approximately 35 locations, most of which are in the U.S., and environmental liabilities have been accrued reflecting management's best estimate of future costs. Potential insurance reimbursements are not anticipated in the company's accruals for environmental liabilities.

### Matters Related to Wage Hour Claims

The company is a defendant in five pending wage hour lawsuits claiming violations of the Fair Labor Standards Act ("FLSA") or a similar state law. Of these five suits, two have been certified for class action status.

Ross (formerly Icard) v. Ecolab, U.S. District Court — Northern District of California, case no. C 13-05097 PJH, an action under California state law, has been certified for class treatment of California Institutional employees. The Court in Ross recently granted plaintiffs' motion for partial summary judgment, finding that Institutional Route Sales Managers are not exempt from overtime pay under California wage and hour laws. The company is seeking an appeal of this judgment. The court has not determined damages; however the company has established an accrual, which is not material to its results of operations or financial position.

In Cancilla v. Ecolab, U.S. District Court - Northern District of California, case no. CV 12-03001, the Court conditionally certified a nationwide class of Pest Elimination Service Specialists for alleged FLSA violations. The suit also seeks a purported California sub-class for alleged California wage hour law violations and certifications of classes for state law violations in Washington, Colorado, Maryland, Illinois, Missouri, Wisconsin and North Carolina. The Cancilla lawsuit has been settled. The settlement amount, which was not material to the company's operations or financial position, will be paid in the first quarter of 2016.

A third pending suit, Charlot v. Ecolab Inc., U.S. District Court-Eastern District of New York, case no. CV 12-04543, seeks nationwide class certification of Institutional employees for alleged FLSA violations as well as purported state sub-classes in New York, New Jersey, Washington and Pennsylvania alleging violations of state wage hour laws. The Court in Charlot recently granted the company's motion for summary judgment against plaintiffs on the federal FLSA claims. Plaintiffs' claims under state law remain pending and the judgment in favor of Ecolab may be subject to appeal by Plaintiffs.

A fourth pending suit, Schneider v. Ecolab, United States District Court for the Northern District of Illinois, case no. 14 C 01044, seeks certification of a class of Institutional employees for alleged violations of Illinois wage and hour

laws.

A fifth pending suit, *Martino v. Ecolab*, Santa Clara County California Superior Court, seeks certification of a California state class of Institutional employees for alleged violations of California wage and hour laws. The *Martino* case has been removed to the United States District Court for the Northern District of California. Case no. 5:14-cv-04358-PSG.

In addition to the five pending suits, the court entered an order of dismissal on August 12, 2015 in connection with the settlement of a sixth suit, *LaValley v. Ecolab*, United States District Court for the District of Minnesota, which sought certification of a class of Territory Representatives for alleged violations of the FLSA and New York state wage and hour laws. The settlement amount, which is not material to the company's operations or financial position, was paid in August 2015.

#### Matters Related to Deepwater Horizon Incident Response

On April 22, 2010, the deepwater drilling platform, the *Deepwater Horizon*, operated by a subsidiary of BP plc, sank in the Gulf of Mexico after a catastrophic explosion and fire that began on April 20, 2010. A massive oil spill resulted. Approximately one week following the incident, subsidiaries of BP plc, under the authorization of the responding federal agencies, formally requested Nalco Company, now an indirect subsidiary of Ecolab, to supply large quantities of COREXIT® 9500, a Nalco oil dispersant product listed on the U.S. EPA National Contingency Plan Product Schedule. Nalco Company responded immediately by providing available COREXIT and increasing production to supply the product to BP's subsidiaries for use, as authorized and directed by agencies of the federal government throughout the incident. Prior to the incident, Nalco and its subsidiaries had not provided products or services or otherwise had any involvement with the *Deepwater Horizon* platform. On July 15, 2010, BP announced that it had capped the leaking well, and the application of dispersants by the responding parties ceased shortly thereafter.

On May 1, 2010, the President appointed retired U.S. Coast Guard Commandant Admiral Thad Allen to serve as the National Incident Commander in charge of the coordination of the response to the incident at the national level. The EPA directed numerous tests of all the dispersants on the National Contingency Plan Product Schedule, including those provided by Nalco Company, "to ensure decisions about ongoing dispersant use in the Gulf of Mexico are grounded in the best available science." Nalco Company cooperated with this testing process and continued to supply COREXIT, as requested by BP and government authorities. After review and testing of a number of dispersants, on September 30, 2010, and on August 2, 2010, the EPA released toxicity data for eight oil dispersants.

The use of dispersants by the responding parties was one tool used by the government and BP to avoid and reduce damage to the Gulf area from the spill. Since the spill occurred, the EPA and other federal agencies have closely monitored conditions in areas where dispersant was applied. Nalco Company has encouraged ongoing monitoring and review of COREXIT and other dispersants and has cooperated fully with the governmental review and approval process. However, in connection with its provision of COREXIT, Nalco Company has been named in several lawsuits

as described below.

86

---

## Table of Contents

Cases arising out of the Deepwater Horizon accident were administratively transferred for pre-trial purposes to a judge in the United States District Court for the Eastern District of Louisiana with other related cases under In Re: Oil Spill by the Oil Rig “Deepwater Horizon” in the Gulf of Mexico, on April 20, 2010, Case No. 10-md-02179 (E.D. La.) (“MDL 2179”).

### Putative Class Action Litigation

Nalco Company was named, along with other unaffiliated defendants, in six putative class action complaints related to the Deepwater Horizon oil spill: Adams v. Louisiana, et al., Case No. 11-cv-01051 (E.D. La.); Elrod, et al. v. BP Exploration & Production Inc., et al., 12-cv-00981 (E.D. La.); Harris, et al. v. BP, plc, et al., Case No. 2:10-cv-02078-CJBSS (E.D. La.); Irelan v. BP Products, Inc., et al., Case No. 11-cv-00881 (E.D. La.); Petitjean, et al. v. BP, plc, et al., Case No. 3:10-cv-00316-RS-EMT (N.D. Fla.); and, Wright, et al. v. BP, plc, et al., Case No. 1:10-cv-00397-B (S.D. Ala.). The cases were filed on behalf of various potential classes of persons who live and work in or derive income from the effected Coastal region. Each of the actions contains substantially similar allegations, generally alleging, among other things, negligence relating to the use of our COREXIT dispersant in connection with the Deepwater Horizon oil spill. The plaintiffs in these putative class action lawsuits are generally seeking awards of unspecified compensatory and punitive damages, and attorneys’ fees and costs. These cases have been consolidated in MDL 2179.

### Other Related Claims Pending in MDL 2179

Nalco Company was also named, along with other unaffiliated defendants, in 23 complaints filed by individuals: Alexander, et al. v. BP Exploration & Production, et al., Case No. 11-cv-00951 (E.D. La.); Best v. British Petroleum plc, et al., Case No. 11-cv-00772 (E.D. La.); Black v. BP Exploration & Production, Inc., et al. Case No. 2:11-cv- 867, (E.D. La.); Brooks v. Tidewater Marine LLC, et al., Case No. 11-cv- 00049 (S.D. Tex.); Capt Ander, Inc. v. BP, plc, et al., Case No. 4:10-cv-00364-RH-WCS (N.D. Fla.); Coco v. BP Products North America, Inc., et al. (E.D. La.); Danos, et al. v. BP Exploration et al., Case No. 00060449 (25th Judicial Court, Parish of Plaquemines, Louisiana); Doom v. BP Exploration & Production, et al. , Case No. 12-cv-2048 (E.D. La.); Duong, et al., v. BP America Production Company, et al., Case No. 13-cv-00605 (E.D. La.); Esponge v. BP, P.L.C., et al., Case No. 0166367 (32nd Judicial District Court, Parish of Terrebonne, Louisiana); Ezell v. BP, plc, et al., Case No. 2:10-cv-01920-KDE-JCW (E.D. La.); Fitzgerald v. BP Exploration, et al., Case No. 13-cv-00650 (E.D. La.); Hill v. BP, plc, et al., Case No. 1:10-cv-00471-CG-N (S.D. Ala.); Hogan v. British Petroleum Exploration & Production, Inc., et al., Case No. 2012-22995 (District Court, Harris County, Texas); Hudley v. BP, plc, et al., Case No. 10-cv-00532-N (S.D. Ala.); In re of Jambon Supplier II, L.L.C., et al., Case No. 12-426 (E.D. La.); Kolian v. BP Exploration & Production, et al. , Case No. 12-cv-2338 (E.D. La.); Monroe v. BP, plc, et al., Case No. 1:10-cv-00472-M (S.D. Ala.); Pearson v. BP Exploration & Production, Inc., Case No. 2:11-cv-863, (E.D. La.); Shimer v. BP Exploration and Production, et al, Case No. 2:13-cv-4755 (E.D. La.); Top Water Charters, LLC v. BP, P.L.C., et al., No. 0165708 (32nd Judicial District Court, Parish of Terrebonne, Louisiana); Troups, et al. v Nalco Company, et al., Case No. 59-121 (25th Judicial District Court, Parish of Plaquemines, Louisiana); and, Trehern v. BP, plc, et al., Case No. 1:10-cv-00432-HSO-JMR (S.D. Miss.). The cases were filed on behalf of individuals and entities that own property, live, and/or work in or derive income from the effected Coastal region. Each of the actions contains substantially similar allegations,

generally alleging, among other things, negligence relating to the use of our COREXIT dispersant in connection with the Deepwater Horizon oil spill. The plaintiffs in these lawsuits are generally seeking awards of unspecified compensatory and punitive damages, and attorneys' fees and costs.

Pursuant to orders issued by the court in MDL 2179, the claims were consolidated in several master complaints, including one naming Nalco Company and others who responded to the Gulf Oil Spill (known as the "B3 Master Complaint"). On May 18, 2012, Nalco filed a motion for summary judgment against the claims in the "B3" Master Complaint, on the grounds that: (i) Plaintiffs' claims are preempted by the comprehensive oil spill response scheme set forth in the Clean Water Act and National Contingency Plan; and (ii) Nalco is entitled to derivative immunity from suit. On November 28, 2012, the Court granted Nalco's motion and dismissed with prejudice the claims in the "B3" Master Complaint asserted against Nalco. The Court held that such claims were preempted by the Clean Water Act and National Contingency Plan. Because claims in the "B3" Master Complaint remain pending against other defendants, the Court's decision is not a "final judgment" for purposes of appeal. Under Federal Rule of Appellate Procedure 4(a), plaintiffs will have 30 days after entry of final judgment to appeal the Court's decision.

Nalco Company, the incident defendants and the other responder defendants have been named as first party defendants by Transocean Deepwater Drilling, Inc. and its affiliates (the "Transocean Entities") (In re the Complaint and Petition of Triton Asset Leasing GmbH, et al, MDL No. 2179, Civil Action 10-2771). In April and May 2011, the Transocean Entities, Cameron International Corporation, Halliburton Energy Services, Inc., M-I L.L.C., Weatherford U.S., L.P. and Weatherford International, Inc. (collectively, the "Cross Claimants") filed cross claims in MDL 2179 against Nalco Company and other unaffiliated cross defendants. The Cross Claimants generally allege, among other things, that if they are found liable for damages resulting from the Deepwater Horizon explosion, oil spill and/or spill response, they are entitled to indemnity or contribution from the cross defendants.

