MERCER INTERNATIONAL INC. Form 10-K February 21, 2014 Table of Contents

# **UNITED STATES**

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **FORM 10-K**

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

For the fiscal year ended December 31, 2013

OR

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

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

Commission File No.: 000-51826

# MERCER INTERNATIONAL INC.

(Exact name of Registrant as specified in its charter)

Washington (State or other jurisdiction of	47-0956945 (IRS Employer
incorporation or organization)	Identification No.)
Suite 1120, 700 West Pender Street,	

Vancouver, British Columbia, CanadaV6C 1G8(Address of Principal Executive Office)(Zip Code)Registrant s telephone number including area code: (604) 684-1099

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

# Title of each className of each exchange on which registeredCommon Stock, par value \$1.00 per shareNASDAQ Global Select MarketSecurities 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 x No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Act. "Yes x 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 x No "

Indicate by check mark whether 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 x No "

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the 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. x

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. (Check one):

 Large accelerated filer
 ...
 Accelerated filer
 x

 Non-accelerated filer
 ...
 ...
 Smaller reporting company)
 Smaller reporting company
 ...

 Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the
 ...
 ...
 ...

 Act).
 ...
 Yes
 x
 No

The aggregate market value of the Registrant s voting and non-voting common equity held by non-affiliates of the Registrant as of June 30, 2013, the last business day of the Registrant s most recently completed second fiscal quarter, based on the closing price of the voting stock on the NASDAQ Global Select Market on such date, was approximately \$364,166,150.

As of February 19, 2014, the Registrant had 55,853,704 shares of common stock, \$1.00 par value per share, outstanding.

# DOCUMENTS INCORPORATED BY REFERENCE

Certain information that will be contained in the definitive proxy statement for the Registrant s annual meeting to be held in 2014 is incorporated by reference into Part III of this Form 10-K.

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# CHANGE IN REPORTING CURRENCY

Effective October 1, 2013, we changed our reporting currency from the Euro to the U.S. dollar, as management is of the opinion that a U.S. dollar reporting currency enhances communication and understanding with our shareholders, analysts and other stakeholders and improves comparability of our financial information with our competitors and peer group companies. Consolidated financial statements issued prior to October 1, 2013 were prepared using the Euro as the reporting currency; however, subsequent to October 1, 2013, both current and historical financial information have been translated to U.S. dollars in accordance with the method described in Critical Accounting Policies. See Part II, Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations and Note 1 of our financial statements for more information about our change in reporting currency.

The following table sets out exchange rates, based on the noon buying rates in New York City for cable transfers in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York, referred to as the Noon Buying Rate , for the conversion of U.S. dollars to Euros and Canadian dollars in effect at the end of the

Noon Buying Rate , for the conversion of U.S. dollars to Euros and Canadian dollars in effect at the end of the following periods, the average exchange rates during these periods (based on daily Noon Buying Rates) and the range of high and low exchange rates for these periods:

	Year Ended December 31,				
	2013	2012	2011 (\$/ )	2010	2009
End of period	1.3779	1.3186	1.2973	1.3269	1.4332
High for period	1.2774	1.2062	1.2926	1.1959	1.2547
Low for period	1.3816	1.3463	1.4875	1.4536	1.5100
Average for period	1.3281	1.2859	1.3931 ( <b>\$/C\$</b> )	1.3261	1.3935
End of period	0.9401	1.0042	0.9835	0.9991	0.9559
High for period	0.9348	0.9600	0.9430	0.9280	0.7695
Low for period	1.0164	1.0299	1.0584	1.0040	0.9719
Average for period	0.9712	1.0007	1.0121	0.9714	0.8803

On February 18, 2014, the most recent weekly publication of the Daily Noon Buying Rate before the filing of this annual report on Form 10-K reported that the Noon Buying Rate as of February 14, 2014 for the conversion of Euros and Canadian dollars to U.S. dollars was \$1.3690 per Euro and \$0.9107 per Canadian dollar.

#### PART I

#### **ITEM 1. BUSINESS**

In this document, please note the following:

references to we, our, us, the Company or Mercer mean Mercer International Inc. and its subsidiaries, the context clearly suggests otherwise, and references to Mercer Inc. mean Mercer International Inc. excluding its subsidiaries;

references to ADMTs mean air-dried metric tonnes;

references to MW mean megawatts and MWh mean megawatt hours; and

all references to \$ shall mean U.S. dollars, which is our reporting currency, unless otherwise stated; refers to Euros; and C\$ refers to Canadian dollars.

Due to rounding, numbers presented throughout this report may not add up precisely to totals we provide and percentages may not precisely reflect the absolute figures.

#### The Company

#### General

We operate in the pulp business and are among the largest publicly traded producers of market northern bleached softwood kraft, or NBSK, pulp in the world. Mercer Inc. reorganized as a corporation under the laws of the State of Washington in 2006 from a Washington business trust. Its common stock is quoted and listed for trading on the NASDAQ Global Select Market (MERC) and the Toronto Stock Exchange (MRI.U).

We are the sole NBSK producer, and the only significant producer of pulp for resale, known as market pulp , in Germany, which is the largest pulp import market in Europe. We also generate and sell a significant amount of surplus green energy to regional utilities. Our operations are located in Eastern Germany and Western Canada. We currently employ approximately 1,460 people. We operate three NBSK pulp mills with a consolidated annual production capacity of approximately 1.5 million ADMTs of NBSK pulp and 305 MW of electrical generation:

*Rosenthal mill*. Our wholly-owned subsidiary, Rosenthal, owns and operates the Rosenthal mill, a modern, efficient ISO 9001, 14001 and 50001 certified NBSK pulp mill that has an annual production capacity of approximately 360,000 ADMTs and 57 MW of electrical generation. The Rosenthal mill generated and exported 178,295 MWh of electricity in 2013, resulting in approximately \$21.5 million in annual revenues. The Rosenthal mill is located in the town of Blankenstein, Germany, approximately 300 kilometers south of Berlin.

*Celgar mill*. Our wholly-owned subsidiary, Celgar, owns and operates the Celgar mill, a modern, efficient ISO 9001 and 14001 certified NBSK pulp mill with an annual production capacity of approximately 520,000 ADMTs and 100 MW of electrical generation. The Celgar mill generated and exported 127,729 MWh of electricity in 2013, resulting in approximately \$12.3 million in annual revenues. The Celgar mill is located near the city of Castlegar, British Columbia, Canada, approximately 600 kilometers east of Vancouver, British Columbia, Canada.

*Stendal mill.* Our 83.0% owned subsidiary, Stendal, owns and operates the Stendal mill, a state-of-the-art, single-line, ISO 9001 and 14001 certified NBSK pulp mill that has an annual production capacity of approximately 660,000 ADMTs and 148 MW of electrical generation. The Stendal mill generated and exported 393,027 MWh of electricity in 2013, resulting in approximately \$45.6 million in annual revenues. The Stendal mill is located near the town of Stendal, Germany, approximately 130 kilometers west of Berlin.

# **Organizational Chart**

The following chart sets out our directly and indirectly owned principal operating subsidiaries, their jurisdictions of organization, their principal activities and their annual pulp production and electrical generation capacity:

# History and Development of Business

In 1994, we commenced pulp operations with the acquisition of our Rosenthal mill. In 1999, we completed a major capital project which, among other things, converted that mill to the production of kraft pulp from sulphite pulp, increased its annual production capacity and improved efficiencies. The aggregate cost of this project was approximately \$385.7 million, of which approximately \$100.8 million was financed through government grants. Subsequent capital investments and efficiency improvements have reduced emissions and energy costs and increased the Rosenthal mill s annual production capacity to approximately 360,000 ADMTs.

In September 2004, we completed construction of the Stendal mill at an aggregate cost of approximately \$1.1 billion. The Stendal mill is one of the largest NBSK pulp mills in Europe. The Stendal mill was financed through a combination of government grants totaling approximately \$332.0 million, low-cost, long-term project debt which is largely severally guaranteed by the federal government and a state government in Germany, and equity contributions.

We initially had a 63.6% ownership interest in Stendal and, over time, increased our interest to 83.0%. We and Stendal s noncontrolling shareholder are parties to a shareholders agreement dated August 26, 2002, as amended, to govern our respective interests in Stendal. The agreement contains terms and conditions customary for these types of agreements, including restrictions on transfers of share capital and shareholder loans other than to affiliates, rights of first refusal on share and shareholder loan transfers, pre-emptive rights and piggyback rights on dispositions of our interest. The shareholders are not obligated to fund any further equity capital contributions to the project. The shareholders agreement provides that Stendal s managing directors are appointed by holders of a simple majority of its share capital. Further, shareholder decisions, other than those mandated by law or for the provision of financial assistance to a shareholder, are determined by a simple majority of Stendal s share capital.

In December 2013, our Stendal mill completed a \$49.3 million project, referred to as Project Blue Mill , which was designed to increase production and efficiency through debottlenecking initiatives including the installation of an additional 46 MW steam turbine at our Stendal mill. The debottlenecking which, among other things, required a new turbine in order to enhance and efficiently utilize steam production is designed to increase the mill s annual pulp production capacity by 30,000 ADMTs. The new turbine is also expected to initially produce an additional 109,000 MWh of surplus renewable energy for sale at premium pricing.

A significant portion of the capital investments at our German mills, including the construction of the Stendal mill, were financed through government grants. Since 1998, our German mills have benefited from approximately \$464.1 million in government grants. These grants reduce the cost basis of the assets purchased when the grants are received and are not reported in our income.

In February 2005, we acquired the Celgar mill for \$210.0 million plus \$16.0 million for the defined working capital of the mill. The Celgar mill was completely rebuilt in the early 1990s through a C\$850.0 million modernization and expansion project, which transformed it into a modern and competitive producer.

