Coal

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Coal - 2011 Annual Review and Outlook

HIGHLIGHTS

- Canada's coal production and exports maintained their momentum in 2011. Volumes were at levels similar to 2010, but values increased significantly. The value of coal production increased 27.2% to $7 billion, making it the second-ranked commodity among all minerals produced in Canada. The value of coal exports increased 34% to reach $8 billion in 2011.

- Global demand for coking coal hit another record high with its price averaging US$300/tonne (t) in 2011. Canadian exports achieved a realized unit value, on average, of $267/t for coking coal and $103/t for thermal coal.

- The Canadian coal mining sector plays an important role in Canada's economy as a direct employer of more than 7000 people, as a contributor of more than $1 billion to Canada's Gross Domestic Product, and as a provider of 9% of the country's primary energy.

- Coal was the number one dry bulk commodity transported by rail (36 million tonnes [Mt]) and handled by ports (approximately 54 Mt) in 2011.

In 2011, there were 21 operating coal mines in Canada. Most large-scale coal mines are located in western Canada. Ten coal mines were operating in British Columbia: Brule, Coal Mountain, Elkview, Fording River, Greenhills, Line Creek, Quinsam, Trend, Perry Creek (Wolverine), and Willow Creek. Alberta was home to eight operating coal mines: Cheviot, Coal Valley, Genesee, Grande Cache, Highvale, Obed Mountain, Paintearth, and Sheerness. Saskatchewan had three operating mines: Bienfait, Boundary Dam, and Poplar River.

Four companies produced metallurgical (coking) coal or PCI (pulverized coal injection) coal for export: Teck Resources Ltd. (Teck) with six mines, Walter Energy, Inc. (Walter Energy) with three mines, Grande Cache Coal Corp. (GCC), and Anglo American Plc's Peace River Coal Inc. Two companies produced bituminous thermal coal for export: Sherritt International Corp. (Sherritt) with two mines and Vitol Group's Hillsborough Resources Ltd. Sherritt operated seven mines that produced subbituminous and lignite coal for domestic coal-fired power generation (Table 8).

CANADIAN PRODUCTION

Preliminary figures indicate that Canada produced 67 Mt of coal in 2011, about 1% lower than the 68 Mt produced in 2010. However, coking coal production increased about 5% to 29.5 Mt from the previous year's 28.1 Mt. The increase was driven by global demand for coking coal, which is directly tied to the production of steel. Almost all of Canada's coking coal production was exported with only a very small volume shipped to domestic users. Most of the output in the coking coal category was hard coking coal and only a small portion was PCI coal. Approximately 5.2 Mt of bituminous thermal coal were produced in 2011, all of which were exported. About 22.8 Mt of subbituminous coal and 9.7 Mt of lignite coal were produced in 2011. Both types of coal were used for domestic coal-fired power generation.

In 2011, Alberta produced 30 Mt of coal while British Columbia produced 27.4 Mt and Saskatchewan produced 9.7 Mt.

CANADIAN DEVELOPMENTS

On March 29, 2012, the Government of Canada's 2012 Budget laid out fixed timelines for project reviews and assessments: Panel Reviews – 24 months, National Energy Board Hearings – 18 months, and Standard Environmental Assessments – 12 months. The Government recognizes that emerging markets around the world have provided Canada with a tremendous opportunity to responsibly develop its abundant natural resources for the benefit of all Canadians. The proposed changes to the existing environmental assessment mechanism are expected to streamline and modernize Canada's project approval process.