In April and June 2011, in support of its defense of the claims against it, Nalco Company filed counterclaims against the Cross Claimants. In its counterclaims, Nalco Company generally alleges that if it is found liable for damages resulting from the Deepwater Horizon explosion, oil spill and/or spill response, it is entitled to contribution or indemnity from the Cross Claimants.

In December 2012 and January 2013, the MDL 2179 court issued final orders approving two settlements between BP and Plaintiffs' Class Counsel: (1) a proposed Medical Benefits Class Action Settlement; and (2) a proposed Economic and Property Damages Class Action Settlement. Pursuant to the proposed settlements, class members agree to release claims against BP and other released parties, including Nalco Energy Services, LP, Nalco Holding Company, Nalco Finance Holdings LLC, Nalco Finance Holdings Inc., Nalco Holdings LLC and Nalco Company.

Table of Contents

Other Related Actions

In March 2011, Nalco Company was named, along with other unaffiliated defendants, in an amended complaint filed by an individual in the Circuit Court of Harrison County, Mississippi, Second Judicial District (Franks v. Sea Tow of South Miss, Inc., et al., Cause No. A2402-10-228 (Circuit Court of Harrison County, Mississippi)). The amended complaint generally asserts, among other things, negligence and strict product liability claims relating to the plaintiff's alleged exposure to chemical dispersants manufactured by Nalco Company. The plaintiff seeks unspecified compensatory damages, medical expenses, and attorneys' fees and costs. Plaintiff's allegations place him within the scope of the MDL 2179 Medical Benefits Class. In approving the Medical Benefits Settlement, the MDL 2179 Court barred Medical Benefits Settlement class members from prosecuting claims of injury from exposure to oil and dispersants related to the Response. As a result of the MDL court's order, on April 11, 2013, the Mississippi court stayed proceedings in the Franks case. The Franks case was dismissed in May 2014.

The company believes the claims asserted against Nalco Company are without merit and intends to defend these lawsuits vigorously. The company also believes that it has rights to contribution and/ or indemnification (including legal expenses) from third parties. However, the company cannot predict the outcome of these lawsuits, the involvement it might have in these matters in the future, or the potential for future litigation.

## 16. RETIREMENT PLANS

### Pension and Postretirement Health Care Benefits Plans

The company has a non-contributory qualified defined benefit pension plan covering the majority of its U.S. employees. The company also has U.S. non-contributory non-qualified defined benefit plans, which provide for benefits to employees in excess of limits permitted under its U.S. pension plans. The company provides postretirement health care benefits to certain U.S. employees and retirees. The non-qualified plans are not funded and the recorded benefit obligation for the non-qualified plans was \$122 million and \$113 million at December 31, 2015 and 2014, respectively. The measurement date used for determining the U.S. pension plan assets and obligations is December 31.

Various international subsidiaries have defined benefit pension plans. International plans are funded based on local country requirements. The measurement date used for determining the international pension plan assets and obligations is November 30, the fiscal year-end of the company's international affiliates.



The U.S. postretirement health care plans are contributory based on years of service and choice of coverage (family or single), with retiree contributions adjusted annually. The measurement date used to determine the U.S. postretirement health care plan assets and obligations is December 31. Certain employees outside the U.S. are covered under government-sponsored programs, which are not required to be fully funded. The expense and obligation for providing international postretirement health care benefits are not significant.

Table of Contents

The following table sets forth financial information related to the company's pension and postretirement health care plans:

(millions)	U.S. Pension (a)		International Pension		U.S. Postretirement Health Care	
	2015	2014	2015	2014	2015	2014
Accumulated Benefit Obligation, end of year	\$ 2,040.2	\$ 2,075.0	\$ 1,185.7	\$ 1,304.6	\$ 229.2	\$ 240.4
Projected Benefit Obligation						
Projected benefit obligation, beginning of year	\$ 2,252.7	\$ 1,886.3	\$ 1,424.9	\$ 1,243.6	\$ 240.4	\$ 234.1
Service cost	76.5	66.4	31.8	32.2	3.8	4.3
Interest	91.1	90.0	38.1	49.8	9.6	10.8
Participant contributions	-	-	3.4	3.6	8.7	10.4
Medicare subsidies received	-	-	-	-	1.1	2.0
Curtailments and settlements	(1.2)	-	(5.5)	(15.9)	-	-
Plan amendments	-	-	(5.3)	0.1	-	0.9
Actuarial loss (gain)	(126.0)	329.4	(13.5)	248.8	(13.4)	-
Assumed through acquisitions	-	-	-	(0.2)	-	-
Benefits paid	(106.3)	(119.4)	(37.5)	(38.1)	(21.0)	(22.1)
Reclassification associated with Venezuelan entities	-	-	(13.1)	-	-	-
Foreign currency translation	-	-	(143.4)	(99.0)	-	-
Projected benefit obligation, end of year	\$ 2,186.8	\$ 2,252.7	\$ 1,279.9	\$ 1,424.9	\$ 229.2	\$ 240.4
Plan Assets						
Fair value of plan assets, beginning of year	\$ 1,871.6	\$ 1,848.9	\$ 847.7	\$ 787.6	\$ 13.3	\$ 14.8
Actual returns on plan assets	0.4	136.4	32.9	108.6	0.1	0.9
Company contributions	6.2	5.7	41.2	52.8	17.5	18.2
Participant contributions	-	-	3.4	3.6	1.4	1.5
Settlements	(1.2)	-	(5.5)	(12.8)	-	-
Benefits paid	(106.3)	(119.4)	(37.5)	(38.1)	(21.0)	(22.1)
Foreign currency translation	-	-	(68.7)	(54.0)	-	-
Fair value of plan assets, end of year	\$ 1,770.7	\$ 1,871.6	\$ 813.5	\$ 847.7	\$ 11.3	\$ 13.3
Funded Status, end of year	\$ (416.1)	\$ (381.1)	\$ (466.4)	\$ (577.2)	\$ (217.9)	\$ (227.1)
Amounts recognized in Consolidated Balance Sheet:						
Other assets	\$ -	\$ -	\$ 28.0	\$ 15.9	\$ -	\$ -
Other current liabilities	(12.1)	(9.6)	(16.9)	(15.7)	(7.3)	(7.0)
	(404.0)	(371.5)	(477.5)	(577.4)	(210.7)	(220.1)

## Postretirement healthcare and pension benefits

	\$	\$	\$	\$	\$	\$
Net liability	(416.1)	(381.1)	(466.4)	(577.2)	(218.0)	(227.1)

## Amounts recognized in Accumulated Other Comprehensive Loss (Income):

	\$	\$	\$	\$	\$	\$
Unrecognized net actuarial loss (gain)	512.8	555.8	310.1	358.0	(40.0)	(33.6)
Unrecognized net prior service benefits	(33.7)	(40.6)	(9.9)	(2.6)	0.1	-
Tax benefit	(188.4)	(201.8)	(77.1)	(93.4)	13.0	10.7
Accumulated other comprehensive loss (income), net of tax	\$ 290.7	\$ 313.4	\$ 223.1	\$ 262.0	\$ (26.9)	\$ (22.9)

## Change in Accumulated Other Comprehensive Loss (Income):

	\$	\$	\$	\$	\$	\$
Amortization of net actuarial loss	(48.5)	(23.7)	(15.4)	(9.1)	6.2	8.2
Amortization of prior service costs (benefits)	6.9	6.9	0.4	(0.1)	0.1	0.3
Current period net actuarial loss (gain)	6.2	321.4	9.2	194.8	(12.6)	0.5
Current period prior service costs (benefits)	-	-	(5.6)	0.1	-	0.9
Settlement	(0.7)	-	(1.0)	-	-	-
Tax expense (benefit)	13.4	(115.9)	16.3	(37.3)	2.3	(3.7)
Reclassification associated with Venezuelan entities	-	-	(3.5)	-	-	-
Foreign currency translation	-	-	(39.3)	(25.8)	-	-
Other comprehensive loss (income)	\$ (22.7)	\$ 188.7	\$ (38.9)	\$ 122.6	\$ (4.0)	\$ 6.2

(a) Includes qualified and non-qualified plans

Table of Contents

Estimated amounts in accumulated other comprehensive loss expected to be reclassified to net period cost during 2016 are as follows:

(millions)	U.S. Pension (a)	International Pension	U.S. Post- Retirement Health Care
	\$	\$	\$
Net actuarial loss (gain)	30.8	14.3	(1.7)
Net prior service costs (benefits)	(6.9)	(0.9)	(0.2)
	\$	\$	\$
Total	23.9	13.4	(1.9)

(a) Includes qualified and non-qualified plans

The aggregate projected benefit obligation, accumulated benefit obligation and fair value of pension plan assets for plans with accumulated benefit obligations in excess of plan assets were as follows:

December 31 (millions)	2015	2014
Aggregate projected benefit obligation	\$ 3,088.0	\$ 3,272.1
Accumulated benefit obligation	2,882.5	3,011.9
Fair value of plan assets	2,190.6	2,315.7

These plans include the U.S. non-qualified pension plans which are not funded as well as the U.S. qualified pension plan. These plans also include various international pension plans which are funded consistent with local practices and requirements.

#### Net Periodic Benefit Costs

Pension and postretirement health care benefits expense for the company's operations are as follows:

U.S. Pension (a)	International Pension	U.S. Postretirement Health Care
---------------------	--------------------------	------------------------------------

Edgar Filing: ECOLAB INC. - Form 10-K

(millions)	2015	2014	2013	2015	2014	2013	2015	2014	2013
Service cost - employee benefits earned during the year	\$ 76.5	\$ 66.4	\$ 68.6	\$ 31.8	\$ 32.2	\$ 36.0	\$ 3.8	\$ 4.3	\$ 5.9
Interest cost on benefit obligation	91.1	90.0	84.7	38.1	49.8	47.2	9.6	10.8	10.8
Expected return on plan assets	(132.6)	(128.4)	(130.1)	(55.6)	(54.6)	(46.9)	(0.9)	(1.0)	(1.1)
Recognition of net actuarial loss	48.5	23.7	62.3	15.4	7.0	11.3	(6.2)	(8.2)	0.6
Amortization of prior service cost (benefit)	(6.9)	(6.9)	(6.9)	(0.4)	0.4	(0.3)	(0.1)	(0.3)	(0.3)
Settlements/Curtailments	0.7	-	0.9	1.0	(1.3)	(0.3)	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Total expense	77.3	44.8	79.5	30.3	33.5	47.0	6.2	5.6	15.9

(a) Includes qualified and non-qualified plans

Plan Assumptions  (percent)	U.S. Pension (a)			International Pension			U.S. Postretirement Health Care		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
Weighted-average actuarial assumptions used to determine benefit obligations as of year end:									
Discount rate	4.51 %	4.14 %	4.92 %	2.93 %	3.02 %	4.09 %	4.38 %	4.08 %	4.77 %
Projected salary increase	4.32	4.32	4.32	2.50	2.66	2.73			
Weighted-average actuarial assumptions used to determine net cost:									
Discount rate	4.14	4.92	4.14	2.78	4.45	4.34	4.08	4.77	3.95
Expected return on plan assets	7.75	7.75	8.25	6.80	6.90	6.79	7.75	7.75	8.25
Projected salary increase	4.32	4.32	4.32	2.83	3.58	3.70			

(a) Includes qualified and non-qualified plans

The discount rate assumptions for the U.S. plans are developed using a bond yield curve constructed from a population of high-quality, non-callable, corporate bond issues with maturities ranging from six months to thirty years. A discount rate is estimated for the U.S. plans and is based on the durations of the underlying plans.