Since its acquisition, we have effected several capital projects and other initiatives at the Celgar mill to increase its annual pulp production capacity to 520,000 ADMTs and its production of green energy. This includes a capital project, referred to as the Celgar Energy Project, which was completed in September 2010 and increased the Celgar mill s production of green energy and optimized its power generation capacity, at an aggregate cost of approximately \$60.6 million, of which approximately \$44.6 million was financed by grants from the Canadian federal government.

# **Our Competitive Strengths**

Our competitive strengths include the following:

*Modern and Competitive Mills.* We operate three large, modern, competitive NBSK pulp mills that produce high-quality NBSK pulp, which is a premium grade of kraft pulp. We believe the relative age, production capacity and electrical generation capacity of our mills provide us with certain manufacturing cost and other advantages over many of our competitors.

Stable and Growing Income from Surplus Renewable Energy and Chemical Sales. Our modern mills generate electricity and steam in their boilers which is surplus to their operating requirements. Such energy is primarily produced from wood residuals which are a renewable carbon neutral source. All of our mills also generate and sell surplus energy to regional utilities. Our German mills benefit from special tariffs under Germany s Renewable Energy Sources Act, referred to as the Renewable Energy Act, which provides for premium pricing. Our Celgar mill is party to a fixed electricity purchase agreement, referred to as the Electricity Purchase Agreement, with the regional public utility provider, for the sale of surplus power that runs until 2020. Our Stendal mill also produces tall oil as a chemical by-product which is sold to third parties. In 2013, our mills produced approximately 699,051 MWh of surplus renewable energy and generated approximately \$92.2 million in revenues from energy and chemical sales. These sales provide us with a stable income unrelated to cyclical changes in pulp prices. In 2014, we expect our revenues from this source to increase as we completed the Blue Mill Project at our Stendal mill in December 2013, which is designed to produce an annual incremental 109,000 MWh of surplus energy. Additionally, in 2014, our Rosenthal mill is implementing a capital project to also produce and sell tall oil. We believe our generation and sale of surplus renewable green energy and chemicals provides us with a competitive energy advantage over less efficient mills.

*Leading Market Position.* We are among the largest publicly traded NBSK market pulp producers in the world, which provides us increased presence and better industry information in the markets in which we operate and provides for strong customer relationships with many large pulp consumers.

*Strategic Locations and Customer Service.* We are the only significant producer of market pulp in Germany, which is the largest pulp import market in Europe. Due to the proximity of our German mills to most of our European customers, we benefit from lower transportation costs relative to our major

competitors. Our Celgar mill, located in Western Canada, is well situated to serve Asian and North American customers. We primarily work directly with customers to capitalize on our geographic diversity, coordinate sales and enhance customer relationships. We believe our ability to deliver high-quality pulp on a timely basis and our customer service make us a preferred supplier for many customers.

Advantageous Capital Investments and Financing. Our German mills are eligible to receive government grants in respect of qualifying capital investments. Over the last 16 years, our German mills have benefited from approximately \$464.1 million of such government grants. In addition, our Celgar mill received approximately \$55.6 million of grants under the Canadian government s Pulp and Paper Green Transformation Program to fund the Celgar Energy Project and other smaller projects. All such grants reduce the cost basis of the assets purchased when the grants are received and are not reported in our income. Additionally, during the last ten years, capital investments at our German mills have reduced the amount of overall wastewater fees that would otherwise be payable by over \$71.3 million. Further, our Stendal mill benefits from German governmental guarantees of its project financing, which permitted it to obtain better credit terms and lower interest costs than would otherwise have been available. Stendal s project debt, which matures in 2017, currently bears interest at a substantially fixed rate of 5.28% per annum plus an applicable margin and is non-recourse to our other operations and Mercer Inc.

*Proximity of Abundant Fiber Supply.* Although fiber is cyclical in both price and supply, there is a significant amount of high-quality fiber within a close radius of each of our mills. This fiber supply, combined with our purchasing power and our current ability to meaningfully switch between whole logs chipped at our mills and sawmill residual chips, enables us to enter into contracts and arrangements which have generally provided us with sufficient fiber supply.

*Experienced Management Team.* Our directors and senior managers have extensive experience in the pulp and forestry industries. We also have experienced managers at all of our mills. Our management has a proven track record of implementing new initiatives and capital projects in order to reduce costs throughout our operations as well as identifying and harnessing new revenue opportunities.

# **Corporate Strategy**

Our corporate strategy is to create shareholder value by focusing on the expansion of our asset and earnings base through organic growth and acquisitions, primarily in Europe and North America. We pursue organic growth through active management and targeted capital expenditures to generate a high return by increasing pulp, energy and chemical production, reducing costs and improving efficiency. We are also conducting research to develop innovative new products based on other derivatives of the kraft pulping process. We seek to acquire interests in companies and assets in the pulp industry and related businesses where we can leverage our experience and expertise in adding value through a focused management approach. Key features of our strategy include:

*Targeted Capital Expenditures.* We operate three large modern pulp mills as we believe these production facilities provide us with the best platform to be an efficient and competitive producer of high-quality NBSK pulp without the need for significant sustaining capital. We seek to make targeted capital expenditures that increase the production and operational efficiency of the mills, reduce costs and improve product quality. Over the last five years, we have invested approximately \$200.0 million (including \$73.0 million in associated government grants) in growth capital expenditures for capacity expansions and operational efficiencies.

*Increasing Stable Revenues from Renewable Energy and Chemical Sales.* We focus on the generation and sales of surplus renewable energy and chemicals and, because there are minimal associated incremental

costs, such sales are highly profitable and they provide us with a stable income source unrelated to cyclical changes in pulp prices. In 2013, our mills sold 699,051 MWh of surplus electricity resulting in revenues of approximately \$79.4 million, compared to 710,241 MWh and approximately \$78.0 million in revenues in 2012. In December 2013, our Stendal mill completed Project Blue Mill to increase production and efficiency through debottlenecking initiatives and the installation of a 46 MW steam turbine at the mill. The new turbine is expected to initially produce an additional 109,000 MWh of surplus electricity annually. Our Rosenthal mill is implementing a capital project in 2014 to produce and sell tall oil. Based upon the current production levels of our mills, we expect to sell in excess of 840,000 MWh of surplus renewable energy in 2014. We continually explore and pursue initiatives to enhance our energy and chemical generation and sales in order to reduce volatility and increase our revenues from a stable source.

*Focus on NBSK Market Pulp.* We produce NBSK pulp because it is a premium grade kraft pulp and generally obtains the highest price relative to other kraft pulps. Although demand is cyclical, between 2004 and 2013 overall worldwide demand for bleached softwood kraft market pulp grew at an average of approximately 2% per annum. We focus on customers that produce tissue, specialty papers and high-quality printing and writing paper grades. We believe the growth in demand from tissue and specialty paper customers, which utilize a significant proportion of NBSK pulp, has more than offset the secular decline in demand from printing and writing paper customers. This allows us to benefit from our long-term relationships with tissue and paper manufacturers in Europe and participate in strong growth markets in emerging countries such as China where there has been strong growth in tissue demand.

Achieving Operational Excellence. Operating our mills reliably and at a competitive cost is important for our financial performance. In addition to our capital expenditure program, we continuously strive to develop maintenance systems and procedures that will improve the throughput of our products by increasing the reliability of our manufacturing processes. We also seek to reduce operating costs by better managing certain operating activities such as fiber procurement, sales, marketing and logistics activities. We believe that our continued focus on operational excellence should allow us to achieve improved profitability and cash flows.

*Strategic Opportunities.* We believe there will be continuing change and consolidation in the pulp and paper industry as industry participants continually seek to lower costs, refocus their product lines and react to ever changing global market conditions. We take an opportunistic approach to opportunities that can expand our earnings or grow our business.

#### **The Pulp Industry**

#### General

Pulp is used in the production of paper, tissues and paper-related products. Pulp is generally classified according to fiber type, the process used in its production and the degree to which it is bleached. Kraft pulp, a type of chemical pulp, is produced through a sulphate chemical process in which lignin, the component of wood which binds individual fibers, is dissolved in a chemical reaction. Chemically prepared pulp allows the wood s fiber to retain its length and flexibility, resulting in stronger paper products. Kraft pulp can be bleached to increase its brightness. Kraft pulp is noted for its strength, brightness and absorption properties and is used to produce a variety of products, including lightweight publication grades of paper, tissues and other paper-related products.

There are two main types of bleached kraft pulp, being softwood kraft made from coniferous trees and hardwood kraft made from deciduous trees. Softwood species generally have long, flexible fibers which add strength to paper while fibers from species of hardwood contain shorter fibers which lend bulk and opacity. Generally, list prices for softwood pulp are higher than list prices for hardwood pulp.

We produce and sell NBSK pulp, which is a bleached kraft pulp manufactured using species of northern softwood and is considered a premium grade because of its strength. It generally obtains the highest price relative to other kraft pulps. Southern bleached softwood kraft pulp is kraft pulp manufactured using southern softwood species and does not possess the strength found in NBSK pulp. NBSK pulp is the sole pulp product of our mills.

Most paper users of market kraft pulp use a mix of softwood and hardwood grades to optimize production and product qualities. In 2013, market kraft pulp consumption was approximately 52% hardwood bleached kraft, 44% softwood bleached kraft and the remainder comprised of unbleached pulp. Over the last several years, production of hardwood

pulp, based on fast growing plantation fiber primarily from Asia and South America, has increased much more rapidly than that of softwood grades that have longer growth cycles. Hardwood kraft generally has a cost advantage over softwood kraft as a result of lower fiber costs, higher wood yields and, for newer hardwood mills, economies of scale. As a result of this growth in supply and lower costs, kraft pulp customers have substituted some of the pulp content in their products to hardwood pulp.