On October 31, 2011, GCC entered into an acquisition agreement with China's Winsway and Japan's Marubeni at $10 per share in cash for a total of approximately $1 billion. The acquisition was conducted through a partnership called "1629835 Alberta Ltd.," which was created for the purpose of the transaction. Winsway holds 60% and Marubeni holds 40% in the partnership. Winsway was incorporated in the British Virgin Islands in 2007. Winsway's main business is purchasing coking coal, particularly from Mongolia, and selling it to users in China. Its business also includes the transportation, storage, and processing of coking coal. The company owns logistics and transportation infrastructure at the China-Mongolia border crossings. Winsway's web site indicates that its "principal place of business and head office" is in Beijing, but that it has offices in Hong Kong, Singapore, Macau, Mongolia, and Australia. Marubeni was founded in 1858 and incorporated in 1949. The company's head office is located in Tokyo, Japan. Marubeni is one of the largest Japanese trading companies. It is involved in a wide range of industrial activities that include minerals, metals and materials, transportation machinery, energy, food materials and products, textiles, chemicals, and pulp and paper. GCC was a publicly traded company listed on the Toronto Stock Exchange (TSX) with a head office located in Calgary, Alberta, and mining operations in the town of Grande Cache in northern Alberta. GCC was formed in 2000 to reactivate a closed coal mine that had produced for the previous three decades. Production resumed in 2004. The company's sales and production were 1.6 Mt in 2010. On February 8, 2012, the Government of Canada approved the GCC acquisition under the *Investment Canada Act*. Subsequently, GCC announced that all of its shares had been acquired by 1629835 Alberta Ltd. The acquisition was completed on March 1, 2012, and GCC's stock was delisted from the TSX.

In September and October 2011, Anglo American plc (Anglo American) acquired the remaining 25.17% interest of the Peace River Coal Limited Partnership (PRC) for a cash consideration of $166 million from Northern Energy and Mining Inc. and Hillsborough Resources Ltd. As a result, Anglo American now owns 100% of PRC. Early in May 2011, Anglo American announced it would not proceed with its proposal that

was made in April 2010 to sell its 74.83% equity interest in the partnership. PRC currently operates the Trend mine in Tumbler Ridge in northeastern British Columbia with output of about 1 million tonnes per year (Mt/y). Anglo American indicated that it would conduct further exploration studies to evaluate the long-term potential. A feasibility study for increasing production from 1 Mt/y to 3.5 Mt/y by 2015 is under way.

In August 2011, the *Canada Gazette* published the proposed *Reduction of Carbon Dioxide Emissions From Coal-Fired Generation of Electricity Regulations*. The proposed Regulations address carbon dioxide (CO_2) only because CO_2 emissions account for approximately 98% of all greenhouse gas emissions from the electricity sector, including coal-fired electricity generation. The proposed Regulations, made under the *Canadian Environmental Protection Act, 1999,* would apply a performance standard to new and old coal-fired electricity generation units. In the *Canada Gazette'*s notice (Volume 145, Number 35 – August 27, 2011), it indicates that "Under the proposed Regulations, the performance standard is set at the emissions intensity level with consideration of natural gas combined cycle technology - a high-efficiency type of natural gas generation - and will be fixed at 375 tonnes of CO_2 per gigawatt-hour. The standard would address emissions of CO_2 from the combustion of coal, coal derivatives (e.g., syngas), and petroleum coke (petcoke), and from all fuels burned in conjunction with coal, except for biomass." "The performance standard will be applied to new and old coal-fired electricity generation units. New units are units that start producing electricity commercially on or after July 1, 2015. Old units are, in general, defined as units that have reached their end of useful life date, which is the later of 45 years from the units' commissioning dates or the end of their power purchase agreement (PPA). Existing units that were operating before July 1, 2015, but have not reached their end of useful life date are not directly subject to the performance standard." The proposed Regulations would come into effect on July 1, 2015. (For more details, please read *Canada Gazette*, Notices and Proposed Regulations, Volume 145, Number 35 – August 27, 2011.)

On August 8, 2011, Xstrata plc completed a $147 million takeover of First Coal Corp. through its subsidiary, Xstrata Coal Canada Ltd. (Xstrata). First Coal Corp. was developing the proposed Central South coking coal mine project in northeastern British Columbia.

Walter Energy completed its acquisition of Western Coal Corp. on April 1, 2011. The acquisition was made in November 2010 and the Government of Canada approved the merger on March 23, 2011.