Table of Contents

For 2015, the company measured service and interest costs utilizing a single weighted-average discount rate derived from the yield curve used to measure the plan obligations. At the end of 2015, the company changed the approach used to measure service and interest costs for pension and other postretirement benefits. For 2016, the company elected to measure service and interest costs by applying the specific spot rates along that yield curve to the plans' liability cash flows. The company believes the new approach provides a more precise measurement of service and interest costs by aligning the timing of the plans' liability cash flows to the corresponding spot rates on the yield curve. This change does not affect the measurement of its plan obligations. The company has accounted for this change as a change in accounting estimate and, accordingly, has accounted for it on a prospective basis.

The expected long-term rate of return used for the U.S. plans is based on the pension plan's asset mix. The company considers expected long-term real returns on asset categories, expectations for inflation, and estimates of the impact of active management of the assets in coming to the final rate to use. The company also considers actual historical returns.

The expected long-term rate of return used for the company's international plans is determined in each local jurisdiction and is based on the assets held in that jurisdiction, the expected rate of returns for the type of assets held and any guaranteed rate of return provided by the investment. The other assumptions used to measure the international pension obligations, including discount rate, vary by country based on specific local requirements and information. As previously noted, the measurement date for these plans is November 30.

For postretirement benefit measurement purposes as of December 31, 2015, the annual rates of increase in the per capita cost of covered health care were assumed to be 7.25%. The rates are assumed to decrease each year until they reach 5% in 2027 and remain at those levels thereafter. Health care costs for certain employees which are eligible for subsidy by the company are limited by a cap on the subsidy.

Assumed health care cost trend rates have an effect on the amounts reported for the company's U.S. postretirement health care benefits plan. A one-percentage point change in the assumed health care cost trend rates would have the following effects:

(millions)	1-Percentage Point	
	Increase	Decrease
Effect on total of service and interest cost components	\$ (0.1)	\$ 0.1
Effect on postretirement benefit obligation	1.4	(1.6)

## Plan Asset Management

The company's U.S. investment strategy and policies are designed to maximize the possibility of having sufficient funds to meet the long-term liabilities of the pension fund, while achieving a balance between the goals of asset growth of the plan and keeping risk at a reasonable level. Current income is not a key goal of the policy. The asset allocation position reflects the ability and willingness to accept relatively more short-term variability in the performance of the pension plan portfolio in exchange for the expectation of better long-term returns, lower pension costs and better funded status in the long run.

The pension fund is diversified across a number of asset classes and securities. Selected individual portfolios within the asset classes may be undiversified while maintaining the diversified nature of total plan assets. The company has no significant concentration of risk in its U.S. plan assets.

Assets of funded retirement plans outside the U.S. are managed in each local jurisdiction and asset allocation strategy is set in accordance with local rules, regulations and practice. Therefore, no overall target asset allocation is presented. Although non-U.S. equity securities are all considered international for the company, some equity securities are considered domestic for the local plan. The funds are invested in a variety of equities, bonds and real estate investments and, in some cases, the assets are managed by insurance companies which may offer a guaranteed rate of return. The company has no significant concentration of risk in its international plan assets.

The discussion that follows references the fair value measurements in terms of levels 1, 2 and 3. See Note 7 for definitions of these levels. Plan assets by level are as follows:

Level 1 - Cash, and certain equity securities and fixed income: Valued at the quoted market prices of shares held by the plans at year-end in the active market on which the individual securities are traded.

Level 2 - Real estate, insurance contracts, and certain equity securities and fixed income: Valued based on inputs other than quoted prices that are observable for the securities.

Level 3 - Hedge funds and private equity: Valued based on the net asset values of the underlying partnerships. The net asset values of the partnerships are based on the fair values of the underlying investments of the partnerships. Quoted market prices are used to value the underlying investments of the partnerships, where available.



Table of Contents

## U.S. Assets

The allocation and fair value of the company's U.S. plan assets for its defined benefit pension and postretirement health care benefit plans are as follows:

Asset Category	Target Asset Allocation Percentage		Percentage of Plan Assets	
	2015	2014	2015	2014
December 31 (%)				
Equity securities:				
Large cap equity	34 %	34 %	37 %	37 %
Small cap equity	9	9	10	9
International equity	15	13	14	13
Fixed income:				
Core fixed income	18	18	19	18
High-yield bonds	5	5	5	5
Emerging markets	2	2	2	2
Other:				
Real estate	6	4	5	4
Hedge funds	5	9	3	8
Private equity	6	6	5	4
Total	100%	100%	100%	100%

(millions)	Fair Value as of December 31, 2015			
	Level 1	Level 2	Level 3	Total
	\$			\$
Cash	6.9			6.9
Equity securities:				
Large cap equity	660.5			660.5
Small cap equity	184.2			184.2
International equity	247.4			247.4
Fixed income:				
Core fixed income	336.5			336.5
High-yield bonds	86.7			86.7
Emerging markets	27.1			27.1

Edgar Filing: ECOLAB INC. - Form 10-K

Other:

		\$		
Real estate		84.5		84.5
			\$	
Hedge funds			58.6	58.6
Private equity			89.2	89.2
Other		0.3		0.3
	\$	\$	\$	\$
Total	1,549.3	84.8	147.8	1,781.9

Table of Contents

(millions)	Fair Value as of December 31, 2014			Total
	Level 1	Level 2	Level 3	
	\$			\$
Cash	7.4			7.4
Equity securities:				
Large cap equity	693.5			693.5
Small cap equity	174.9			174.9
International equity	246.2			246.2
Fixed income:				
Core fixed income	344.7			344.7
High-yield bonds	90.5			90.5
Emerging markets	29.4			29.4
Other:				
		\$		
Real estate		72.6		72.6
			\$	
Hedge funds			152.0	152.0
Private equity			73.4	73.4
Other		0.3		0.3
	\$	\$	\$	\$
Total	1,586.6	72.9	225.4	1,884.9

For those assets that are valued using significant unobservable inputs (level 3), the following is a rollforward of the significant activity for the year:

(millions)	Hedge Funds	Private Equity
	\$	\$
Balance at December 31, 2013	148.5	54.9
Unrealized gains	3.5	2.5
Realized gains	-	10.0
Purchases, sales and settlements, net	-	6.0
Transfers in and/or out	-	-
	\$	\$
Balance at December 31, 2014	152.0	73.4
Unrealized gains	(18.1)	10.0
Realized gains	16.6	8.9
Purchases, sales and settlements, net	(91.9)	(3.1)
Transfers in and/or out	-	-
	\$	\$
Balance at December 31, 2015	58.6	89.2

The company is responsible for the valuation process and seeks to obtain quoted market prices for all investments. When quoted market prices are not available, a number of methodologies are used to establish fair value estimates, including discounted cash flow models, prices from recently executed transactions of similar securities or broker/dealer quotes using market observable information to the extent possible. The company reviews the values generated by those models for reasonableness and, in some cases, further analyzes and researches values generated to ensure their accuracy, which includes reviewing other publicly available information.

Table of Contents

## International Assets

The allocation of plan assets and fair value of the company's international plan assets for its defined benefit pension plans are as follows:

	Asset Category		Percentage of Plan Assets	
	December 31 (%)		2015	2014
Cash	-	%	1	%
Equity securities:				
International equity	44		43	
Fixed income:				
Corporate bonds	22		22	
Government bonds	19		19	
Total fixed income	41		41	
Other:				
Insurance contracts	13		13	
Real estate	2		2	
Total	100%		100%	

  

(millions)	Fair Value as of December 31, 2015			Total
	Level 1	Level 2	Level 3	
	\$			\$
Cash	3.1			3.1
Equity securities:				
		\$		
International equity		356.2		356.2
Fixed income:				
Corporate bonds	6.6	170.3		176.9
Government bonds	9.8	146.5		156.3
Other:				
Insurance contracts		106.1		106.1
Real estate		13.2		13.2
Other		1.7		1.7
	\$	\$		\$
Total	19.5	794.0		813.5

(millions)	Fair Value as of			Total
	Level 1	Level 2	Level 3	
	\$			\$
Cash	7.2			7.2
Equity securities:				
		\$		
International equity		363.5		363.5
Fixed income:				
Corporate bonds	5.1	184.2		189.3
Government bonds	7.7	156.7		164.4
Other:				
Insurance contracts		109.8		109.8
Real estate		12.7		12.7
Other	0.5	0.3		0.8
	\$	\$		\$
Total	20.5	827.2		847.7

#### Multiemployer Plan

The company has historically contributed to a multiemployer defined benefit pension plan (“MEPP”) under the terms of a collective-bargaining agreement that covers certain union-represented former employees. During the fourth quarter of 2012, the company determined that a withdrawal from the MEPP was probable and based on the underfunded status of the MEPP recorded an estimated withdrawal liability of \$4.7 million. During 2013, the company withdrew from the MEPP. The present value of the company’s withdrawal liability to the MEPP was \$4.4 million as of December 31, 2015. The risks of participating in a MEPP are different from single-employer pension plans such that assets contributed to the MEPP by one employer may be used to provide benefits to employees of other participating employers. Additionally, if a participating employer stops contributing to the MEPP, the unfunded obligations of the plan may be borne by the remaining participating employers. Participation in the MEPP is not considered significant to the company.

Table of Contents

## Cash Flows

As of year-end 2015, the company's estimate of benefits expected to be paid in each of the next five fiscal years and in the aggregate for the five fiscal years thereafter for the company's pension and postretirement health care benefit plans are as follows:

	All	Medicare
(millions)	Plans	Subsidy
	\$	Receipts
	\$	\$
2016	171	1
2017	179	1
2018	180	-
2019	193	-
2020	238	-
2021 - 2025	1,169	-

Depending on plan funding levels, the U.S. defined benefit qualified pension plan provides certain terminating participants with an option to receive their pension benefits in the form of lump sum payments.

The company is currently in compliance with all funding requirements of its U.S. pension and postretirement health care plans. No voluntary contributions were made to the U.S. pension plan during 2015 and 2014. The company is required to fund certain international pension benefit plans in accordance with local legal requirements. The company estimates contributions to be made to its international plans will approximate \$42 million in 2016.

The company seeks to maintain an asset balance that meets the long-term funding requirements identified by the projections of the pension plan's actuaries while simultaneously satisfying the fiduciary responsibilities prescribed in ERISA. The company also takes into consideration the tax deductibility of contributions to the benefit plans.

The company is not aware of any expected refunds of plan assets within the next twelve months from any of its existing U.S. or international pension or postretirement benefit plans.

## Savings Plan, ESOP and Profit Sharing

The company provides a 401(k) savings plan for the majority of its U.S. employees.

On January 1, 2013, a new plan benefiting active employees accruing final average pay or legacy cash balance pension benefits under the Ecolab Pension Plan was spun off from the Ecolab Savings Plan and ESOP (the “Ecolab Plan”) and into the Ecolab Savings Plan and ESOP for Traditional Benefit Employees (the “New Plan”). Under the New Plan, 401(k) contributions of up to 3% of eligible compensation are matched 100% by the company and 401(k) contributions over 3% and up to 5% of eligible compensation are matched 50% by the company.

All other active legacy Ecolab U.S. employees remain in the Ecolab Plan and beginning January 1, 2013, received a 100% match on 401(k) contributions of up to 4% of eligible compensation and a 50% match on 401(k) contributions of over 4% and up to 8% of eligible compensation.