Counteracting customers ability to substitute lower priced hardwood pulp for NBSK pulp is the requirement for strength and formation characteristics in finished goods. Paper and tissue makers focus on larger paper machines with higher speeds and lower basis weights for certain papers which require the strength characteristics of softwood pulp. Additionally, where paper products are lightweight or specialized, like direct mail, magazine paper or premium tissue, or where strength or absorbency are important, softwood kraft forms a significant proportion of the fiber used. As a result, we believe that the ability of kraft pulp users to further substitute hardwood for softwood pulp is limited by such requirements.

Kraft pulp can be made in different grades, with varying technical specifications, for different end uses. High-quality kraft pulp is valued for its reinforcing role in mechanical printing papers, while other grades of kraft pulp are used to produce lower priced grades of paper, including tissues and paper-related products.

#### Markets

We believe that over 130 million ADMTs of chemical pulp are converted annually into tissues, printing and writing papers, carton boards and other specialty grades of paper and paperboard around the world. We also believe that over one third of this pulp is sold on the open market as market pulp, while the remainder is produced for internal purposes by integrated paper and paperboard manufacturers.

Demand for kraft pulp is cyclical in nature and is generally related to global and regional levels of economic activity. In 2008, overall global demand for all kraft pulp types, including softwood, was negatively impacted by the weak global economic conditions and global financial and credit turmoil the world began to experience in the second half of that year and which continued into the first half of 2009. Significant producer shutdowns and curtailments, along with strong demand from China, resulted in an improved supply-demand balance and improved prices in the second half of 2009 through 2010. Although global pulp markets continued to strengthen in the first half of 2011, mainly driven by demand from Asia, economic uncertainty in Europe and credit tightening in China resulted in a decrease in demand and weaker pulp prices in the fourth quarter of 2011. In 2012, there was continued economic uncertainty in Europe and credit tightening in China in the first half of the year. Further, in the latter part of 2012, weak demand for paper in Europe resulted in some integrated producers curtailing their paper production and selling their pulp on the market, primarily in China. These factors negatively impacted demand and supply of pulp and resulted in generally weak pulp prices. In 2013, demand from China was stable throughout the year and supply was slightly under-balanced, which resulted in higher prices in 2013.

Between 2004 and 2013, worldwide demand for chemical market pulp grew at an average rate of approximately 2% annually. The following chart illustrates the global demand for chemical market pulp for the periods indicated:

Two key macro-economic trends in worldwide NBSK pulp demand over the last several years have been:

a significant increase in demand from emerging markets, and in particular China, which has more than offset a decline in demand in the mature markets of Europe, North America and Japan; and

partly related to the foregoing, there has been a significant shift in demand by end use, as demand from tissue and specialty producers has increased markedly and offset the secular decline in demand for printing and writing paper resulting from the rapid growth in digital media.

Since 2007, demand for chemical softwood market pulp has grown in the emerging markets of Asia, Eastern Europe and Latin America. China in particular has experienced substantial growth and its imports of softwood market pulp grew by approximately 13% per annum between 2004 and 2013. We believe the emerging markets now account for approximately 50% of total world demand. China now accounts for approximately 28% of global bleached softwood kraft market pulp demand, compared to only 12% in 2004. Western Europe currently accounts for approximately 27% of global bleached softwood kraft market pulp demand, compared to approximately 38% in 2004. We believe the demand in the mature markets of Europe, North America and Japan in 2013 will have declined by approximately 2.5 million ADMTs from its peak in 2005.

The following chart sets forth industry-wide bleached softwood kraft delivery levels to China for the periods indicated:

Growth in NBSK pulp demand in China and other emerging markets has, to a large extent, been driven by increased demand from tissue producers, as a result of economic growth and rising income levels and living standards in such markets. These factors generally contribute to a greater demand for personal hygiene products in such regions. In China alone, tissue producers have publicly announced plans to add a total of 132 tissue paper machines at various sites by the end of 2015 to increase their annual tissue capacity by approximately 4.9 million ADMTs. At this time there can be no assurance as to when and how much of such capacity expansion will be implemented.

This has also led to an overall shift in demand for NBSK pulp, as demand from tissue producers has increased, while demand from printing and writing end uses has decreased. Between 2004 and 2012 (the last year for which information is currently available), NBSK pulp demand for tissue production increased by approximately 106%.

The following chart compares NBSK pulp demand by end use in each of 2003 and 2012 (the latest year for which figures are currently available).

We believe 2013 NBSK demand by end use was generally consistent with the trend in the chart above.

A measure of demand for kraft pulp is the ratio obtained by dividing the worldwide demand of kraft pulp by the worldwide capacity for the production of kraft pulp, or the demand/capacity ratio . An increase in this ratio generally occurs when there is an increase in global and regional levels of economic activity. An increase in this ratio also generally indicates greater demand as consumption increases, which often results in rising kraft pulp prices and a reduction of inventories by producers and buyers. As prices continue to rise, producers continue to run at higher operating rates. However, an adverse change in global and regional levels of economic activity generally negatively affects demand for kraft pulp, often leading buyers to reduce their purchases and rely on existing pulp inventories. As a result, producers run at lower operating rates by taking downtime to limit the build-up of their own inventories. The demand/capacity ratio for softwood kraft pulp was approximately 94%, 94% and 92% in 2013, 2012 and 2011, respectively.

A significant factor affecting our market is the amount of closures of old, high-cost capacity. Over the last several years, mills in North America, Finland and Sweden were permanently or indefinitely closed. Although some capacity was restarted in late 2009 and 2010 in response to very high NBSK pulp prices, we believe the overall net effect reduced NBSK pulp supply and positively impacted markets. Between 2011 and 2013, we believe approximately 1.5 million ADMTs of pulp capacity was idled or shut down through mill closures or curtailments. Further, in efforts to improve environmental and safety standards, China has publicly stated that it will be reducing existing pulp and paper capacity in the near term by closing old mills, targeting a removal of 7.4 million ADMTs by the end of 2013. At this time, there can be no certainty as to the actual amount and timing of any such closures.

During the course of 2014, the supply of hardwood bleached kraft pulp production is projected to increase by approximately 2.1 million ADMTs, primarily from South America. This increase in hardwood chemical production is, in large part, targeted at the growing demand for pulp by tissue makers, particularly in China. As a result of generally lower prices for hardwood bleached pulp, this increase in supply could put downward pressure on NBSK pulp prices.

We are aware of one new NBSK mill in Russia which started up in 2013. The new mill provided a net incremental increase in annual pulp production capacity of approximately 490,000 ADMTs. Other than the foregoing, we are unaware of any new material NBSK pulp capacity that has been announced. However, certain integrated pulp and paper producers have the ability to discontinue paper production by idling their paper machines and selling their NBSK pulp production on the market, if market conditions, prices and trends warrant such actions. We believe that the absence of other plant expansions is due in part to fiber supply constraints and high capital costs.

# **NBSK Pulp Pricing**

Pulp prices are highly cyclical. In general, kraft pulp is a globally traded commodity. Pricing and demand are influenced by the balance between supply and demand, as affected by global macroeconomic conditions, changes in consumption and capacity, the level of customer and producer inventories and fluctuations in exchange rates. As Northern Europe has historically been the world s largest market and NBSK is the premium grade, the European NBSK market price is generally used as a benchmark price by the industry.

The average European list prices for NBSK pulp since 2000 have fluctuated between a low of approximately \$447 per ADMT in 2002 to a high of \$1,030 per ADMT in 2011.

The following chart sets out the changes in list prices for NBSK pulp in Europe, as stated in U.S. dollars, Canadian dollars and Euros for the periods indicated:

In 2006, pulp prices increased steadily from approximately \$600 per ADMT in Europe to \$870 per ADMT at the end of 2007. These price increases resulted from increased demand and the closure of several pulp mills, particularly in North America, which reduced NBSK capacity. In the second half of 2008, list prices for NBSK pulp decreased markedly due to weak global economic conditions. As a result, list prices for NBSK pulp in Europe decreased from \$900 per ADMT in mid-2008 to \$635 per ADMT at the end of the year. Such pulp price weakness continued into early 2009, though commencing in mid-2009, pulp markets began to strengthen which led to improved prices. Strong demand from China, capacity closures and historically low global inventories for bleached softwood kraft pulp helped support upward price momentum. During the second half of 2009, several price increases raised European list prices by a total of \$170 per ADMT to \$800 per ADMT by year end. Such price increases were partially offset by the continued weakening of the U.S. dollar versus the Euro and Canadian dollar during the period. In 2010, several increases lifted prices to record levels in the middle of the year and at the end of 2010 list prices were near historic highs of \$950, \$960 and \$840 per ADMT in Europe, North America and China, respectively.

In 2011, pulp prices remained strong in the first half of the year, reaching record levels of \$1,030 per ADMT in Europe and \$1,035 and \$920 per ADMT in North America and China, respectively. However, uncertainty concerning the economic situation in Europe, along with credit tightening in China in the last part of the year, caused pulp prices to drop sharply to \$825 per ADMT in Europe and \$890 and \$670 per ADMT in North America and China, respectively, by the end of the year. Economic uncertainty in Europe and China continued to dampen demand and NBSK pulp prices, which remained generally weak in 2012. In 2012, year-end list prices were approximately \$810, \$870 and \$655 per ADMT in Europe, North America and China, respectively. In 2013, demand from China was stable throughout the year and supply was slightly under-balanced, which resulted in higher year-end list prices of \$905 per ADMT in Europe and \$750 per ADMT in North America and China, respectively.

A producer s net sales realizations are list prices, net of customer discounts, commissions and other selling concessions. While there are differences between NBSK list prices in Europe, North America and Asia, European prices are generally regarded as the global benchmark and pricing in other regions tends to follow European trends. The nature of the pricing structure in Asia is different in that, while quoted list prices tend to be lower than Europe, customer discounts and rebates are much lower resulting in net sales realizations that are generally similar to other markets.