Expansion and Project Updates

The Environmental Assessment Office (EAO) of B.C. accepted Teck's Application for an Environmental Assessment Certificate for the proposed Line Creek Coal Mine Phase II Expansion project on January 30, 2012. The project is currently subject to a screening assessment. A decision on the project is anticipated by mid-August 2012. The expansion project is expected to yield 59 Mt of coal over 18 years. It will use almost exclusively the existing infrastructure, including the existing power substation, coal conveyance systems, and wash plant.

Teck's proposed Swift project is in a new operating area adjacent to the existing Fording River Operations near Elkford, British Columbia. The EAO determined on September 6, 2011, that the Swift project would require an environmental assessment certificate before it could proceed. In March 2012, federal agencies indicated that a federal-level assessment might also be required. The project would enable the Fording River Operations to sustain current production levels of high-quality hard coking coal by accessing new coal reserves of approximately 175 Mt with a projected mine life of 25 years. It is anticipated that the Swift

project would use the existing labour force, that site development would start in 2013, and that coal production would begin in 2014.

A feasibility study for re-opening Teck's Quintette mine is ongoing and is expected to be completed in mid-2012. Teck initiated the study in June 2010 given the favourable global long-term outlook for coking coal. The Quintette project is located in northeastern British Columbia approximately 20 kilometres (km) south of the town of Tumbler Ridge. The re-opening of the Quintette project focuses on two open pits: the pre-existing Windy Pit and the proposed Window Pit. Although the Quintette area had previously been mined for a period of 18 years until 2000, the Window Pit has never been mined. Teck plans to build a mine with a production capacity of 3 Mt/y of steelmaking coal and to start production in 2013. The EAO decided in December 2010 that the proposed re-opening of the Quintette operation would be treated as the modification of an existing mine rather than as a new project as the previous mine permit is still valid.

Sherritt initiated the regulatory approval process for its Robb Trent project. Sherritt's Coal Valley mine has been in operation since 1978. Coal reserves within the existing permit area are reaching the end of their expected life. Access to additional reserves is required to enable the continuation of thermal coal supply to Sherritt's customers. The company is proposing to access the coal reserves in the Robb Trend project area as an extension to the existing operations. Sherritt intends to use the existing infrastructure, work force, and current office and maintenance facilities from its present site. The current production rate of 4 Mt/y is expected to be sustained. A preliminary reserve estimate for the Robb Trend project area indicates there is enough coal to operate for an additional 16 years. The Alberta Ministry of Environment and Sustainable Resource Development advised Sherritt that the project required an Environmental Impact Assessment (EIA). As of March 31, 2012, the EIA had not been submitted.

On November 14, 2011, the Canadian Environmental Assessment Agency announced it had started a comprehensive environmental assessment study for the proposed Donkin coal project located in Nova Scotia. In February 2010, Xstrata announced its revised development plan for the Donkin underground mine. The new plan is to produce 2.7 Mt/y of coking coal for export instead of producing thermal coal for domestic use. Under the new plan, a wash plant will be constructed and the output will be barged to loading facilities for shipment overseas. The mine life is expected to range between 20 and 30 years. Xstrata owns 75% of the Donkin coal project and Erdene Resource Development Corp. owns the remaining 25%.

In 2011, Coalspur Mines Ltd. (Coalspur) initiated the regulatory approval process on its proposed Vista coal project in Alberta. The project location is approximately 4 km east of the town of Hinton and 60 km southwest of the town of Edson. It is in a region with a history of coal mining of more than 100 years and four existing coal mining operations. It is located 60 km north of the Coal Valley mine and 10 km south of the Obed Mountain mine. Coalspur is proposing a two-phase development: Phase 1 would see the commencement of production at a level of 5 Mt/y of bituminous thermal-grade coal by 2015, and Phase 2 would increase output to 11.2 Mt/y by 2018. The mine life is projected to be approximately 30 years. The Alberta Minstry of Environment and Sustainable Resource Development advised Coalspur that the project required an EIA. As of March 31, 2012, Coalspur had not submitted the EIA.