On August 2, 2013, the legacy Nalco Company Profit Sharing and Savings Plan (the “Nalco Plan”) merged into and became part of the Ecolab Plan and eligible legacy Nalco employees began receiving matching contributions as discussed above. Prior to the merger of the plans, beginning January 1, 2013, eligible legacy Nalco employees received a 100% match on 401(k) contributions of up to 4% of eligible compensation and a 50% match on 401(k) contributions of over 4% and up to 8% of eligible compensation.

On December 31, 2013, the legacy Champion Permian Mud Service, Inc. 401(k) Savings Plan (the “Permian Plan”) merged into and became part of the Ecolab Plan and eligible legacy Champion employees began receiving matching contributions as discussed above. Prior to January 1, 2014, the Champion Plan provided a discretionary matching contribution of 100% on 401(k) contributions of up to 3% of eligible compensation and 50% on 401(k) contributions of over 3% and up to 6% of eligible compensation.

The company’s matching contributions are 100% vested immediately. The company’s matching contribution expense was \$72 million and \$67 million in 2015 and 2014, respectively. The company’s matching contribution expense for legacy Ecolab and legacy Nalco employees was \$54 million in 2013. Ecolab’s matching contribution to the Permian Plan during 2013, from the close of the Champion acquisition in April 2013 to December 2013, was \$5 million.



Table of Contents

17. OPERATING SEGMENTS AND GEOGRAPHIC INFORMATION

The company's organizational structure consists of global business unit and global regional leadership teams. The company's ten operating units, which are also operating segments, follow its commercial and product-based activities and are based on engagement in business activities, availability of discrete financial information and review of operating results by the Chief Operating Decision Maker at the identified operating unit level.

Eight of the company's ten operating units have been aggregated into three reportable segments based on similar economic characteristics and future prospects, nature of the products and production processes, end-use markets, channels of distribution and regulatory environment. The company's reportable segments are Global Industrial, Global Institutional and Global Energy. The company's two operating units that are primarily fee-for-service businesses have been combined into the Other segment and do not meet the quantitative criteria to be separately reported. The company provides similar information for the Other segment as compared to its three reportable segments as the company considers the information regarding its two underlying operating units as useful in understanding its consolidated results.

The company's ten operating units are aggregated as follows:

Global Industrial

Includes the Water, Food & Beverage, Paper and Textile Care operating units. It provides water treatment and process applications, and cleaning and sanitizing solutions primarily to large industrial customers within the manufacturing, food and beverage processing, chemical, mining and primary metals, power generation, pulp and paper, and commercial laundry industries. The underlying operating units exhibit similar manufacturing processes, distribution methods and economic characteristics.

Global Institutional

Includes the Institutional, Specialty and Healthcare operating units. It provides specialized cleaning and sanitizing products to the foodservice, hospitality, lodging, healthcare, government and education and retail industries. The underlying operating units exhibit similar manufacturing processes, distribution methods and economic characteristics.

## Global Energy

Includes the Energy operating unit. It serves the process chemicals and water treatment needs of the global petroleum and petrochemical industries in both upstream and downstream applications.

## Other

Includes the Pest Elimination and Equipment Care operating units, which provide pest elimination and kitchen repair and maintenance. Its two operating units are primarily fee-for-service businesses.

## Reportable Segment Information

The company evaluates the performance of its non-U.S. dollar functional currency international operations based on fixed currency exchange rates which eliminate the impact of exchange rate fluctuations on its international operations. The international amounts included within each of the company's reportable segments are based on translation into U.S. dollars at the fixed currency exchange rates used by management for 2015. The difference between the fixed currency exchange rates and the actual currency exchange rates is reported as "Effect of foreign currency translation" in the following tables.

Financial information for each of the company's reportable segments is as follows:

(millions)	Net Sales			Operating Income (Loss)		
	2015	2014	2013	2015	2014	2013
	\$	\$	\$	\$	\$	\$
Global Industrial	4,857.8	4,623.2	4,487.3	692.7	605.1	575.9
Global Institutional	4,393.2	4,157.9	3,998.0	900.7	800.8	753.5
Global Energy	3,825.7	4,145.0	3,320.1	550.7	612.5	435.0
Other	773.4	731.1	691.2	132.0	113.4	102.8
Corporate	-	-	-	(670.8)	(258.8)	(404.6)
Subtotal at fixed currency	13,850.1	13,657.2	12,496.6	1,605.3	1,873.0	1,462.6
Effect of foreign currency translation	(305.0)	623.3	756.8	(44.0)	82.0	98.0

Edgar Filing: ECOLAB INC. - Form 10-K

	\$	\$	\$	\$	\$	\$
Consolidated	13,545.1	14,280.5	13,253.4	1,561.3	1,955.0	1,560.6

The profitability of the company's operating units is evaluated by management based on operating income. The company has no intersegment revenues.

Table of Contents

Consistent with the company's internal management reporting, the Corporate segment includes intangible asset amortization specifically from the Nalco merger and in 2013 certain integration costs for both the Nalco and Champion transactions. The Corporate segment also includes special (gains) and charges, as discussed in Note 3, reported on the Consolidated Statement of Income.

The company has an integrated supply chain function that serves all of its reportable segments. As such, asset and capital expenditure information by reportable segment has not been provided and is not available, since the company does not produce or utilize such information internally. In addition, although depreciation and amortization expense is a component of each reportable segment's operating results, it is not discretely identifiable.

The company had one class of products which comprised 10% or more of consolidated net sales in any of the last three years. Sales of warewashing products were approximately 10% of consolidated net sales in both 2015 and 2013.

The majority of the company's revenue is driven by the sale of its chemical products, with any corresponding service generally considered incidental to the product sale. The exception to this is the Pest Elimination and Equipment Care operating units, which are within the Other segment and as previously noted, are primarily fee-for-service businesses. In addition, the Global Industrial, Global Institutional and Global Energy reportable segments derive a small amount of revenue directly from service offerings.

Total service revenue at public exchange rates by reportable segment is shown below.

	Service Revenue		
(millions)	2015	2014	2013
	\$	\$	\$
Global Industrial	48.4	53.2	51.9
Global Institutional	36.4	31.1	27.0
Global Energy	291.9	294.1	179.3
Other	670.6	655.1	619.4

## Geographic Information

Net sales and long-lived assets at public exchange rates by geographic region are as follows:

	Net Sales			Long-Lived Assets, net	
(millions)	2015	2014	2013	2015	2014
	\$	\$	\$	\$	\$
United States	7,073.2	7,233.6	6,696.0	8,838.2	8,656.0
Europe	2,442.1	2,816.5	2,707.6	1,508.9	1,723.1
Asia Pacific	1,630.1	1,685.9	1,631.8	2,315.2	2,339.8
Latin America	1,100.8	1,177.4	1,022.6	564.2	779.8
MEA	682.3	654.1	547.4	331.0	343.7
Canada	616.6	713.0	648.0	636.6	732.0
	\$	\$	\$	\$	\$
Total	13,545.1	14,280.5	13,253.4	14,194.1	14,574.4

Net sales by geographic region were determined based on origin of sale. Geographic data for long-lived assets is based on physical location of those assets. There were no sales from a single foreign country or individual customer that were material to the company's consolidated net sales.

Table of Contents

## 18. QUARTERLY FINANCIAL DATA (UNAUDITED)

(millions, except per share) 2015	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
	\$	\$	\$	\$	\$
Net sales	3,297.6	3,389.1	3,446.4	3,412.0	13,545.1
Cost of sales (including special charges of \$0.6, \$11.0, \$23.8 and \$45.2 in Q1, Q2, Q3 and Q4, respectively)	1,765.3	1,806.5	1,820.0	1,831.7	7,223.5
Selling, general and administrative expenses	1,136.8	1,079.2	1,070.7	1,058.8	4,345.5
Special (gains) and charges	7.8	65.6	142.7	198.7	414.8
Operating income	387.7	437.8	413.0	322.8	1,561.3
Interest expense, net	62.5	61.2	57.6	62.3	243.6
Income before income taxes	325.2	376.6	355.4	260.5	1,317.7
Provision for income taxes	89.8	67.8	105.3	37.6	300.5
Net income including noncontrolling interest	235.4	308.8	250.1	222.9	1,017.2
Less: Net income attributable to noncontrolling interest (including special charges of \$11.1 and \$1.7 in Q3 and Q4, respectively)	2.0	6.8	(7.7)	14.0	15.1
Net income attributable to Ecolab	\$ 233.4	\$ 302.0	\$ 257.8	\$ 208.9	\$ 1,002.1
Earnings attributable to Ecolab per common share					
	\$	\$	\$	\$	\$
Basic	0.78	1.02	0.87	0.71	3.38
	\$	\$	\$	\$	\$
Diluted	0.77	1.00	0.86	0.69	3.32
Weighted-average common shares outstanding					
Basic	298.2	296.2	295.2	295.8	296.4
Diluted	303.2	301.1	300.0	300.6	301.4
2014					
	\$	\$	\$	\$	\$
Net sales	3,336.6	3,568.2	3,694.9	3,680.8	14,280.5
Cost of sales (including special charges of \$6.0, \$1.1, \$0.8 and \$6.4 in Q1, Q2, Q3 and Q4, respectively)	1,819.2	1,909.4	1,970.6	1,979.9	7,679.1
	1,136.9	1,152.7	1,145.9	1,142.1	4,577.6

Selling, general and administrative expenses					
Special (gains) and charges	29.6	(6.1)	7.0	38.3	68.8
Operating income	350.9	512.2	571.4	520.5	1,955.0
Interest expense, net	65.1	66.2	63.3	62.0	256.6
Income before income taxes	285.8	446.0	508.1	458.5	1,698.4
Provision for income taxes	91.3	131.0	138.7	115.2	476.2
Net income including noncontrolling interest	194.5	315.0	369.4	343.3	1,222.2
Less: Net income attributable to noncontrolling interest	3.5	3.6	4.5	7.8	19.4
Net income attributable to Ecolab	\$ 191.0	\$ 311.4	\$ 364.9	\$ 335.5	\$ 1,202.8
Earnings attributable to Ecolab per common share					
	\$	\$	\$	\$	\$
Basic	0.64	1.04	1.22	1.12	4.01
	\$	\$	\$	\$	\$
Diluted	0.62	1.02	1.19	1.10	3.93
Weighted-average common shares outstanding					
Basic	300.6	299.6	300.0	300.1	300.1
Diluted	306.5	305.2	305.7	305.6	305.9

Per share amounts do not necessarily sum due to changes in the calculation of shares outstanding for each discrete period and rounding.

Table of Contents

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

As of December 31, 2015, we carried out an evaluation, under the supervision and with the participation of our management, including our Chairman of the Board and Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 as amended). Based upon that evaluation, our Chairman of the Board and Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures are effective.

Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Under the supervision and with the participation of our management, including our Chairman of the Board and Chief Executive Officer and our Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the 2013 framework in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under this framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2015.

The Company's independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2015. Their report, and our management reports, can be found in Item 8 of Part II of this Form 10-K.

During the period October 1 - December 31, 2015 there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.





Table of Contents

PART III

Item 10. Directors, Executive Officers of the Registrant and Corporate Governance.