The majority of market NBSK pulp is produced and sold by Canadian and Northern European producers, while the price of NBSK pulp is generally quoted in U.S. dollars. As a result, NBSK pricing is often affected by fluctuations in the currency exchange rates for the U.S. dollar versus the Canadian dollar, the Euro and local currencies. NBSK pulp price increases during 2006, 2007 and the first half of 2008 were in large part offset by the weakening of the U.S. dollar. Similarly, the strengthening of the U.S. dollar against the Canadian dollar and the Euro towards the end of 2008 helped partially offset pulp price decreases caused by the deterioration in global economic conditions. The overall strengthening of the U.S. dollar against the Euro in 2010, and in particular in the first half of 2010, improved the operating margins of our German mills. Although the U.S. dollar weakened against the Euro in 2012 compared to 2011, partially offsetting pulp price decreases in 2012. In 2013, the U.S. dollar was 3% weaker against the Euro, compared to 2012, which reduced the operating margins of our German mills.

The global supply and demand balance for NBSK pulp is a key determinant in pulp pricing. Generally, we and other producers consider global NBSK pulp supply and demand to be evenly balanced when world inventory levels are at about 30 days supply.

The following chart sets forth changes in FOEX PIX Pulp index prices for NBSK pulp and global bleached softwood kraft inventory levels between 2004 and 2013:

### Seasonality

We are exposed to fluctuations in quarterly sales volumes and expenses due to seasonal factors. These factors are common in the NBSK pulp industry. We generally have weaker pulp demand in Europe during the summer holiday months and in China in the period relating to its lunar new year. We typically have a seasonal build-up in raw material inventories in the early winter months as the mills build up their fiber supply for the winter when there is reduced availability.

# Competition

Pulp markets are large and highly competitive. Producers ranging from small independent manufacturers to large integrated companies produce pulp worldwide. Our pulp and customer services compete with similar products manufactured and distributed by others. While many factors influence our competitive position, particularly in weak economic times, a key factor is price. Other factors include service, quality and convenience of location. Some of our competitors are larger than we are in certain markets and have substantially greater financial resources. These resources may afford those competitors more purchasing power, increased financial flexibility, more capital resources for expansion and improvement and enable them to compete more effectively. Our key NBSK pulp competitors are principally located in Northern Europe and Canada.

# The Manufacturing Process

The following diagram provides a simplified description of the kraft pulp manufacturing process at our pulp mills:

In order to transform wood chips into kraft pulp, wood chips undergo a multi-step process involving the following principal stages: chip screening, digesting, pulp washing, screening, bleaching and drying.

In the initial processing stage, wood chips are screened to remove oversized chips and sawdust and are conveyed to a pressurized digester where they are heated and cooked with chemicals. This occurs in a continuous process at the Celgar and Rosenthal mills and in a batch process at the Stendal mill. This process softens and eventually dissolves the phenolic material called lignin that binds the fibers to each other in the wood.

Cooked pulp flows out of the digester and is washed and screened to remove most of the residual spent chemicals and partially cooked wood chips. The pulp then undergoes a series of bleaching stages where the brightness of the pulp is gradually increased. Finally, the bleached pulp is sent to the pulp machine where it is dried to achieve a dryness level of approximately 90%. The pulp is then ready to be baled for shipment to customers.

A significant feature of kraft pulping technology is the recovery system, whereby chemicals used in the cooking process are captured and extracted for re-use, which reduces chemical costs and improves environmental performance. During the cooking stage, dissolved organic wood materials and used chemicals, collectively known as black liquor, are extracted from the digester. After undergoing an evaporation process, black liquor is burned in a recovery boiler. The chemical compounds of the black liquor are collected from the recovery boiler and are reconstituted into cooking chemicals used in the digesting stage through additional processing in the recausticizing plant.

The heat produced by the recovery boiler is used to generate high-pressure steam. Additional steam is generated by a power boiler through the combustion of biomass consisting of bark and other wood residuals from sawmills and our woodrooms and residue generated by the effluent treatment system. Additionally, during times of upset, we may use natural gas to generate steam. The steam produced by the recovery and power boilers is used to power a turbine generator to generate electricity, as well as to provide heat for the digesting and pulp drying processes.

#### **Research and Development**

We, along with other pulp producers both individually and through industry associations, are conducting research and development focused on developing innovative new products that are based on derivatives of the kraft pulping process. Currently these derivatives are focused in two broad categories:

the further refinement of materials contained in black liquor, the extractive chemical and lignin containing compounds that are a result of the kraft pulping process; and

the further refinement of cellulose materials that are currently the basis of NBSK kraft pulp. We are engaged with several research partners to participate in and develop new innovative products. To date, one of the most well-developed of these projects is a cellulose derivative generally referred to in the industry as cellulose filaments . Cellulose filaments are the result of a new process that unbinds the individual filaments that make up a cellulose fiber. In northern softwoods, there are approximately 1,000 filaments making up a single fiber. The filaments resulting from this patented process are long, ribbon-like structures that have unique strength characteristics similar to other chemical derivatives, such as aramids. We believe that this material may have commercial potential in many applications, including strength enhancers, solution stabilizers and specialty solutions for numerous other industries.

We are part of an industry association that has made considerable progress in developing a particular manufacturing process. We, along with other member companies, including certain other NBSK producers, have license rights to further develop and market existing intellectual property registered under patent to our industry association. Further, such association, in conjunction with one of its member companies, is constructing a pilot production facility and we have access to its product for development purposes. While there remains much research and development to be done, we are encouraged enough to continue to expend resources to develop this technology, both individually and in joint development arrangements with third parties. We estimate expenditures totaling approximately \$3.0 million over the next three years.

Such research and development is still at an early stage and there has been no commercialization of the research to date. We currently estimate it may take between three and five years before we can determine if product applications can be commercialized. However, there can be no assurance that such research and development will ever result in commercialization or the production or sales of any products by us at a profit or at all.

#### **Our Mills and Product**

We manufacture and sell NBSK pulp produced from woodchips and pulp logs at our three mills.

The following table sets out our pulp production capacity and actual production by mill for the periods indicated:

	Annual	Year Ended December 31,		
Pulp Production by Mill:	Capacity <sup>(1)</sup>	2013	2012 (ADMTs)	2011
Rosenthal	360,000	361,724	337,959	344,389
Celgar	520,000	447,935	490,018	488,007
Stendal	660,000	634,816	640,298	621,281
Total pulp production	1,540,000	1,444,475	1,468,275	1,453,677

(1) Capacity is the rated capacity of the plants for the year ended December 31, 2013.

*Rosenthal Mill.* The Rosenthal mill is situated on a 220 acre site in the town of Blankenstein in the state of Thüringia, approximately 300 kilometers south of Berlin. The Saale river flows through the site of the mill. In late 1999, we completed a major capital project which converted the Rosenthal mill to the production of kraft pulp. It is a single line mill with a current annual production capacity of approximately 360,000 ADMTs of kraft pulp. The mill is self-sufficient in steam and electrical power. Some excess electrical power which is constantly generated is sold to the regional power grid. The facilities at the mill include:

an approximately 315,000 square feet fiber storage area;

debarking and chipping facilities for pulp logs;

an approximately 300,000 square feet roundwood yard;

a fiber line, which includes a Kamyr continuous digester and bleaching facilities;

a pulp machine, which includes a dryer, a cutter and a baling line;

an approximately 63,000 square feet finished goods storage area;

a chemical recovery line, which includes a recovery boiler, evaporation plant, recausticizing plant and lime kiln;

a fresh water plant;

a wastewater treatment plant; and

a power station with a turbine capable of producing 57 MW of electric power from steam produced by the recovery boiler and a power boiler.

The kraft pulp produced at the Rosenthal mill is a long-fibered softwood pulp produced by a sulphate cooking process and manufactured primarily from wood chips and pulp logs. A number of factors beyond economic supply and demand have an impact on the market for chemical pulp, including requirements for pulp bleached without any chlorine compounds or without the use of chlorine gas. The Rosenthal mill has the capability of producing both totally chlorine free and elemental chlorine free pulp. Totally chlorine free pulp is bleached to a high brightness using oxygen, ozone and hydrogen peroxide as bleaching agents, whereas elemental chlorine free pulp is produced by substituting chlorine dioxide for chlorine gas in the bleaching process. This substitution virtually eliminates complex chloro-organic compounds from mill effluent.

Kraft pulp is valued for its reinforcing role in mechanical printing papers and is sought after by producers of paper for the publishing industry, primarily for magazines and advertising materials. Kraft pulp is also an important ingredient for tissue manufacturing, and tissue demand tends to increase with living standards in developing countries. Kraft pulp produced for reinforcement fibers is considered the highest grade of kraft pulp and generally obtains the highest price. The Rosenthal mill produces pulp for reinforcement fibers to the specifications of certain of our customers. We believe that a number of our customers consider us their supplier of choice.

*Stendal Mill.* The Stendal mill is situated on a 200 acre site owned by Stendal that is part of a larger 1,250 acre industrial park near the town of Stendal in the state of Saxony-Anhalt, approximately 300 kilometers north of the Rosenthal mill and 130 kilometers west of Berlin. The mill is adjacent to the Elbe river and has access to harbor facilities for water transportation. The mill is a single line mill with a current annual design production capacity of approximately 660,000 ADMTs of kraft pulp. The Stendal mill is self-sufficient in steam and electrical power. Some excess electrical power which is constantly being generated is sold to the regional power grid. The facilities at the mill include:

an approximately 920,000 square feet fiber storage area;

debarking and chipping facilities for pulp logs;

a fiber line, which includes ten SuperBatch digesters and bleaching facilities;

a pulp machine, which includes a dryer, a cutter and a baling line;

an approximately 108,000 square feet finished goods storage area;

a chemical recovery line, which includes a recovery boiler, evaporation plant, recausticizing plant and lime kiln;

a fresh water plant;

a wastewater treatment plant; and

a power station with two turbines capable of producing 148 MW of electrical power since the completion of Project Blue Mill in December 2013.