The Raven underground coal mine project proposed by Compliance Energy Corp. (CEC) had been classified as pre-application by the EAO as of March 31, 2012. The project is a joint venture between CEC (60%), Itochu Corp. of Japan (20%), and LG International Corp. of Korea (20%). It is located in the Comox Coal Basin on Vancouver Island in British Columbia. The proposed project would produce coking

coal for export. The joint venture is proposing clean coking coal production at a rate of 1.5 Mt/y with a mine life of 20 years. CEC submitted its application for an environmental assessment in February 2009.

PRC's proposed Roman coal mine project was under review by the EAO as of March 31, 2012. The latest development was a request for PRC to meet seven conditions from the EAO dated September 14, 2011. The company proposes to develop a new open-pit coal mine with a production capacity of 2-4 Mt/y and a mine life of 15 years. The proposed mine is located 25 km south of Tumbler Ridge, British Columbia. PRC applied for an environmental assessment in 2007.

The Gething underground coal mine project proposed by Dehua International Mines Group Inc. (Dehua) had also been classified as pre-application by the EAO as of March 31, 2012. The project is located in northeastern British Columbia, 25 km northwest of Henderson's Hope. The company proposes to construct an underground mine and coal preparation plant. The mine is projected to produce 2 Mt/y of coking coal over a 40-year mine life. Dehua applied for an environmental assessment in 2006.

The Horizon mine project, formally known as the Five Cabin project, was originally proposed by Hillsborough Resources Limited, who initiated an environmental assessment in 2005. The project was later acquired by PRC. It is located 25 km southwest of Tumbler Ridge in northeastern British Columbia. The planned production capacity for the project is 1.6 Mt/y of coking coal. The project's current status is also listed in the category of pre-application by the EAO and no update has been provided.

Fortune Minerals Ltd. (Fortune) initiated an environmental assessment process for its Mount Klappan mine project in 2004. The project is located 160 km northeast of Stewart in northern British Columbia. It has progressed slowly. The company has indicated it will not advance the project until it finds a suitable development partner. On July 13, 2011, Fortune formed a joint venture with POSCO Canada Ltd. (POSCAN) to accelerate development of the Mount Klappan project. The joint venture is an 80%-20% partnership between Fortune and POSCAN. The creation of this new joint venture may lead to renewed interest in advancing the project. The latest feasibility study (November 2010) recommended production of 3 Mt/y of PCI coal from the Lost Fox deposit and transportation by rail to the Ridley Terminals in Prince Rupert. Based on this recommendation, Fortune is redoing its environmental assessment study. However, the new study had not been submitted as of March 31, 2012.

No update was available on Sherritt's Dodds-Roundhill gasification project as of March 31, 2012. Sherritt applied for an environmental assessment in 2007 and, in 2008, received notice from the Alberta EAO that an EIA would be needed. The project is located 80 km southeast of Edmonton, Alberta. The $1.5 billion project would be the first commercial application of coal gasification technology in Canada. The proposed project involves mining subbituminous coal and processing it into gas. Production was to begin in 2011 and reach its design capacity of 320 million cubic feet of synthetic gas per day by 2012. Coal reserves and resources are estimated at 320 Mt and the mine is expected to have a life of 40 years.

The Fox Creek coal gasification project, proposed by Alter NRG Corp., was withdrawn from the environmental assessment process. Alter NRG Corp. sold the asset to Bellair Ventures Inc. for $5 million and the deal was finalized in January 2012. The project was supposed to develop a surface coal mine and coal gasification plant. The surface mine was to produce 9.2 Mt/y of coal for the gasification plant, which would have converted coal into some 40 000 barrels per day of diesel fuel and naphtha over a period of 50 years. The project is located 27 km northeast of Fox Creek, about 240 km northwest of Edmonton.

Xstrata withdrew the Central South project in January 2012. In a letter to British Columbia's EAO on January 31, 2012, Xstrata indicated "we have been engaged in an internal review of the Central South project proposed by First Coal Corporation. As a result of our review, we have determined not to proceed with the Central South project, as submitted, at this time." The Central South project was originally proposed by First Coal Corp., who submitted an application for an environmental assessment of the project in September 2010. The proposed project is within the Peace River Coalfield, approximately 60 km west of the town of Chetwynd in northeastern British Columbia. It has a production capacity of 1.5 Mt/y of coking coal. The EAO confirmed that the project was terminated on March 20, 2012.