Information about our directors is incorporated by reference from the discussion under the heading “Proposal 1: Election of Directors” located in the Proxy Statement. Information about compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, is incorporated by reference from the discussion under the heading “Section 16(a) Beneficial Ownership Reporting Compliance” located in the Proxy Statement. Information about our Audit Committee, including the members of the Committee, and our Audit Committee financial experts, is incorporated by reference from the discussion under the heading “Corporate Governance,” and sub-headings “Board Committees” and “Audit Committee,” located in the Proxy Statement. Information about our Code of Conduct is incorporated by reference from the discussion under the heading “Corporate Governance Materials and Code of Conduct” located in the Proxy Statement. Information regarding our executive officers is presented under the heading “Executive Officers of the Registrant” in Part I, Item 1(e) of this Form 10-K, and is incorporated herein by reference.

Item 11. Executive Compensation.

Information appearing under the headings entitled “Executive Compensation” and “Director Compensation” located in the Proxy Statement is incorporated herein by reference. However, pursuant to Instructions to Item 407(e)(5) of Securities and Exchange Commission Regulation S-K, the material appearing under the sub-heading “Compensation Committee Report” shall not be deemed to be “filed” with the Commission.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information appearing under the heading entitled “Security Ownership” located in the Proxy Statement is incorporated herein by reference. Information appearing under the heading entitled “Equity Compensation Plan Information” located in the Proxy Statement is incorporated herein by reference.

A total of 1,035,650 shares of Common Stock held by our directors and executive officers, some of whom may be deemed to be “affiliates” of the Company, have been excluded from the computation of market value of our Common Stock on the cover page of this Form 10-K. This total represents that portion of the shares reported as beneficially

owned by our directors and executive officers as of June 30, 2015 which are actually issued and outstanding.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Information appearing under the headings entitled “Director Independence Standards and Determinations” and “Related Person Transactions” located in the Proxy Statement is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

Information appearing under the heading entitled “Audit Fees” located in the Proxy Statement is incorporated herein by reference.

Table of Contents

PART IV

Item 15. Exhibits, Financial Statement Schedules.

The following information required under this item is filed as part of this report:

(a)(1) Financial Statements

- (i) Report of Independent Registered Public Accounting Firm.
- (ii) Consolidated Statements of Income for the years ended December 31, 2015, 2014 and 2013.
- (iii) Consolidated Statements of Comprehensive Income for the years ended December 31, 2015, 2014 and 2013.
- (iv) Consolidated Balance Sheets at December 31, 2015 and 2014.
- (v) Consolidated Statements of Cash Flows for the years ended December 31,

2015, 2014 and  
2013.

(vi) Consolidated  
Statements of  
Equity for the  
years ended  
December 31,  
2015, 2014 and  
2013.

(vii) Notes to  
Consolidated  
Financial  
Statements.

(a)(2) Financial Statement  
Schedules

All financial statement  
schedules are omitted  
because they are not  
applicable or the required  
information is shown in  
the consolidated financial  
statements or the  
accompanying notes to the  
consolidated financial  
statements. The separate  
financial statements and  
summarized financial  
information of  
majority-owned  
subsidiaries not  
consolidated and of fifty  
percent or less owned  
persons have been omitted  
because they do not satisfy  
the requirements for  
inclusion in this Form  
10-K.

(a)(3) The documents below are  
filed as exhibits to this  
Report. We will, upon  
request and payment of a  
fee not exceeding the rate  
at which copies are  
available from the

Securities and Exchange  
Commission, furnish  
copies of any of the  
following exhibits to  
stockholders.

- (2.1) Agreement and Plan of Merger dated as of July 19, 2011, among Ecolab Inc., Sustainability Partners Corporation and Nalco Holding Company – Incorporated by reference to Exhibit (2.1) of our Form 8-K dated July 19, 2011. (File No. 001-9328)
- (2.2) Agreement and Plan of Merger, dated as of October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and Permian Mud Service, Inc. – Incorporated by reference to Exhibit (2.1) of our Form 8-K dated October 12, 2012. (File No. 001-9328)
- (2.3) First Amendment dated as of November 28, 2012 to Agreement and Plan of Merger, dated as of October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and Permian Mud Service, Inc. – Incorporated by reference to Exhibit (2.3) of our Form 10-K Annual Report for the year ended December 31, 2012. (File No. 001-9328)
- (2.4) Second Amendment dated as of November 30, 2012 to Agreement and Plan of Merger, dated as October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and Permian Mud

Service, Inc. – Incorporated  
by reference to Exhibit  
(2.1) of our Form 8-K  
dated November 30, 2012.  
(File No. 001-9328)

- (2.5) Third Amendment dated as of December 28, 2012 to Agreement and Plan of Merger, dated as of October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and Permian Mud Services, Inc. – Incorporated by reference to Exhibit (2.4) of our Form 8-K dated April 10, 2013. (File No. 001-9328)
- (2.6) Fourth Amendment dated as of April 10, 2013 to Agreement and Plan of Merger, dated as of October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and Permian Mud Services, Inc. – Incorporated by reference to Exhibit (2.5) of our Form 8-K dated April 10, 2013. File No. 001-9328)
- (3.1) Restated Certificate of Incorporation of Ecolab Inc., dated as of January 2, 2013 – Incorporated by reference to Exhibit (3.2) of our Form 8-K dated January 2, 2013. (File No. 001-9328)
- (3.2) By-Laws, as amended through December 3, 2015 – Incorporated by reference to Exhibit (3.1) of our Form 8-K dated December 3, 2015. (File No. 001-9328)





Table of Contents

- (4.1) Common Stock  
see Exhibits (3.1)  
and (3.2).
- (4.2) Form of Common  
Stock Certificate  
effective January  
2, 2013 –  
Incorporated by  
reference to  
Exhibit (4.2) of  
our Form 10-K  
Annual Report for  
the year ended  
December 31,  
2012. (File No.  
001-9328)
- (4.3) Amended and  
Restated  
Indenture, dated  
as of January 9,  
2001, between  
Ecolab Inc. and  
The Bank of New  
York Trust  
Company, N.A.  
(as successor in  
interest to J.P.  
Morgan Trust  
Company,  
National  
Association and  
Bank One, NA) as  
Trustee -  
Incorporated by  
reference to  
Exhibit (4)(A) of  
our Form 8-K  
dated January 23,  
2001. (File No.  
001-9328)
- (4.4) Second  
Supplemental  
Indenture, dated  
as of December 8,  
2011, between the

Company, Wells  
Fargo Bank,  
National  
Association, as  
Trustee and the  
Bank of New  
York Mellon Trust  
Company, N.A.  
(formerly known  
as The Bank of  
New York Trust  
Company, N.A.,  
as successor in  
interest to J.P.  
Morgan Trust  
Company,  
National  
Association and  
Bank One,  
National  
Association), as  
original trustee –  
Incorporated by  
reference to  
Exhibit (4.2) of  
our Form 8-K  
dated December 5,  
2011. (File No.  
001-9328)

(4.5) Forms of 2.375%  
Notes due 2014  
Notes, 3.000%  
Notes due 2016,  
4.350% Notes due  
2021 and 5.500%  
Notes due 2041 –  
Included in  
Exhibit (4.4)  
above.

(4.6) Fourth  
Supplemental  
Indenture, dated  
as of December  
13, 2012, between  
The Company,  
Wells Fargo Bank  
National  
Association, as  
Trustee and The

Bank of New  
York Mellon Trust  
Company, N.A.  
(formerly known  
as The Bank of  
New York Trust  
Company, N.A.,  
as successor in  
interest to J.P.  
Morgan Trust  
Company,  
National  
Association and  
Bank One,  
National  
Associated as  
original trustee –  
Incorporated by  
reference to  
Exhibit (4.2) of  
our Form 8-K  
dated December  
13, 2012. (File  
No. 001-9328)

(4.7) Form of 1.450%  
Note due  
December 8, 2017  
– Included in  
Exhibit (4.6)  
above.

(4.8) Indenture, dated  
as of January 12,  
2015, between  
Ecolab Inc. and  
Wells Fargo Bank,  
National  
Association, as  
Trustee –  
Incorporated by  
reference to  
Exhibit 4.1 of our  
Form 8-K dated  
January 15,  
2015. (File No.  
001-9328).

(4.9) First  
Supplemental  
Indenture, dated

as of January 15,  
2015, between  
Ecolab Inc. and  
Wells Fargo Bank,  
National  
Association, as  
Trustee –  
Incorporated by  
reference to  
Exhibit 4.1 of our  
Form 8-K dated  
January 15,  
2015. (File No.  
001-9328).

(4.10) Forms of 1.550%  
Notes due 2018  
and 2.250% Notes  
due 2020 --  
Included in  
Exhibit (4.9)  
above.

(4.11) Second  
Supplemental  
Indenture, dated  
July 8, 2015,  
between Ecolab  
Inc. and Wells  
Fargo Bank,  
National  
Association, as  
Trustee –  
Incorporated by  
reference to  
Exhibit 4.2 of our  
Form 8-K dated  
July 8, 2015. (File  
No. 001-9328)

(4.12) Form of 2.625%  
Euro Notes due  
2025 – Included in  
Exhibit (4.11)  
above.

(4.13) Third  
Supplemental  
Indenture, dated  
January 14, 2016,  
between Ecolab

Inc. and Wells  
Fargo Bank,  
National  
Association, as  
Trustee –  
Incorporated by  
reference to  
Exhibit 4.2 of our  
Form 8-K dated  
January 11, 2016.  
(File No.  
001-9328)

- (4.14) Forms of 2.000%  
Notes due 2019  
and 3.250% Notes  
due 2023 –  
included in  
Exhibit (4.13)  
above.  
Copies of other  
constituent  
instruments  
defining the rights  
of holders of our  
long term debt are  
not filed herewith,  
pursuant to  
Section (b)(4)(iii)  
of Item 601 of  
Regulation S K,  
because the  
aggregate amount  
of securities  
authorized under  
each of such  
instruments is less  
than 10% of our  
total assets on a  
consolidated  
basis. We will,  
upon request by  
the Securities and  
Exchange  
Commission,  
furnish to the  
Commission a  
copy of each such  
instrument.