The kraft pulp produced at the Stendal mill is of a slightly different grade than the pulp produced at the Rosenthal mill as the mix of softwood fiber used is slightly different. This results in a complementary product more suitable for different end uses. The Stendal mill is capable of producing both totally chlorine free and elemental chlorine free pulp.

*Celgar Mill.* The Celgar mill is situated on a 400 acre site near the city of Castlegar, British Columbia. The mill is located on the south bank of the Columbia River, approximately 600 kilometers east of the port city of Vancouver, British Columbia, and approximately 32 kilometers north of the Canada-U.S. border. The city of Seattle, Washington is approximately 650 kilometers southwest of Castlegar. The Celgar mill is a single line mill with a current annual production capacity of approximately 520,000 ADMTs of kraft pulp. Internal power generating capacity resulting from the completion of the Celgar Energy Project in 2010 enables the Celgar mill to be self-sufficient in electrical power and to sell surplus electricity. The facilities at the Celgar mill include:

chip storage facilities with a capacity of 250,000 cubic meters of chips;

a woodroom containing debarking and chipping equipment for pulp logs;

a fiber line, which includes a dual vessel hydraulic digester, two stage oxygen delignification and a four stage bleach plant;

two pulp machines, which each include a dryer, a cutter and a baling line;

a chemical recovery line, which includes a recovery boiler, evaporation plant, recausticizing area and wastewater treatment system; and

two turbines and generators capable of producing approximately 48 MW and 52 MW, respectively, of electric power from steam produced by the recovery boiler and a power boiler.

The Celgar mill produces high-quality kraft pulp that is made from a unique blend of slow growing/long-fiber Western Canadian tree species. It is used in the manufacture of high-quality paper and tissue products. We believe the Celgar mill s pulp is known for its excellent product characteristics, including tensile strength, wet strength and brightness. The Celgar mill is a long-established supplier to paper and tissue producers in Asia.

# Generation and Sales of Green Energy and Chemicals at our Mills

Our pulp mills are large scale bio-refineries that, in addition to pulp, also produce surplus carbon neutral or green energy. As part of the pulp production process our mills generate green energy using carbon-neutral biofuels such as black liquor and wood waste. Through the incineration of biofuels in the recovery and power boilers, our mills produce sufficient steam to cover all of our steam requirements and allow us to produce surplus electricity which we sell to third party utilities. As a result, we have benefitted from green energy legislation, incentives and commercialization that has developed over the last few years in Europe and Canada. In addition, in recent years we have applied considerable resources to increasing our capacity to produce and sell bio-chemicals, primarily tall oil for use in numerous applications including bio-fuels.

Our surplus energy and chemical sales provide our mills with a new stable revenue source unrelated to pulp prices. Since our energy and chemical production are by-products of our pulp production process, there are minimal incremental costs and our surplus energy and chemical sales are highly profitable. We believe that this revenue source gives our mills a competitive advantage over other older mills which do not have the equipment or capacity to produce and/or sell surplus power and/or chemicals in a meaningful amount.

In 2013 and 2012, we sold 699,051 MWh and 710,241 MWh of surplus energy, respectively, and recorded revenues of \$79.4 million and \$78.0 million, respectively, from such energy sales. In 2013 and 2012, we recorded revenues of \$12.8 million and \$15.0 million, respectively, from the sale of bio-chemicals.

The following table sets out our electricity generation and surplus electricity sales for the last five years:

The following chart sets forth our consolidated revenues from electricity and chemical sales for the last five years:

### German Mills

Our Rosenthal and Stendal mills participate in a program established pursuant to the Renewable Energy Act in Germany. Such Act, in existence since 2000, requires that public electric utilities give priority to electricity produced from renewable energy sources by independent power producers and pay a fixed tariff for a period of 20 years. Under the program, our German mills now sell their surplus energy to the local electricity grid at the rates stipulated by the Renewable Energy Act for biomass energy.

Since 2005, our German mills have also benefited from the sale of emission allowances under the European Union Carbon Emissions Trading Scheme, referred to as EUETS. However, our eligibility for special tariffs under the Renewable Energy Act has reduced the amount of emissions allowances granted to our German mills under the EU ETS.

In 2013, our Rosenthal and Stendal mills sold approximately 178,295 MWh and 393,027 MWh of electricity, respectively, for proceeds of \$21.5 million and \$45.6 million, respectively.

In December 2013, we completed Project Blue Mill which was designed to increase the Stendal mill s annual pulp production by 30,000 ADMTs and initially produce an additional 109,000 MWh of surplus renewable electricity. We estimate that, based on forecasted pulp production and current prices, sales of such incremental surplus electricity will generate approximately \$10.0 million in annual revenues for Stendal.

In 2013, our Stendal mill generated \$12.8 million from the sale of tall oil, a by-product of our production process. In 2014, our Rosenthal mill is implementing a capital project to also produce and sell tall oil. We estimate that, when completed and based on current pricing, the project should permit the Rosenthal mill to generate approximately \$1.6 million in net annual revenues from tall oil sales.

# Celgar Mill

In September 2010, we completed the Celgar Energy Project at the Celgar mill to increase and optimize the mill s production of green energy. The project included the installation of a 48 MW condensing turbine, which brought the mill s installed generating capacity up to 100 MW, and upgrades to the mill s bark boiler and steam consuming facilities. The Celgar mill has an Electricity Purchase Agreement with British Columbia Hydro and Power Authority, referred to as B.C. Hydro , for the sale of power generated from such project. Under the Electricity Purchase Agreement, the Celgar mill agreed to supply a minimum of approximately 238,000 MWh of surplus electrical energy annually to the utility over a ten-year term. We financed the Celgar Energy Project principally with funding of approximately \$44.6 million of Canadian governmental grants.

In 2013, we sold approximately 127,729 MWh of surplus renewable electricity at our Celgar mill which generated approximately \$12.3 million in annual revenues.

# **Production Costs**

Our major costs of production are fiber, labor, energy and chemicals. Fiber, comprised of wood chips and pulp logs, is our most significant operating expense. Given the significance of fiber to our total operating expenses and our limited ability to control its costs, compared with our other operating costs, volatility in fiber costs can materially affect our margins and results of operations.

# Fiber

Our mills are situated in regions which generally provide a relatively stable supply of fiber. The fiber consumed by our mills consists of wood chips produced by sawmills as a by-product of the sawmilling process and pulp logs. Wood chips are small pieces of wood used to make pulp and are either wood residuals from the sawmilling process or pulp logs chipped especially for this purpose. Pulp logs consist of lower quality logs not used in the production of lumber. Wood chips and pulp logs are cyclical in both price and supply.

Generally, the cost of wood chips and pulp logs is primarily affected by the supply and demand for lumber. Additionally, regional factors such as harvesting levels and weather conditions can also have a material effect on the supply, demand and price for fiber.

In Germany, since 2006, the price and supply of wood chips has been affected by increasing demand from alternative or renewable energy producers and government initiatives for carbon neutral energy. Declining energy prices and weakening economies in the first half of 2009 tempered the increased demand for wood chips that resulted from initiatives by European governments to promote the use of wood as a carbon neutral energy. Over the long-term, we expect this non-traditional demand for fiber to continue to increase.

In April 2008, the Russian government raised tariffs on the export of sawmill and pulp wood to 25% from 20%. A further increase to 80% was initially scheduled for January 1, 2009 but was officially deferred twice and Russia s export tariff remained unchanged at 25% in 2011. In August 2012, Russia entered the World Trade Organization, or WTO, and, due to inclusion in the WTO, Russia has lowered its export tariffs to between 13% and 15%, which we believe has had a positive impact on European fiber supply.

During the past few years, certain customers have endeavored to purchase pulp that is produced using fiber that meets certain recognized wood certification requirements from forest certification agencies like FSC, PEFC, SFI-CSA. If the fiber we purchase does not meet certain wood certifications required by customers, it may make it more difficult or prevent us from selling our pulp to such customers. The wood certification process is a voluntary process which allows a company to demonstrate that they use forest resources in accordance with strict principles and standards in the areas of sustainable forest management practices and environmental management. In an effort to procure wood only from sustainably managed sources, we employ an FSC Chain of Custody protocol which requires tracking of fiber origins and preparing risk based assessments regarding the region and operator. In the areas where we operate, we are actively engaged in the further development of certification processes. Although wood certification requirements to have a material adverse impact on our fiber procurement and pulp sales.

Offsetting some of the increases in demand for wood fiber have been initiatives in which we and other producers are participating to increase harvest levels in Germany, particularly from small private forest owners. We believe that

Germany has the highest availability of softwood forests in Europe suitable for harvesting and manufacturing. We believe private ownership of such forests is approximately 50%. Many of these forest ownership stakes are very small and have been harvested at rates much lower than their rate of growth. In 2009, forest owners began to reduce their harvesting rates in response to slowing economies and weaker demand for pulp logs, leading to an undersupply which resulted in increased fiber prices during that year. Fiber prices continued to increase through most of 2010 and 2011, driven by a weak lumber market, lower harvesting in central Germany and increased demand for wood from the energy sector for heating and other bio-energy purposes. In 2012, fiber prices in Germany decreased by approximately 17% (in U.S. dollar terms), mainly due to reduced demand for fiber from the European particle board industry and other regional residual fiber users and the start of a recovery in lumber markets. In 2013, fiber prices in Germany increased demand for pellets due to an unusually cold winter. In addition to increased demand, high snow levels and summer floods in some areas in which we operate led to lower fiber supply levels during much of 2013.