WORLD PRODUCTION

According to the International Energy Agency, the world's total coal production was 7229 Mt in 2010, including 6186 Mt of hard coal and 1043 Mt of brown coal (subbituminous and lignite). The world's total coal production in 2010 increased by 6% compared to 2009 production.

The world's largest coal producer is China, whose output reached 3162 Mt in 2010, accounting for 44% of total world production, followed by the United States, India, Australia, and Indonesia (Table 7).

Total global coal consumption in 2010 was 7328 Mt, or 5234 Mt of coal equivalent[1] in 2010, a 10.7% increase from 2009 (4725 Mt of coal equivalent). Steam coal consumption increased 11% to 5437 Mt in 2010 from 4898 Mt in 2009. Coking coal consumption increased 15.5% to 879 Mt in 2010 from 761 Mt in 2009.

TRADE

Canada exported approximately 33.6 Mt of coal in 2011, a slight increase from 33.1 Mt in 2010. Canada is one of the leading seaborne hard coking coal suppliers to world markets. Almost all of the coking coal produced in western Canada is destined for offshore markets. In 2011, Canada exported 27.6 Mt of coking coal, slightly more than the 27.4 Mt exported in 2010, and 6 Mt of bituminous thermal coal, similar to the previous year's volume.

Asia was Canada's largest coal-trading partner, accounting for 73.4% of its total exports in 2011. Europe ranked second, representing 13.3% of Canada's exports. The remainder went to the Americas, which accounted for 13.4%.

About 80% of Canada's seaborne coal exports were shipped through coal terminals in Vancouver while the rest was shipped through the Ridley Terminals in Prince Rupert in northern British Columbia.

Canada's coal imports continued to decline due to Ontario's phase-out of coal-fired generation policy, which resulted in a lower volume imported into Ontario. Canada's coal imports were 9.4 Mt in 2011, a 25.6% decrease from 12.6 Mt in 2010. Of the 9.4 Mt, 5.6 Mt were steam coal used for coal-fired power generation and 3.8 Mt were coking coal for use by steel mills. The United States supplied 7 Mt and the rest was supplied by various countries.

MARKETS AND PRICES

In 2011, most of the global coking coal was traded under quarterly contracts and pricing. The global hard coking contract price, on a free on board (f.o.b.) basis, averaged US$225/t for the first quarter, US$330/t

for the second quarter, US$280/t for the third quarter, and US$285/t for the fourth quarter. The spot price averaged US$315/t for the first and second quarters, and US$297/t and US$244/t for the third and fourth quarters, respectively.

Based on Canadian customs records, the 2011 average achieved coking coal export unit value was $267/t and the 2011 average achieved thermal coal (all types) export unit value was $103/t, both on an f.o.b. basis.

Canada imports both coking and thermal coal. Most of the coking coal went to Ontario. The average unit value for imported coking coal was $140/t in 2011. Thermal coal was also imported into Ontario, Nova Scotia, and New Brunswick. The average unit value for imported thermal coal was $77/t in 2011.

The majority of domestically sourced coal was from so-called "mine-mouth" operations, which involve extracting coal from a mine site and then trucking it to adjacent coal-fired power generation plants to produce electricity. The majority of mining and power generation operators are engaged in long-term contracts. Sherritt, who is the largest thermal coal producer in Canada, reported an average realized price of $16.31/t in 2011. However, this price is merely a reflection of the cost of mining coal and cannot be regarded as the prevailing market price.