(10.1)

Amended and Restated \$2.0 billion 5-Year Revolving Credit Facility, dated as of December 3, 2014, among Ecolab Inc., the lenders party thereto, the issuing banks party thereto, Bank of America, N.A., as administrative agent and Swingline Bank, and Citibank, N.A., JPMorgan Chase Bank, N.A. and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-syndication agents – Incorporated by reference to Exhibit (10.1) of our Form 8-K dated December 3, 2014. (File No. 001-9328)

(10.2) First Amendment to Note Purchase Agreement dated July 26, 2006, dated as of October 27, 2011, by and among Ecolab Inc. and the Noteholders party thereto – Incorporated by reference to Exhibit (10.2) of our Form 8-K dated October 27, 2011. (File No. 001-9328)

(10.3) Note Purchase  
Agreement dated  
October 27, 2011,  
by and among  
Ecolab Inc. and  
the Purchasers  
party thereto –  
Incorporated by  
reference to  
Exhibit (10.1) of  
our Form 8-K  
dated October 27,  
2011. (File No.  
001-9328)

Table of Contents

(10.4) Documents comprising global Commercial Paper Programs

(i) U.S. \$200,000,000 Euro-Commercial Paper Programme

- (a) Amended and Restated Dealer Agreement dated 2 December 2005 between Ecolab Inc. (as Guarantor), Ecolab B.V. and Ecolab Holding GmbH (as Issuers), Ecolab Inc., Credit Suisse First Boston (Europe) Limited (as Arranger), and Citibank International plc and Credit Suisse First Boston (Europe) Limited (as Dealers) – Incorporated by reference to Exhibit (10)B(i)(a) of our Form 10-K Annual Report for the year ended December 31, 2005. (File No. 001-9328)
- (b) Amended and Restated Note Agency Agreement dated as of 2 December 2005 between Ecolab Inc., Ecolab B.V. and Ecolab Holding GmbH (as Issuers) and Citibank, N.A. as Issue and Paying Agent – Incorporated by reference to Exhibit (10)B(i)(b) of our Form 10-K Annual Report for the year ended December 31, 2005. (File No. 001-9328)
- (c) Deed of Covenant made on 2 December 2005 by Ecolab Inc., Ecolab B.V. and Ecolab Holding GmbH – Incorporated by reference to Exhibit (10)B(i)(c) of our Form 10-K Annual Report for the year ended December 31, 2005. (File No. 001-9328)
- (d) Deed of Guarantee made on 2 December 2005 – Incorporated by reference to Exhibit (10)B(i)(d) of our Form 10-K Annual Report for the year ended December 31, 2005. (File No. 001-9328)

(ii) U.S. \$2,000,000,000 U.S. Commercial Paper Program

- (a) Form of Commercial Paper Dealer Agreement for 4(a)(2) Program dated as of September 22, 2014. The dealers for the program are Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC, J.P. Morgan Securities LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated, Mizuho Securities USA Inc., and Wells Fargo Securities, LLC - Incorporated by reference to Exhibit (10.1)(a) of our Form 10-Q for the quarter ended September 30, 2014. (File No. 001-9328)
- (b) Commercial Issuing and Paying Agency Agreement dated as of September 22, 2014 between Ecolab Inc. and Deutsche Bank Trust Company Americas as Issuing and Paying Agent - Incorporated by reference to Exhibit (10.1)(b) of our Form 10-Q for the quarter ended September 30, 2014. (File No. 001-9328)
- (c) Corporate Commercial Paper – Master Note dated September 22, 2014, together with annex thereto – Incorporated by reference to Exhibit (10.1)(c) of our Form 10-Q for the quarter ended September 30, 2014. (File No. 001-9328)

(10.5) (i) Ecolab Inc. 2001 Non-Employee Director Stock Option and Deferred Compensation Plan, as amended and restated effective August 1, 2013 – Incorporated by reference to Exhibit (10.6) of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328)

(ii) Master Agreement Relating to Options (as in effect through May 7, 2004) – Incorporated by reference to Exhibit (10)D(i) of our Form 10-Q for the quarter ended June 30, 2004. (File No. 001-9328)

(iii) Master Agreement Relating to Periodic Options, as amended effective as of May 1, 2004 – Incorporated by reference to Exhibit (10)D(ii) of our Form 10-Q for the quarter ended June 30, 2004. (File No. 001-9328)



- (iv) Amendment No. 1 to Master Agreement Relating to Periodic Options, as amended effective May 2, 2008 – Incorporated by reference to Exhibit (10)B of our Form 10-Q for the quarter ended September 30, 2008. (File No. 001-9328)
- (10.6) (i) Note Purchase Agreement, dated as of July 26, 2006 by and among Ecolab Inc. and the Purchasers party thereto – Incorporated by reference to Exhibit (10) of our Form 8-K dated July 26, 2006. (File No. 001-9328)
- (ii) First Amendment to Note Purchase Agreement dated July 26, 2006, dated as of October 27, 2011, by and among Ecolab Inc. and the Noteholders party thereto – Incorporated by reference to Exhibit (10.2) of our Form 8-K dated October 27, 2011. (File No. 001-9328)

Table of Contents

- (10.7) Form of Director Indemnification Agreement. Substantially identical agreements are in effect as to each of our directors – Incorporated by reference to Exhibit (10)I of our Form 10-K Annual Report for the year ended December 31, 2003. (File No. 001-9328)
- (10.8) (i) Ecolab Executive Death Benefits Plan, as amended and restated effective March 1, 1994 – Incorporated by reference to Exhibit (10)H(i) of our Form 10-K Annual Report for the year ended December 31, 2006. See also Exhibit (10.14) hereof. (File No. 001-9328)
- (ii) Amendment No. 1 to Ecolab Executive Death Benefits Plan, effective July 1, 1997 – Incorporated by reference to Exhibit (10)H(ii) of our Form 10-K Annual Report for the year ended December 31, 1998. (File No. 001-9328)
- (iii) Second Declaration of Amendment to

- Ecolab  
Executive Death  
Benefits Plan,  
effective March  
1, 1998 -  
Incorporated by  
reference to  
Exhibit  
(10)H(iii) of our  
Form 10-K  
Annual Report  
for the year  
ended  
December 31,  
1998. (File No.  
001-9328)
- (iv) Amendment No.  
3 to the Ecolab  
Executive Death  
Benefits Plan,  
effective August  
12, 2005 –  
Incorporated by  
reference to  
Exhibit (10)B of  
our Form 8-K  
dated December  
13, 2005. (File  
No. 001-9328)
- (v) Amendment No.  
4 to the Ecolab  
Executive Death  
Benefits Plan,  
effective  
January 1, 2005 –  
Incorporated by  
reference to  
Exhibit  
(10)H(v) of our  
Form 10-K  
Annual Report  
for the year  
ended  
December 31,  
2009. (File No.  
001-9328)
- (vi) Amendment No.  
5 to the Ecolab

Executive Death  
Benefits Plan,  
effective May 6,  
2015 –  
Incorporated by  
reference to  
Exhibit 10.2 of  
our Form 10-Q  
for the quarter  
ended June 30,  
2015. (File No.  
001-9328)

(10.9) (i)

Ecolab  
Executive  
Long-Term  
Disability Plan,  
as amended and  
restated  
effective  
January 1, 1994 –  
Incorporated by  
reference to  
Exhibit (10)I of  
our Form 10-K  
Annual Report  
for the year  
ended  
December 31,  
2004. (File No.  
001-9328). See  
also Exhibit  
(10.14) hereof.

(ii)

Amendment No.  
1 to the Ecolab  
Executive  
Long-Term  
Disability Plan,  
effective August  
21, 2015 –  
Incorporated by  
reference to  
Exhibit 10.1 of  
our Form 10-Q  
for the quarter  
ended  
September 30,  
2015. (File No.  
001-9328)

Edgar Filing: ECOLAB INC. - Form 10-K

- (10.10) (i) Ecolab Supplemental Executive Retirement Plan, as amended and restated effective as of January 1, 2014 – Incorporated by reference to Exhibit 10.11 of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328). See also Exhibit (10.14) hereof.
- (ii) Amendment No. 1 to the Ecolab Supplemental Executive Retirement Plan, effective May 6, 2015 – Incorporated by reference to Exhibit 10.1 of our Form 10-Q for the quarter ended June 30, 2015. (File No. 001-9328)
- (10.11) Ecolab Mirror Savings Plan, as amended and restated effective as of January 1, 2014 – Incorporated by reference to Exhibit 10.12 of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328) See also Exhibit (10.14) hereof.
- (10.12) Ecolab Mirror Pension Plan, as amended and restated effective as of January 1, 2014 – Incorporated by reference to Exhibit 10.13 of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328). See also Exhibit (10.14)

hereof.

- (10.13) (i) Ecolab Inc.  
Administrative Document for Non-Qualified Plans (Amended and Restated effective as of January 1, 2011) – Incorporated by reference to Exhibit (10.16) of our Form 10-K Annual Report for the year ended December 31, 2011. (File No. 001-9328)
- (ii) Amendment No. 1 to the Ecolab Inc. Administrative Document for Non-Qualified Plans effective as of January 1, 2013 – Incorporated by reference to Exhibit (10.14)(II) of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328)
- (10.14) Ecolab Inc. Management Performance Incentive Plan, as amended and restated on February 27, 2014 – Incorporated by reference to Exhibit (10.1) of our Form 8-K dated May 9, 2014. (File No. 001-9328)
- (10.15) (i) Ecolab Inc.  
Change in

Control  
Severance  
Compensation  
Policy, as  
amended and  
restated  
effective  
February 26,  
2010 –  
Incorporated by  
reference to  
Exhibit (10) of  
our Form 8-K  
dated February  
26, 2010. (File  
No. 001-9328)

Table of Contents

- (ii) Amendment No. 1 to Ecolab Inc. Change-in-Control Severance Policy (as Amended and Restated effective as of February 26, 2010) – Incorporated by reference to Exhibit (10.18)(ii) of our Form 10-K Annual Report for the year ended December 31, 2011. (File No. 001-9328)
- (10.16) Description of Ecolab Management Incentive Plan.
- (10.17) (i) Ecolab Inc. 2010 Stock Incentive Plan, as amended and restated effective May 2, 2013 – Incorporated by reference to Exhibit (10.1) of our Form 8-K dated May 2, 2013. (File No. 001-9328)
- (ii) Sample form of Non-Statutory Stock Option Agreement under the Ecolab Inc. 2010 Stock Incentive Plan – Incorporated by reference to Exhibit (10)B of our Form 8-K dated May 6, 2010. (File No. 001-9328)
- (iii) Sample form of Restricted Stock Award Agreement



- under the Ecolab Inc. 2010 Stock Incentive Plan – Incorporated by reference to Exhibit (10)C of our Form 8-K dated May 6, 2010. (File No. 001-9328)
- (iv) Sample form of Performance-Based Restricted Stock Award Agreement under the Ecolab Inc. 2010 Stock Incentive Plan – Incorporated by reference to Exhibit (10)D of our Form 8-K dated May 6, 2010. (File No. 001-9328)
- (v) Sample form of Restricted Stock Unit Award Agreement under the Ecolab Inc. 2010 Stock Incentive Plan – Incorporated by reference to Exhibit (10)A of our Form 10-Q for the quarter ended September 30, 2010. (File No. 001-9328)
- (vi) Sample form of Performance-Based Restricted Stock Award Agreement under the Ecolab Inc. 2010 Stock Incentive as adopted December 2, 2015.

(10.18) Policy on Reimbursement of Incentive Payments adopted December 4, 2008 – Incorporated by

Edgar Filing: ECOLAB INC. - Form 10-K

reference to Exhibit (10)W of our Form 10-K Annual Report for the year ended December 31, 2008. (File No. 001-9328)

- (10.19) Second Amended and Restated Nalco Holding Company 2004 Stock Incentive Plan – Incorporated by reference to Exhibit (4.3) of our Post-Effective Amendment No. 1 on Form S-8 to Form S-4 Registration Statement dated December 2, 2011. (File No. 001-9328)
- (10.20) Form of Nalco Company Death Benefit Agreement and Addendum to Death Benefit Agreement – Incorporated by reference from Exhibit (99.2) on Form 8-K of Nalco Holding Company filed on May 11, 2005. (File No. 001-32342)
- (10.21) Sublease Agreement, dated as of November 4, 2003 between Leo Holding Company, as sub-landlord and Ondeo Nalco Company, as subtenant – Incorporated by reference from Exhibit (10.6) of the Registration Statement on Form S-4 of Nalco Company filed on May 17, 2004. (File No. 333-115560)
- (14.1) Ecolab Code of Conduct, as amended November 26, 2012 – Incorporated by reference to Exhibit (14.1) of our Form 10-K Annual Report for the year ended December 31, 2012. (File No. 001-9328)
- (21.1) List of Subsidiaries.
- (23.1) Consent of Independent Registered Public Accounting Firm.
- (24.1) Powers of Attorney.
- (31.1) Rule 13a-14(a) Certifications.
- (32.1) Section 1350 Certifications.
- (101.1) Interactive Data File.