We believe we are the largest consumer of wood chips and pulp logs in Germany and often provide the best long-term economic outlet for the sale of wood chips in Eastern Germany. We coordinate the wood procurement activities for our German mills to reduce overall personnel and administrative costs, provide greater purchasing power and coordinate buying and trading activities. This coordination and integration of fiber flows also allows us to optimize transportation costs, and the species and fiber mix for both mills.

In 2013, the Rosenthal mill consumed approximately 1.8 million cubic meters of fiber. Approximately 63% of such consumption was in the form of sawmill wood chips and approximately 37% was in the form of pulp logs. The wood chips for the Rosenthal mill are sourced from approximately 31 sawmills located primarily in the states of Bavaria, Baden-Württemberg and Thüringia and are within a 300 kilometer radius of the Rosenthal mill. Within this radius, the Rosenthal mill is the largest consumer of wood chips. Given its location and size, the Rosenthal mill is often the best economic outlet for the sale of wood chips in the area. Approximately 67% of the fiber consumed by the Rosenthal mill is spruce and the remainder is pine. While fiber costs and supply are subject to cyclical changes largely in the sawmill industry, we expect that we will be able to continue to obtain an adequate supply of fiber on reasonably satisfactory terms for the Rosenthal mill due to its location and our long-term relationships with suppliers. We have not historically experienced any significant fiber supply interruptions at the Rosenthal mill.

Wood chips for the Rosenthal mill are normally sourced from sawmills under one-year contracts with quarterly adjustments for market pricing. Substantially all of our chip supply is sourced from suppliers with which we have a long-standing relationship. Pulp logs are sourced from the state forest agencies in Thüringia, Saxony and Bavaria on a contract basis and partly from private holders and traders on the same basis as wood chips. Like the wood chip supply arrangements, these contracts tend to be for one-year terms with quarterly adjustments for market pricing. We organize the transportation of pulp logs sourced from the state agencies in Thüringia, Saxony and Bavaria after discussions with the agencies regarding the quantities of pulp logs that we require.

In 2013, the Stendal mill consumed approximately 3.3 million cubic meters of fiber. Approximately 24% of such fiber was in the form of sawmill wood chips and approximately 76% in the form of pulp logs. The core wood supply region for the Stendal mill includes most of the Northern part of Germany within an approximate 300 kilometer radius of the mill. We also purchase wood chips from Southwestern and Southern Germany. The fiber base in the wood supply area for the Stendal mill consisted of approximately 58% pine and 42% spruce and other species in 2013. The Stendal mill has sufficient chipping capacity to fully operate solely using pulp logs, if required. We source pulp logs partly from private forest holders and partly from state forest agencies in Thüringia, Saxony-Anhalt, Mecklenburg-Western Pomerania, Saxony, Lower Saxony, North Rhine-Westphalia, Hesse and Brandenburg. In addition, in 2013, the Stendal mill also imported fiber from Poland and the Baltic Sea region.

In 2013, the Celgar mill consumed approximately 2.4 million cubic meters of fiber. Approximately 72% of such fiber was in the form of sawmill wood chips and the remaining 28% came from pulp logs processed through its woodroom or chipped by a third party. The source of fiber at the mill is characterized by a mixture of species (whitewoods, douglas fir and cedar) and the mill sources fiber from a number of Canadian and U.S. suppliers.

As a result of the cyclical decline in sawmill chip supply resulting from lower lumber production in British Columbia commencing in 2008, the Celgar mill increased its U.S. purchases of fiber, diversified its suppliers and, where possible, increased chip production through third party field chipping contracts and existing sawmill suppliers. In 2009, the Celgar mill upgraded its woodroom which, along with subsequent improvements during the year, increased its capacity to be able to process up to 50% of the mill s fiber needs. The woodroom upgrades also increased the mill s ability to process smaller diameter logs and facilitate an efficient flow of fiber. This has increased the overall volume of fiber being processed and helped mitigate increases in the price of fiber.

The Celgar mill has access to approximately 21 different suppliers from Canada and the U.S., representing approximately 75% of its total annual fiber requirements. The Celgar mill s woodroom and third party chippers supplied the remaining 25% of the mill s fiber requirements in 2013. Chips are purchased in Canada and the U.S. in accordance with chip purchase agreements. Generally, pricing is reviewed and adjusted periodically to reflect market prices. One of the longer-term contracts is a so-called evergreen agreement, where the contract remains in effect until one of the parties elects to terminate after providing the stipulated notice. All other contracts are generally for one year with quarterly adjustments or on three-month terms.

To secure the volume of pulp logs required by its woodroom, the Celgar mill has entered into pulp log supply agreements, which can range from three-month to one-year terms, with a number of different suppliers, many of whom are also contract chip suppliers to the mill. All of the pulp log agreements can be terminated by either party for any reason, upon seven days written notice. The Celgar mill also purchased two non-renewable licenses at a cost of \$1.2 million, which will provide saw logs to sawmills in the area and pulp logs for the Celgar mill to use.

In 2013, our fiber costs per unit at the Celgar mill were approximately 12% lower than in 2012, as a result of the impact of strong sawmill activity in the region.

#### Labor

Our labor costs are generally steady, with small overall increases due to inflation in wages and health care costs. Over the last three years, we have been able to largely offset such increases by increasing our efficiencies and production and streamlining operations.

In July 2013, we determined to reduce the Celgar mill s workforce by approximately 85 employees in order to reduce the mill s fixed costs. In 2013, we incurred pre-tax charges of approximately \$5.0 million for severance and other personnel-related expenses in connection with this reduction. We currently estimate incurring additional pre-tax severance and personnel charges of approximately \$0.6 million as additional personnel leave the workforce in 2014. In 2013, we restructured the management team at the Stendal mill and incurred expenses of \$1.4 million in respect thereof.

#### Energy

Our energy is primarily generated from renewable carbon neutral sources, such as black liquor and wood waste. Our mills produce all of our steam requirements and generate excess energy which we sell to third party utilities. In 2013, we generated 1,710,224 MWh and sold 699,051 MWh of surplus energy. See also Generation and Sales of Green Energy and Chemicals at our Mills . We utilize fossil fuels, such as natural gas, primarily in our lime kilns and we use a limited amount for start-up and shutdown operations. Additionally, from time to time, mill process disruptions occur and we consume small quantities of purchased electricity and fossil fuels to maintain operations. As a result, all of our mills are subject to fluctuations in the prices for fossil fuels.

#### **Chemicals**

Our mills use certain chemicals which are generally available from several suppliers and sourcing is primarily based upon pricing and location. Although chemical prices have risen slightly over the last three years, we have been able to partially reduce our costs through improved efficiencies and capital expenditures. In connection with our focus on the growing bio-energy market, we sell tall oil, a by-product of our production process which is used as both a chemical additive and as a green energy source. In 2013, we generated \$12.8 million from the sale of tall oil. In 2014, our Rosenthal mill is implementing a capital project which will allow it to process and sell tall oil. We currently expect tall oil sales to increase in future periods.

#### **Cash Production Costs**

Consolidated cash production costs per ADMT for our pulp mills are set out in the following table for the periods indicated:

	Ŋ	Year Ended			
	D	December 31,			
	2013	2012	2011		
Cash Production Costs	(1	(per ADMT)			
Fiber	\$ 356	\$331	\$383		
Labor	62	60	60		
Chemicals	63	63	64		
Energy	32	24	28		
Other	64	59	78		
Total cash production costs <sup>(1)</sup>	\$ 577	\$ 537	\$613		

(1) Cost of production per ADMT produced excluding depreciation.

# Sales, Marketing and Distribution

Our pulp revenues by geographic area are set out in the following table for the periods indicated:

	Year Ended December 31,			31,
	2013	2012		2011
Revenues by Geographic Area		(in thousand	s)	
Germany	\$ 309,399	\$ 293,733	\$	357,106
Italy	65,654	55,443		71,695
Other European Union countries <sup>(1)</sup>	224,988	216,846		244,884
North America	30,404	61,103		96,520
China	300,827	295,797		326,610
Other Asia	49,855	42,692		42,970
Other countries	2,748	2,099		1,146
Total <sup>(2)</sup>	\$983,875	\$967,713	\$	1,140,931

(1) Not including Germany or Italy; includes new entrant countries to the European Union from their time of admission.

(2) Excluding intercompany sales and third party transportation revenues.

The following charts illustrate the geographic distribution of our pulp revenues as a percentage of our total pulp revenues for the periods indicated:

\* Not including Germany or Italy; includes new entrant countries to the European Union from their time of admission.

The distribution of our pulp sales by end customer are set out in the following table for the periods indicated:

	Year E	Year Ended December 31,		
	2013	2012	2011	
	(in tho	usands of A	ADMTs)	
Tissue	523	576	602	
Specialty	181	214	222	
Printing & Writing	662	639	563	
Other	74	45	41	
	1.440	1,474	1.428	

Our global sales and marketing group is responsible for conducting all sales and marketing of the pulp produced at our mills and currently has approximately 15 employees engaged full time in such activities. This group largely handles all European and North American sales directly. Sales to Asia are made directly or through commission agents overseen by our sales group. The global sales and marketing group handles sales to approximately 186 customers. We coordinate and integrate the sales and marketing activities of our German mills to realize on a number of synergies between them. These include reduced overall administrative and personnel costs and coordinated selling, marketing and transportation activities. We also coordinate sales from the Celgar mill with our German mills on a global basis, thereby providing our larger customers with seamless service across all major geographies. In marketing our pulp, we seek to establish long-term relationships by providing a competitively priced, high-quality, consistent product and excellent service. In accordance with customary practice, we maintain long-standing relationships with our customers pursuant to which we periodically reach agreements on specific volumes and prices.