OUTLOOK

Global coal demand and supply are expected to continue to grow. In its *World Energy Outlook 2011,* the International Energy Agency forecasts that world primary energy demand will increase under three scenarios: the current policies scenario, the new policies scenario, and the 450 scenario. The current policies scenario looks at a future in which government policies and measures enacted or adopted by mid-2011 remain unchanged. Under this scenario, world primary energy demand is projected to increase by 51%, or by 1.6% per year, from 2009 to 2035. The new policies scenario takes into account both existing government policies and declared policy intentions. Under this scenario, world primary energy demand is forecast to increase by 40%, or by 1.3% per year, from 2009 to 2035. The 450 scenario is outcome-driven, illustrating a global energy pathway with a 50% chance of limiting the increase in the average global temperature to 2 degrees celcius. This would require limiting the long-term concentration of greenhouse gases in the atmosphere to around 450 parts per million of CO_2 equivalent. Under the 450 scenario, world primary energy demand is projected to increase by 23%, or by 0.8% per year, from 2009 to 2035.

In all scenarios, fossil fuels (oil, coal, and natural gas) remain the dominant sources of energy in 2035, but their share of the energy mix varies. The share of fossil fuels decreases from 81% of world primary energy supply in 2009 to 80% in 2035 under the current policies scenario, to 75% under the new policies scenario, and to 62% under the 450 scenario.

Coal has met almost half of the increase in global energy demand over the last decade. Maintaining current policies would see coal use rise by a further 65% by 2035, overtaking oil as the largest fuel in the global energy mix. Under the new policies scenario, global coal use would rise until 2020 and then decrease to finish 25% above 2009 levels. Under the 450 scenario, coal consumption would peak well before 2020 and then decline. The range of projections for coal demand in 2035 across the three scenarios is nearly as large as total world coal demand in 2009. The implications of policy and technology choices on global coal demand are huge.

With the global economy on a recovery trend and demand for both coking and thermal coal on the rise, Canadian coal production and exports, predominately coking coal, will continue to increase. Canada is rich in coal resources and western Canada is strategically located for shipping coal to Asia. Increased Chinese demand will further boost Canada's production and exports. As seen in the section on Expansion and Project Updates, some of the projects currently under development are targeting the Chinese market.

It is expected that Canadian coking coal production and exports will increase in 2012, possibly to 30-31 Mt. Canada's total coal production will likely be over 70 Mt in 2012. Thermal coal production will remain stable as most of the thermal coal is destined for domestic coal-fired power generation plants.

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[1] The term "total coal" refers to the sum of hard coal and brown coal after conversion to a common energy unit (tonnes of coal equivalent). The conversion is done by multiplying the calorific value of the coal in question by the total volume of hard coal and brown coal used, measured in physical units, i.e., in tonnes. The energy content of one tonne of coal equivalent is 29.3 gigajoules, or 7000 kilocalories, and corresponds to 0.7 tonnes of oil equivalent.

Notes: (1) For definitions and valuation of mineral production, shipments, and trade, please refer to the document entitled "Definitions and Valuation: Mineral Production, Shipments, and Trade." (2) Information in this review was current as of March 31, 2012. (3) This and other reviews, including previous editions, are available on the Internet at www.nrcan.gc.ca/minerals-metals/business-market/canadian-minerals-yearbook/4070.

Coal - Other Information

GENERAL INFORMATION

Coal is an organically derived material. It is formed from the remains of decayed plant material compacted into a solid through millions of years of chemical changes under pressure and heat. As the organic maturity process continues, the buried plant material is transformed into different types of coal. In general, the longer the coal is subjected to heat and pressure, the higher its grade and contained heat will be per unit of weight. Bituminous coal and anthracite are high-ranked coals, also known as hard coal. Bituminous coal is consumed for both metallurgical and thermal purposes. Premium-grade bituminous coal, often referred to as metallurgical coal or coking coal, is used to produce coke, which is a key ingredient in iron and steelmaking. Anthracite, the highest ranked coal, is often called "smokeless" and can be consumed by households as a fuel for heating and cooking, and by various industries. Lignite and subbituminous coal are low-ranked coals, also known as brown coals, consumed only for the generation of electricity.