Table of Contents

EXECUTIVE COMPENSATION PLANS AND ARRANGEMENTS

Included in the preceding list of exhibits are the following management contracts or compensatory plans or arrangements:

Exhibit No.	Description
(10.5)	Ecolab Inc. 2001 Non-Employee Director Stock Option and Deferred Compensation Plan.
(10.7)	Form of Director Indemnification Agreement.
(10.8)	Ecolab Executive Death Benefits Plan.
(10.9)	Ecolab Executive Long-Term Disability Plan.
(10.10)	Ecolab Supplemental Executive Retirement Plan.
(10.11)	Ecolab Mirror Savings Plan.
(10.12)	Ecolab Mirror Pension Plan.
(10.13)	Ecolab Inc. Administrative Document for Non-Qualified Plans.
(10.14)	Ecolab Inc. Management Performance Incentive Plan.
(10.15)	Ecolab Inc. Change in Control Severance Compensation Policy.
(10.16)	Description of Ecolab Inc. Management Incentive Plan.
(10.17)	Ecolab Inc. 2010 Stock Incentive Plan.
(10.18)	Policy on Reimbursement of Incentive Payments.
(10.19)	Second Amended and Restated Nalco Holding Company 2004 Stock Incentive Plan.
(10.20)	Nalco Company Death Benefit Agreement and Addendum to Death Benefit Agreement.

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, Ecolab Inc. has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 26th day of February, 2016.

ECOLAB INC.  
(Registrant)

By: /s/ Douglas M. Baker, Jr.  
Douglas M. Baker, Jr.  
Chairman of the Board  
and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of Ecolab Inc. and in the capacities indicated, on the 26th day of February 2016.

/s/ Douglas M. Baker, Jr.	Chairman of the Board and Chief Executive Officer
Douglas M. Baker, Jr.	(Principal Executive Officer and Director)
/s/ Daniel J. Schmechel Daniel J. Schmechel	Chief Financial Officer (Principal Financial Officer)
/s/ Bryan L. Hughes  Bryan L. Hughes	Senior Vice President and Corporate Controller (Principal Accounting Officer)
/s/ James J. Seifert James J. Seifert	Directors
as attorney-in-fact for:	

Edgar Filing: ECOLAB INC. - Form 10-K

Barbara J. Beck, Les S. Biller, Carl M. Casale, Stephen I. Chazen, Jeffrey M. Ettinger, Jerry A. Grundhofer, Arthur J. Higgins, Joel W. Johnson, Michael Larson, Jerry W. Levin, Robert L. Lumpkins, David W. MacLennan, Tracy B. McKibben, Victoria J. Reich, Suzanne M. Vautrinot and John J. Zillmer

Table of Contents

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Registration Nos. 2-90702; 33-18202; 33-55986; 33-56101; 333-95043; 333-109890; 33-34000; 33-56151; 333-18627; 333-109891; 33-39228; 33-56125; 333-70835; 33-60266; 333-95041; 333-40239; 333-95037; 333-50969; 333-58360; 333-97927; 333-115567; 333-129427; 333-129428; 333-140988; 333-115568; 333-132139; 333-147148; 333-163837; 333-163838; 333-165130; 333-165132; 333-166646; 333-174028; 333-176601; 333-178300; 333-178302; 333-184650; 333-190317; 333-199729; 333-199730; and 333-199732) and Form S-3 (Registration No. 333-201445) of Ecolab Inc. of our report dated February 26, 2016 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in this Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP  
PricewaterhouseCoopers LLP  
Minneapolis, Minnesota  
February 26, 2016

Table of Contents

## EXHIBIT INDEX

Exhibit No.	Document	Method of Filing
(2.1)	Agreement and Plan of Merger dated as of July 19, 2011, among Ecolab Inc., Sustainability Partners Corporation and Nalco Holding Company	Incorporated by reference to Exhibit (2.1) of our Form 8-K dated July 19, 2011. (File No. 001-9328)
(2.2)	Agreement and Plan of Merger, dated as of October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and Permian Mud Service, Inc.	Incorporated by reference to Exhibit (2.1) of our Form 8-K dated October 12, 2012. (File No. 001-9328)
(2.3)	First Amendment dated as of November 28, 2012 to Agreement and Plan of Merger, dated as of October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and	Incorporated by reference to Exhibit (2.3) of our Form 10-K Annual Report for the year ended December 31, 2012. (File No. 001-9328)



- Permian  
Mud Service,  
Inc.
- (2.4) Second Amendment dated as of November 30, 2012 to Agreement and Plan of Merger, dated as October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and Permian Mud Service, Inc. Incorporated by reference to Exhibit (2.1) of our Form 8-K dated November 30, 2012. (File No. 001-9328)
- (2.5) Third Amendment dated as of December 28, 2012 to Agreement and Plan of Merger, dated as of October 11, 2012, among Ecolab Inc., OFC Technologies Corp. and Permian Mud Services, Inc. Incorporated by reference to Exhibit (2.4) of our Form 8-K dated April 10, 2013. (File No. 001-9328)
- (2.6) Fourth Amendment dated as of April 10, 2013 to Agreement and Plan of Merger, dated as of October 11, 2012, among Ecolab Inc.,

- OFC  
Technologies  
Corp. and  
Permian  
Mud  
Services, Inc.
- (3.1) Restated Certificate of Incorporation of Ecolab Inc., dated as of January 2, 2013 Incorporated by reference to Exhibit (3.2) of our Form 8-K dated January 2, 2013. (File No. 001-9328)
- (3.2) By-Laws, as amended through December 3, 2015 Incorporated by reference to Exhibit (3.1) of our Form 8-K dated December 3, 2015. (File No. 001-9328)
- (4.1) Common Stock See Exhibits (3.1) and (3.2)
- (4.2) Form of Common Stock Certificate effective January 2, 2013 Incorporated by reference to Exhibit (4.2) of our Form 10-K Annual Report for the year ended December 31, 2012. (File No. 001-9328)
- (4.3) Amended and Restated Indenture, dated as of January 9, 2001, between Ecolab Inc. and The Bank of New York Trust Company, N.A. (as successor in interest to J.P. Morgan Trust Company, National Association and Bank One, NA) as Trustee Incorporated by reference to Exhibit (4)(A) of our Form 8-K dated January 23, 2001. (File No. 001-9328)
- (4.4)

<p>Second Supplemental Indenture, dated as of December 8, 2011, between the Company, Wells Fargo Bank, National Association, as Trustee and the Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A., as successor in interest to J.P. Morgan Trust Company, National Association and Bank One, National Association), as original trustee</p>	<p>Incorporated by reference to Exhibit (4.2) of our Form 8-K dated December 5, 2011. (File No. 001-9328)</p>
<p>(4.5) Forms of 2.375% Notes due 2014 Notes, 3.000% Notes due 2016, 4.350% Notes due 2021 and 5.500% Notes due 2041</p>	<p>Included in Exhibit (4.4) above.</p>

- (4.6) Fourth Supplemental Indenture, dated as of December 13, 2012, between The Company, Wells Fargo Bank National Association, as Trustee and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A., as successor in interest to J.P. Morgan Trust Company, National Association and Bank One, National Associated as original trustee
- Incorporated by reference to Exhibit (4.2) of our Form 8-K dated December 13, 2012. (File No. 001-9328)
- (4.7) Form of 1.450% Note due December 8, 2017
- Included in Exhibit (4.6) above.

Table of Contents

(4.8)	Indenture, dated as of January 12, 2015, between Ecolab Inc. and Wells Fargo Bank, National Association, as Trustee	Incorporated by reference to Exhibit 4.1 of our Form 8-K dated January 15, 2015. (File No. 001-9328)
(4.9)	First Supplemental Indenture, dated as of January 15, 2015, between Ecolab Inc. and Wells Fargo Bank, National Association, as Trustee	Incorporated by reference to Exhibit 4.1 of our Form 8-K dated January 15, 2015. (File No. 001-9328)
(4.10)	Forms of 1.550% Notes due 2018 and 2.250% Notes due 2020	Included in Exhibit (4.9) above.
(4.11)	Second Supplemental Indenture, dated July 8, 2015, between Ecolab Inc. and Wells Fargo Bank, National Association, as Trustee	Incorporated by reference to Exhibit 4.2 of our Form 8-K dated July 8, 2015. (File No. 001-9328)
(4.12)	Form of 2.625% Euro Notes due 2025	Included in Exhibit (4.11) above.
(4.13)	Third Supplemental Indenture, dated January 14, 2016, between Ecolab Inc. and Wells Fargo Bank, National Association, as Trustee	Incorporated by reference to Exhibit 4.2 of our Form 8-K dated January 11, 2016. (File No. 001-9328)
(4.14)	Forms of 2.000% Notes due 2019 and 3.250% Notes due 2023	Included in Exhibit (4.13) above.
(10.1)	Amended and Restated \$2.0 billion 5-Year Revolving Credit Facility, dated as of December 3, 2014, among Ecolab Inc., the lenders party thereto, the issuing banks party thereto, Bank of America, N.A., as administrative agent and Swingline Bank, and Citibank, N.A., JPMorgan Chase Bank, N.A. and The Bank of Tokyo-Mitsubishi UFJ, Ltd., as co-syndication agents	Incorporated by reference to Exhibit (10.1) of our Form 8-K dated December 3, 2014. (File No. 001-9328)
(10.2)	First Amendment to Note Purchase Agreement dated July 26, 2006, dated as of October 27, 2011, by and among Ecolab Inc. and the Noteholders party thereto	Incorporated by reference to Exhibit (10.2) of our Form 8-K dated October 27, 2011. (File No. 001-9328)
(10.3)	Note Purchase Agreement dated October 27, 2011, by and among Ecolab Inc. and the Purchasers party thereto	Incorporated by reference to Exhibit (10.1) of our Form 8-K dated October 27, 2011. (File No. 001-9328)
(10.4)	Documents comprising global Commercial Paper Programs	
	(i) U.S. \$200,000,000 Euro-Commercial Paper Programme	
	(a) Amended and Restated Dealer Agreement dated 2 December 2005 between Ecolab Inc. (as Guarantor), Ecolab B.V. and Ecolab Holding GmbH (as Issuers), Ecolab Inc., Credit Suisse First Boston (Europe) Limited (as Arranger), and Citibank International plc and Credit Suisse First Boston (Europe) Limited (as Dealers)	Incorporated by reference to Exhibit (10)B(i)(a) of our Form 10-K Annual Report for the year ended December 31, 2005. (File No. 001-9328)
	(b) Amended and Restated Note Agency Agreement dated as of 2 December 2005 between Ecolab Inc., Ecolab B.V. and Ecolab Holding GmbH (as Issuers) and Citibank, N.A. as Issue and Paying Agent	Incorporated by reference to Exhibit (10)B(i)(b) of our Form 10-K Annual Report for the year ended December 31, 2005. (File No. 001-9328)
	(c) Deed of Covenant made on 2 December 2005 by Ecolab Inc., Ecolab B.V. and Ecolab Holding GmbH	Incorporated by reference to Exhibit (10)B(i)(c) of our Form 10-K Annual Report for the year ended December 31, 2005. (File