Our pulp sales are on customary industry terms. At December 31, 2013, we had no material payment delinquencies. In 2013, two customers at a number of their individual mills accounted for 10% and 11%, respectively, of our pulp sales. In 2012, one customer at a number of its individual mills accounted for 11% of our pulp sales. In 2011, no single customer accounted for more than 10% of our pulp sales. We do not believe our pulp sales are dependent upon the activities of any single customer and the loss of any single customer would not have a material adverse effect on us.

Approximately 49%, 54% and 58% of our sales were to tissue and specialty paper product manufacturers for the years ended December 31, 2013, 2012 and 2011, respectively. Commencing in 2012 and continuing in 2013, our Celgar mill shifted sales of approximately 55,000 ADMTs per annum from a very large North American tissue producer to certain printing and writing customers in China as it could obtain higher margins on these particular sales volumes. Generally tissue producer customers are not as sensitive to cyclical declines in demand caused by downturns in economic activity. The balance of our sales was to other paper product manufacturers.

# Transportation

We transport our NBSK pulp generally by truck, rail and ocean carriers through third-party carriers. We have a small fleet of trucks in Germany that deliver some of our German mills pulp. Our carrier contracts are generally from one to two years.

Our German mills are currently the only significant market kraft pulp producers in Germany, which is the largest import market for kraft pulp in Europe. We therefore have a competitive transportation cost advantage compared to Canadian and Northern European pulp producers when shipping to customers in Europe. Due to the location of our German mills, we are able to deliver pulp to many of our customers primarily by truck. Most trucks that deliver goods into Eastern Germany generally do not have significant backhaul opportunities as the region is primarily an importer of goods. We are therefore frequently able to obtain relatively low backhaul freight rates for the delivery of our products to many of our customers. Since many of our customers are located within a 500 kilometer radius of our German mills, we can generally supply pulp to customers of these mills faster than our competitors because of the short distances between the mills and our customers.

The Celgar mill s pulp is transported to customers by rail, truck and ocean carrier using third party warehouses to ensure timely delivery. The majority of Celgar s pulp for overseas markets is initially delivered primarily by rail to the Port of Vancouver for shipment overseas by ocean carrier. Based in Western Canada, the Celgar mill is well positioned to service Asian customers. The majority of the Celgar mill s pulp for domestic markets is shipped by rail to third party warehouses in the U.S. or directly to the customer.

In each of the years ended December 31, 2013, 2012 and 2011, outbound transportation costs comprised approximately 9% of our total consolidated cost of sales. Generally, in recent years, our transportation costs have increased due to increases in fuel costs and lower shipping capacity. As a result, we have taken initiatives to target sales to the most freight logical customers for overseas sales.

# **Capital Expenditures**

In 2013, we continued with our capital investment programs designed to increase pulp and green energy production capacity, reduce costs and improve efficiency and environmental performance at our mills. The improvements made at our mills over the years have reduced operating costs and increased the competitive position of our facilities.

Total capital expenditures at our mills are set out in the following table for the periods indicated:

	Year	Year Ended December 31,			
	2013	2012	2011		
		(in thousands)			
Rosenthal	\$ 8,375	\$ 19,851	\$ 19,094		
Stendal	\$ 32,524	\$18,990	\$11,547		
Celgar	\$ 4,798	\$ 8.309	\$21.878		

Capital investments at the Rosenthal mill in 2013 related primarily to completion of the recovery upgrade project and the replacement of capital, while, in 2012, they related primarily to the mill s recovery boiler upgrade, which reduced our wastewater fees. In 2011, capital expenditures related mainly to the installation of a new chipper and upgrades to the recovery process.

Capital investments at the Stendal mill in 2013 and 2012 related primarily to Project Blue Mill. In 2011, capital investments related mainly to relatively small projects designed to improve safety and environmental performance as well as improve the overall efficiency of the mill.

In December 2013, the Stendal mill completed Project Blue Mill, which increased production and efficiency at the mill through debottlenecking initiatives, including the installation of an additional 46 MW steam turbine. Project Blue Mill required \$49.3 million in capital expenditures over about 21 months, which was primarily funded through approximately 11.3 million (\$15.0 million) of non-refundable German government grants and a new 17.0 million (\$22.2 million) five-year amortizing secured term debt facility, of which 80% is government guaranteed. The balance of Project Blue Mill was funded through operating cash flow of the Stendal mill and an aggregate of 6.5 million (\$8.6 million) in pro rata shareholder loans from Mercer Inc. and Stendal s noncontrolling shareholder.

Certain of our capital investment programs in Germany were partially financed through government grants made available by German federal and state governments. Under legislation adopted by the federal and certain state governments of Germany, government grants are provided to qualifying businesses operating in Eastern Germany to finance capital investments. The grants are made to encourage investment and job creation. For example, the government grants received in connection with Project Blue Mill require us to maintain the employment of core employees for five years after completion of the project. Currently, grants are available for up to 30% of the cost of qualified investments. Previously, government grants were available for up to 35% of the cost of qualified investments, such as for the construction of our Stendal mill. These grants at the 35% of cost level required that at least one permanent job be created for each 0.5 million (\$0.7 million) of capital investment eligible for such grants and that such jobs be maintained for a period of five years from the completion of the capital investment project. Generally, government grants are not repayable by a recipient unless such recipient fails to complete the proposed capital investment or, if applicable, fails to create or maintain the requisite amount of jobs. In the case of such failure, the government is entitled to revoke the grants and seek repayment unless such failure resulted from material unforeseen market developments beyond the control of the recipient, in which case the government may refrain from reclaiming previous grants. Pursuant to legislation in effect at the time, the Stendal mill recorded approximately \$349.5 million of government grants. We believe that we are in compliance in all material respects with all of the terms and conditions governing the government grants we have received in Germany. See Item 3 Legal Proceedings .

The following table sets out for the periods indicated the effect of these government grants on the recorded value of such assets in our Consolidated Balance Sheets:

	As at December 31,		
	2013	2012 (in thousands)	2011
Property, plant and equipment, gross amount less amortization	\$ 1.403.990	\$ 1.431.355	\$1,443,315
Less: government grants less amortization	365,359	364,849	378,348
Property, plant and equipment, net (as shown on the Consolidated Balance Sheet)	\$ 1,038,631	\$ 1,066,506	\$ 1,064,967

The following table sets forth the gross amount of all government grants we have received and capitalized in our balance sheet, the associated amortization and the resulting net balance we include in our property, plant and equipment for the periods indicated:

	As at December 31,			
	2013 2012		2011	
		(in thousands)	)	
Government grants gross	\$600,158	\$ 569,039	\$557,726	
Less: Accumulated amortization	234,799	204,190	179,378	
Government grants less accumulated amortization	\$ 365,359	\$ 364,849	\$378,348	

Qualifying capital investments at industrial facilities in Germany that reduce effluent discharges offset wastewater fees that would otherwise be required to be paid. For more information about our environmental capital expenditures, see Environmental .

In 2013, capital expenditures at the Celgar mill included maintenance projects, while in 2012 such expenditures included a project to recover/recycle chemicals from the mill s effluent, referred to as the GAP Project . In 2011, capital expenditures at the Celgar mill related to a project to improve the Celgar mill s fiber line and oxygen delignification process.

In January 2014, we commenced the implementation of a new Enterprise Resource Planning, or ERP, solution to replace our existing business software applications at an estimated cost of \$12.0 million. The project is designed to be completed in stages over the next three years. After considerable due diligence, we selected SAP, a global leader in the development of ERP solutions for medium to large sized international businesses.

The ERP installation will replace a suite of existing legacy systems which, while functional, will begin becoming obsolete in the near future. The ERP solution introduces state of the art end to end business solutions that will provide automation for most aspects of our business including finance, payroll, inventory management, sales, fiber management, supply chain, business analytics and forecasting.

To assist us through the implementation, we have engaged third party advisors with extensive experience in ERP implementations using contemporary systems implementation methodologies that will address not only the technical complexities of such an implementation but also assist with maintaining internal controls over financial reporting.

Excluding costs for projects financed through government grants, capital expenditures in 2014 are expected to be approximately \$40.0 million, comprised principally of:

a tall oil plant, chip receiving project, wastewater reduction project and maintenance projects at the Rosenthal mill, aggregating approximately \$16.0 million;

wastewater reduction projects at the Stendal mill and maintenance projects, aggregating approximately \$8.6 million;

a chip screening project and maintenance projects at the Celgar mill, aggregating approximately \$9.5 million; and

an ERP software implementation across the entire company, aggregating approximately \$5.9 million. Environmental

Our operations are subject to a wide range of environmental laws and regulations, dealing primarily with water, air and land pollution control. We devote significant management and financial resources to comply with all applicable environmental laws and regulations. Our total capital expenditures on environmental projects at our mills were approximately \$1.9 million in 2013, as compared to approximately \$12.0 million in 2012 related primarily to the Rosenthal mill s recovery boiler upgrade. In 2014, capital expenditures for environmental projects are expected to be approximately \$8.0 million.

We believe we have obtained all required environmental permits, authorizations and approvals for our operations. We believe our operations are currently in material compliance with the requirements of all applicable environmental laws

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and regulations and our respective operating permits.

Under German state environmental rules relating to effluent discharges, industrial users are required to pay wastewater fees based upon the amount of their effluent discharge. These rules also provide that an industrial user which undertakes environmental capital expenditures and lowers certain effluent discharges to prescribed levels may offset the amount of these expenditures against the wastewater fees that they would otherwise be required to pay. We estimate that the aggregate amount of wastewater fees we saved in 2013 as a result of environmental capital expenditures and initiatives to reduce allowable emissions and discharges at our Stendal mill was approximately \$1.8 million. The estimated amount of accrued wastewater fees we expect to recover at our Rosenthal mill is approximately \$3.0 million. Capital investment programs and other environmental initiatives at our German mills mostly offset the wastewater fees that were payable for 2013 and we believe they will ensure that our operations continue in substantial compliance with prescribed standards.