Coal is the world's most abundant and widely distributed fossil fuel. According to *Coal Information 2011*, the annual publication of the International Energy Agency, the world's total proven recoverable coal reserves are 1001 billion tonnes (t) spread over more than 70 countries. At its current production rate, coal

offers more than 149 years of supply, which is significantly longer than known reserves of oil and gas. Coal is also an economical energy source when compared to oil and gas.

Coal has been consumed as an energy source for hundreds of years. It provided the energy that boosted the industrial revolution of the 19th century and launched the electric era in the following century. It was the world's most important source of primary energy until the late 1960s when it was overtaken by oil. Today, close to 90% of the world's total coal production is consumed as thermal coal. The majority of thermal coal is used to generate electricity and a small portion is used as a fuel for heat or steam, such as for residential building heating; for the cement, pulp and paper, and other industries; and for the agriculture and transportation sectors. Coal-fired power generation currently provides more than 40% of the world's total electricity. About 10% of global coal production is transformed into coke and used in iron and steelmaking. Almost all primary steel production worldwide is based on pig iron from blast furnaces fed with iron ore and coke made from coking coal.

Canada holds 8.7 billion t of proven coal reserves, including 6.6 billion t of proven recoverable coal reserves that will provide more than 100 years of production at current production rates. In addition, about 193 billion t of coal resources have been identified.

CANADIAN CONSUMPTION

Canada consumed some 50 million tonnes (Mt) of coal in 2010. The largest amount, 44 Mt, was used by coal-fired power generation plants in Canada. About 3.9 Mt of coking coal were transformed into coke and used in the iron and steel industry. Industrial energy and non-energy uses accounted for 2.6 Mt.

Alberta, Canada's largest coal-consuming province, consumed 25 Mt of coal in 2010. Almost all of this coal, 24.4 Mt, was used for coal-fired power generation and the remaining 0.6 Mt was used in various industrial energy and non-energy uses.

Ontario ranked second in coal consumption with a total of 10.4 Mt of coal consumed in 2010. Of that total, 6 Mt were used in coal-fired power generation, 3.9 Mt were used in coke production, and the reminder was consumed in various industrial energy and non-energy uses.

Saskatchewan ranked third in coal consumption in 2010. Almost all of the 9.9 Mt of coal were used in coal-fired power generation with a small portion used in various industrial energy and non-energy uses.

Nova Scotia consumed 2.8 Mt of coal in 2010. Almost all of its consumption was used for coal-fired power generation. New Brunswick consumed close to 0.8 Mt in 2010, all for coal-fired electric power generation. Quebec consumed about 0.8 Mt for industrial energy and non-energy purposes. British Columbia consumed 0.5 Mt in 2010, also for industrial energy and non-energy purposes. Manitoba consumed 69 000 t for coal-fired power generation and industrial energy uses.

ENVIRONMENT

The Government of Canada is committed to reducing Canada's total greenhouse gas emissions by 17% by 2020 from 2005 levels. Canada, at both the federal and provincial levels, is focusing on technology development and deployment to meet the targets.

Both the *Canadian Environmental Protection Act* and the *Canadian Environmental Assessment Act,* as well as provincial laws and regulations, were designed to ensure Canadian companies carry out responsible mining practices. One of the major challenges of coal mining is to reduce its environmental footprint on the land. Mining is a temporary use of the land. The coal sector's strategy is to progressively reclaim mine sites as mining activities are completed and to establish and follow closure plans to ensure long-term environmental protection. Canadian coal mining companies are fully committed to sustainable mining practices. A number of coal mining companies have been recognized for their successful environmental management programs. Multiple awards for mine reclamation and rehabilitation have also been given to coal mines across Canada.

Sherritt, in its *2010 Corporate Social Responsibility Report*, reported that its coal operations leveled 912 hectares (ha) of formerly mined land and completed (leveled, contoured, and applied top soil) 501 ha in 2010. Reclamation of the 1300-ha former Gregg River mine site in Alberta is fully completed. Overall, Sherritt has reclaimed 80% of all the land disturbed by its coal operations in Alberta and Saskatchewan.