(d) Deed of Guarantee made on 2 December 2005

No. 001-9328)  
Incorporated by reference to  
Exhibit (10)B(i)(d) of our Form  
10-K Annual Report for the year  
ended December 31, 2005. (File  
No. 001-9328)

Table of Contents

<p>(ii) U.S. \$2,000,000,000 U.S. Commercial Paper Program</p>	<p>(a) Form of Commercial Paper Dealer Agreement for 4(a)(2) Program dated as of September 22, 2014. The dealers for the program are Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC, J.P. Morgan Securities LLC, Merrill Lynch, Pierce, Fenner &amp; Smith Incorporated, Mizuho Securities USA Inc., and Wells Fargo Securities, LLC</p> <p>(b) Commercial Issuing and Paying Agency Agreement dated as of September 22, 2014 between Ecolab Inc. and Deutsche Bank Trust Company Americas as Issuing and Paying Agent</p> <p>(c) Corporate Commercial Paper – Master Note dated September 22, 2014, together with annex thereto</p>	<p>Incorporated by reference to Exhibit (10.1)(a) of our Form 10-Q for the quarter ended September 30, 2014. (File No. 001-9328)</p> <p>Incorporated by reference to Exhibit (10.1)(b) of our Form 10-Q for the quarter ended September 30, 2014. (File No. 001-9328)</p> <p>Incorporated by reference to Exhibit (10.1)(c) of our Form 10-Q for the quarter ended September 30, 2014. (File No. 001-9328)</p>
<p>(10.5)</p>	<p>(i) Ecolab Inc. 2001 Non-Employee Director Stock Option and Deferred Compensation Plan, as amended and restated effective August 1, 2013</p> <p>(ii) Master Agreement Relating to Options (as in effect through May 7, 2004)</p> <p>(iii) Master Agreement Relating to Periodic Options, as amended effective as of May 1, 2004</p> <p>(iv) Amendment No. 1 to Master Agreement Relating to Periodic Options, as amended effective May 2, 2008</p>	<p>Incorporated by reference to Exhibit (10.6) of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328)</p> <p>Incorporated by reference to Exhibit (10)D(i) of our Form 10-Q for the quarter ended June 30, 2004. (File No. 001-9328)</p> <p>Incorporated by reference to Exhibit (10)D(ii) of our Form 10-Q for the quarter ended June 30, 2004. (File No. 001-9328)</p> <p>Incorporated by reference to Exhibit (10)B of our Form 10-Q for the quarter ended September 30, 2008. (File No. 001-9328)</p>
<p>(10.6)</p>	<p>(i) Note Purchase Agreement, dated as of July 26, 2006 by and among Ecolab Inc. and the Purchasers party thereto</p> <p>(ii) First Amendment to Note Purchase Agreement dated July 26, 2006, dated as of October 27, 2011, by and among Ecolab Inc. and the Noteholders party thereto</p>	<p>Incorporated by reference to Exhibit (10) of our Form 8-K dated July 26, 2006. (File No. 001-9328)</p> <p>Incorporated by reference to Exhibit (10.2) of our Form 8-K dated October 27, 2011. (File No. 001-9328)</p>
<p>(10.7)</p>	<p>Form of Director Indemnification Agreement. Substantially identical agreements are in effect as to each of our directors</p>	<p>Incorporated by reference to Exhibit (10)I of our Form 10-K Annual Report for the year ended December 31, 2003. (File No.</p>

001-9328)

(10.8)

(i) Ecolab Executive Death Benefits Plan, as amended and restated effective March 1, 1994

Incorporated by reference to Exhibit (10)H(i) of our Form 10-K Annual Report for the year ended December 31, 2006. See also Exhibit (10.14) hereof. (File No. 001-9328)

(ii) Amendment No. 1 to Ecolab Executive Death Benefits Plan, effective July 1, 1997

Incorporated by reference to Exhibit (10)H(ii) of our Form 10-K Annual Report for the year ended December 31, 1998. (File No. 001-9328)

(iii) Second Declaration of Amendment to Ecolab Executive Death Benefits Plan, effective March 1, 1998

Incorporated by reference to Exhibit (10)H(iii) of our Form 10-K Annual Report for the year ended December 31, 1998. (File No. 001-9328)



Table of Contents

- |         |   |   |
|---------|---|---|
| (iv)    | Amendment No. 3 to the Ecolab Executive Death Benefits Plan, effective August 12, 2005            | Incorporated by reference to Exhibit (10)B of our Form 8-K dated December 13, 2005. (File No. 001-9328)   |
| (v)     | Amendment No. 4 to the Ecolab Executive Death Benefits Plan, effective January 1, 2005            | Incorporated by reference to Exhibit (10)H(v) of our Form 10-K Annual Report for the year ended December 31, 2009. (File No. 001-9328)                                |
| (vi)    | Amendment No. 5 to the Ecolab Executive Death Benefits Plan, effective May 6, 2015                | Incorporated by reference to Exhibit 10.2 of our Form 10-Q for the quarter ended June 30, 2015. (File No. 001-9328)   |
| (10.9)  | (i) Ecolab Executive Long-Term Disability Plan, as amended and restated effective January 1, 1994 | Incorporated by reference to Exhibit (10)I of our Form 10-K Annual Report for the year ended December 31, 2004. (File No. 001-9328). See also Exhibit (10.14) hereof. |
|         | (ii) Amendment No. 1 to the Ecolab Executive Long-Term Disability Plan, effective August 21, 2015 | Incorporated by reference to Exhibit 10.1 of our Form 10-Q for the quarter ended September 30, 2015. (File No. 001-9328)  |
| (10.10) | (i) Ecolab Supplemental Executive Retirement Plan, as amended and restated effective as of        | Incorporated by reference to Exhibit 10.11 of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328). See also Exhibit (10.14) hereof. |

- January 1, 2014
- (ii) Amendment No. 1 to the Ecolab Supplemental Executive Retirement Plan, effective May 6, 2015
- Incorporated by reference to Exhibit 10.1 of our Form 10-Q for the quarter ended June 30, 2015. (File No. 001-9328)
- (10.11) Ecolab Mirror Savings Plan, as amended and restated effective as of January 1, 2014
- Incorporated by reference to Exhibit 10.12 of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328) See also Exhibit (10.14) hereof.
- (10.12) Ecolab Mirror Pension Plan, as amended and restated effective as of January 1, 2014
- Incorporated by reference to Exhibit 10.13 of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328). See also Exhibit (10.14) hereof.
- (10.13)
- (i) Ecolab Inc. Administrative Document for Non-Qualified Plans (Amended and Restated effective as of January 1, 2011)
- Incorporated by reference to Exhibit (10.16) of our Form 10-K Annual Report for the year ended December 31, 2011. (File No. 001-9328)
- (ii) Amendment No. 1 to the Ecolab Inc. Administrative Document for Non-Qualified Plans effective as of January 1, 2013
- Incorporated by reference to Exhibit (10.14)(II) of our Form 10-K Annual Report for the year ended December 31, 2013. (File No. 001-9328)
- (10.14) Ecolab Inc. Management Performance Incentive Plan, as amended and restated on February 27, 2014
- Incorporated by reference to Exhibit (10.1) of our Form 8-K dated May 9, 2014. (File No. 001-9328)
- (10.15)
- (i) Ecolab Inc. Change in Control Severance Compensation Policy, as amended and
- Incorporated by reference to Exhibit (10) of our Form 8-K dated February 26, 2010. (File No. 001-9328)

- restated  
effective  
February 26,  
2010
- (ii) Amendment      Incorporated by reference to Exhibit (10.18)(ii) of our Form 10-K Annual Report  
No. 1 to Ecolab      for the year ended December 31, 2011. (File No. 001-9328)  
Inc.  
Change-in-Control  
Severance  
Policy (as  
Amended and  
Restated  
effective as of  
February 26,  
2010)

Table of Contents

- (10.16) Description of Ecolab Management Incentive Plan. Filed herewith electronically.
- (10.17)
- (i) Ecolab Inc. 2010 Stock Incentive Plan, as amended and restated effective May 2, 2013. Incorporated by reference to Exhibit (10.1) of our Form 8-K dated May 2, 2013. (File No. 001-9328)
  - (ii) Sample form of Non-Statutory Stock Option Agreement under the Ecolab Inc. 2010 Stock Incentive Plan. Incorporated by reference to Exhibit (10)B of our Form 8-K dated May 6, 2010. (File No. 001-9328)
  - (iii) Sample form of Restricted Stock Award Agreement under the Ecolab Inc. 2010 Stock Incentive Plan. Incorporated by reference to Exhibit (10)C of our Form 8-K dated May 6, 2010. (File No. 001-9328)
  - (iv) Sample form of Performance-Based Restricted Stock Award Agreement under the Ecolab Inc. 2010 Stock Incentive Plan. Incorporated by reference to Exhibit (10)D of our Form 8-K dated May 6, 2010. (File No. 001-9328)
  - (v) Sample form of Restricted Stock Unit Award Agreement under the Ecolab Inc. 2010 Stock Incentive Plan. Incorporated by reference to Exhibit (10)A of our Form 10-Q for the quarter ended September 30, 2010. (File No. 001-9328)
  - (vi) Sample form of Performance-Based Restricted Stock Award Agreement. Filed herewith electronically.

under the  
Ecolab Inc.  
2010 Stock  
Incentive as  
adopted  
December 2,  
2015.

- |         |   |   |
|---------|---|---|
| (10.18) | Policy on Reimbursement of Incentive Payments adopted December 4, 2008  | Incorporated by reference to Exhibit (10)W of our Form 10-K Annual Report for the year ended December 31, 2008. (File No. 001-9328)   |
| (10.19) | Second Amended and Restated Nalco Holding Company 2004 Stock Incentive Plan   | Incorporated by reference to Exhibit (4.3) of our Post-Effective Amendment No. 1 on Form S-8 to Form S-4 Registration Statement dated December 2, 2011. (File No. 001-9328) |
| (10.20) | Form of Nalco Company Death Benefit Agreement and Addendum to Death Benefit Agreement   | Incorporated by reference from Exhibit (99.2) on Form 8-K of Nalco Holding Company filed on May 11, 2005. (File No. 001-32342)  |
| (10.21) | Sublease Agreement, dated as of November 4, 2003 between Leo Holding Company, as sub-landlord and Ondeo Nalco Company, as subtenant | Incorporated by reference from Exhibit (10.6) of the Registration Statement on Form S-4 of Nalco Company filed on May 17, 2004. (File No. 333-115560)                       |
| (14.1)  | Ecolab Code of Conduct, as amended November 26, 2012  | Incorporated by reference to Exhibit (14.1) of our Form 10-K Annual Report for the year ended December 31, 2012. (File No. 001-9328)  |
| (21.1)  | List of Subsidiaries.   | Filed herewith electronically.  |
| (23.1)  | Consent of Independent Registered Public Accounting Firm.   | Filed herewith electronically.  |
| (24.1)  | Powers of Attorney.   | Filed herewith electronically.  |
| (31.1)  | Rule 13a-14(a) Certifications.  | Filed herewith electronically.  |
| (32.1)  | Section 1350 Certifications.  | Filed herewith electronically.  |
| (101.1) | Interactive Data File.  | Filed herewith electronically.  |