Environmental compliance is a priority for our operations. To ensure compliance with environmental laws and regulations, we regularly monitor emissions at our mills and periodically perform environmental audits of operational sites and procedures both with our internal personnel and outside consultants. These audits identify opportunities for improvement and allow us to take proactive measures at the mills as considered appropriate.

The Rosenthal mill has a relatively modern biological wastewater treatment and oxygen bleaching facility. We have significantly reduced our levels of absorbable organic halogen discharge at the Rosenthal mill and we believe the Rosenthal mill s absorbable organic halogen and chemical oxygen discharges are in compliance with the standards currently mandated by the German government.

Management believes that, as the Stendal mill is a state-of-the-art facility, it will be able to continue to operate in compliance with the applicable environmental requirements.

The Celgar mill operates two landfills, one of which is an older site that the mill is in the process of decommissioning. The mill is continuing work on finalizing a closure plan for such site and then reviewing such plan with the British Columbia Ministry of Environment, or MOE . We expect to finalize our closure plan for the older landfill in 2014. The actual closure activities shall be effected pursuant to a timetable agreed to by the mill and the MOE. The cost of closing the landfill is expected to be approximately \$3.0 million.

Future regulations or permits may place lower limits on allowable types of emissions, including air, water, waste and hazardous materials, and may increase the financial consequences of maintaining compliance with environmental laws and regulations or conducting remediation. Our ongoing monitoring and policies have enabled us to develop and implement effective measures to maintain emissions in substantial compliance with environmental laws and regulations to date in a cost-effective manner. However, there can be no assurances that this will be the case in the future.

# **Climate Change**

As there are differing scientific studies relating to the severity, extent and speed at which climate change is occurring, we cannot identify and predict all of the consequences of climate change on our business and operations.

To date, the effects and perceived effects of climate change and social and governmental responses have created both opportunities and negative consequences for our business.

The focus on climate change has generated a substantial increase in demand and in legislative requirements for carbon neutral or green energy in both Europe and, increasingly, in North America. Pulp mills consume wood residuals, being wood chips and pulp logs, as the base raw material for their production process. Wood chips are residuals left over from lumber production and pulp logs are generally lower quality logs left over from logging that are unsuitable for the production of lumber.

As part of their production process, our mills take wood residuals and process them through a digester where cellulose is separated from the wood to be used in pulp production and the remaining residuals, called black liquor , is used for green energy production. As a result of their use of wood residuals and because our mills generate combined heat and power in a process known as cogeneration, they are efficient producers of energy. This energy is carbon neutral and produced from a renewable source. Our relatively modern mills generate a substantial amount of energy that is surplus to their operational requirements.

These factors, along with governmental initiatives in respect of renewable or green energy legislation, have provided business opportunities for us to enhance our generation and sales of green energy to regional utilities. In December 2013, we completed Project Blue Mill, a project at our Stendal mill to install a new 46 MW steam turbine which we expect will initially produce an additional 109,000 MWh of surplus electricity annually.

We are constantly exploring other initiatives to enhance our generation and sales of surplus green energy and chemical by-products. Other potential opportunities that may result from climate change include:

the expansion of softwood forests and increased growth rates for such forests;

more intensive forestry practices and timber salvaging versus harvesting standing timber;

greater demand for sustainable energy and cellulosic biomass fuels; and

additional governmental incentives and/or legislative requirements to enhance biomass energy production.

At this time, we cannot predict which, if any, of these potential opportunities will be realized by us or their economic effect on our business.

While all of the specific consequences to our business from climate change are not predictable, the most visible adverse consequence to date is that the focus on renewable energy has created greater demand and competition for wood residuals or fiber from renewable energy producers like the pellet industry in Germany.

In Germany, since 2006, the price and supply of wood residuals have been affected by an increasing demand from alternative or renewable energy producers and governmental initiatives for carbon neutral energy. Over the long term, this non-traditional demand for fiber is expected to increase in Europe. Additionally, the growing interest and focus in British Columbia for renewable green energy is also expected to create additional competition for such fiber in that region over time. Such additional demand for wood residuals may increase the competition and prices for wood residuals over time. See Production Costs Fiber .

Governmental action or legislation may also have an important effect on the demand and prices for wood residuals. As governments pursue green energy initiatives, they risk creating incentives and demand for wood residuals from renewable energy producers that cannibalizes or adversely affects existing traditional users, such as lumber and pulp and paper producers. We are continually engaged in dialogue with government to educate and try to ensure potential initiatives recognize the traditional and continuing role of our mills in the overall usage of forestry resources and the economies of local communities.

Other potential negative consequences from climate change that over time may affect our business include:

a greater susceptibility of northern softwood forest to disease, fire and insect infestation;

the disruption of transportation systems and power supply lines due to more severe storms;

the loss of fresh water transportation for logs due to lower water levels;

decreases in quantity and quality of processed water for our mill operations;

the loss of northern softwood boreal forests in areas in sufficient proximity to our mills to competitively acquire fiber; and

lower harvest levels decreasing the supply of harvestable timber and, as a consequence, wood residuals. **Human Resources** 

We currently employ approximately 1,460 people. We have approximately 1,041 employees working in our German operations, including our wood procurement, transportation and sales subsidiaries. In addition, there are approximately 17 people employed at the office we maintain in Vancouver, British Columbia, Canada. Celgar currently employs approximately 405 people in its operations, the vast majority of which are unionized.

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Rosenthal, which employs approximately 443 people, is bound by collective agreements negotiated with Industriegewerkschaft Bergbau, Chemie, Energie, or IGBCE, a national union that represents pulp and paper workers. In July 2013, our Rosenthal mill renewed its collective agreement for a two-year period until June 2015. The agreement provides for, among other things, an initial 1.8% wage increase for employees thereunder, with a subsequent 3% wage increase in May 2014.

Stendal and its subsidiaries employ approximately 592 people. In 2011, Stendal entered into a seven-year collective agreement with IGBCE effective July 2011. Since, prior to entering into this collective agreement, Stendal s employees had relatively lower wages compared to their peers at other German pulp mills, this agreement provided for an approximately 5.5% wage increase in 2012. The collective agreement provides for a further 2.5% minimum annual wage increase from 2013 to 2015. The collective agreement is scheduled to expire in 2018.

Our Celgar mill settled, effective May 1, 2012, a new five-year collective agreement with its hourly workers to replace its expiring prior agreement. The agreement provided for lump sum payments of C\$3,750 for all active employees in 2012 and 2013 and wage increases of 2.0%, 2.5% or 3.0% in each of 2014, 2015 and 2016. The collective agreement is scheduled to expire in April 2017. In July 2013, we commenced reducing the Celgar mill s workforce by approximately 85 employees over a 12-month period to reduce fixed costs. See Part II, Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations .

We consider the relationships with our employees to be good. Although no assurances can be provided, we have not had any significant work stoppages at any of our operations and we would therefore expect to enter into new labor agreements with our workers when the current labor agreements expire without any significant work stoppages.

#### **Description of Certain Indebtedness**

The following summaries of certain material provisions of: (i) our Senior Notes; (ii) the Stendal Loan Facility; (iii) a 17.0 million amortizing term facility at our Stendal mill in respect of Project Blue Mill, referred to as the Blue Mill Facility ; (iv) the working capital facilities and investment loan associated with our Rosenthal mill; and (v) the Celgar Working Capital Facility, as such terms are referred to below, are not complete and these provisions, including definitions of certain terms, are qualified by reference to the applicable documents and the applicable amendments to such documents on file with the U.S. Securities and Exchange Commission, referred to as the SEC .

#### Senior Notes

In November 2010, we issued \$300.0 million in aggregate principal amount of 9.5% Senior Notes due 2017, referred to as the Senior Notes , to principally refinance our 9.25% Senior Notes due 2013. In July 2013, we issued an additional \$50.0 million in principal amount of Senior Notes at a price of 104.5%. The Senior Notes bear interest at a rate of 9.5% per annum, payable semi-annually in arrears on December 1 and June 1. The Senior Notes mature on December 1, 2017. The Senior Notes are our senior unsecured obligations and, accordingly, rank junior in right of payment to all existing and future secured indebtedness and all indebtedness and liabilities of our subsidiaries, equal in right of payment with all of our existing and future unsecured senior indebtedness and senior in right of payment to any current or future subordinated indebtedness. The Senior Notes were issued under an indenture which, among other things, restricts our ability and the ability of our restricted subsidiaries under the indenture to: (i) incur additional indebtedness; (ii) pay dividends or make other distributions to our stockholders; (iii) purchase or redeem capital stock or subordinated indebtedness; (iv) make investments; (v) create liens and enter into sale and lease back transactions; (vi) incur restrictions on the ability of our restricted subsidiaries to pay dividends or make other payments to us; (vii) sell assets; (viii) consolidate or merge with or into other companies or transfer all or substantially all of our assets; and (ix) engage in transactions with affiliates. These limitations are subject to important qualifications and exceptions.

In order to take into account the nature of the non-recourse project financing of the loan facility for our Stendal mill and to enhance our financing flexibility, the indenture governing our Senior Notes provides for a Restricted Group and an unrestricted group . The terms of the indenture are applicable to the Restricted Group and are generally not applicable to the unrestricted group. Currently, the Restricted Group is comprised of Mercer Inc., the Rosenthal and Celgar mills and certain holding subsidiaries. The Restricted Group excludes our Stendal mill. The working capital facilities and Rosenthal Investment Loan