Sherritt and EPCOR received the 2009 Alberta Chamber of Resources' Major Reclamation Award in February 2009 for their environmental work at the Genesee mine. EPCOR and Sherritt reclaimed and rehabilitated 600 ha of land, turning it into productive farm land and wildlife habitat. The Alberta Ministry of Environment and Sustainable Resource Development nominated the Genesee mine for the environmental award.

Teck's Elkview Operations received the 2009 Coal Mining Citation from the British Columbia Technical and Research Committee on Reclamation for outstanding achievement for clean-up work and the removal of historical mining debris at Michel Creek near Sparwood between 2002 and 2005. Public safety, fish habitat, and aesthetics were significantly improved by this work.

Teck's Coal Mountain Operations received the 2008 Coal Mining Citation for outstanding reclamation achievement. The reclamation work was undertaken between 2006 and 2008 on a waste rock pile, and extra effort was expended to create a diversity of habitats, including large rock piles, rolling terrain, and several small knolls.

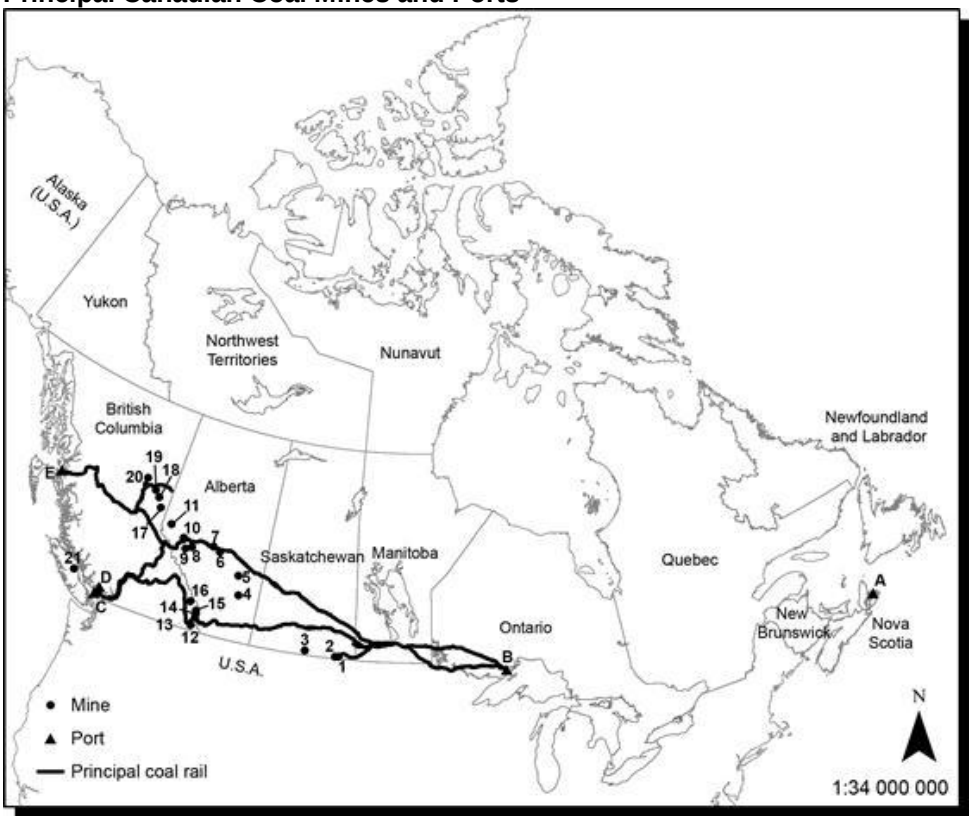
Fording River Operations received the British Columbia 2007 Mining and Sustainability Award for its ongoing commitment to the environment, safety, and the community. The Government of British Columbia stated that "Fording River Operations is a leader in mining reclamation and is working hard to ensure that mining leaves a very small footprint on the land, protecting water and wildlife in the Elkford, Fernie and Sparwood communities." Fording River Operations was a three-time winner of the British Columbia Jake McDonald Mine Reclamation Award for outstanding reclamation achievements in 2005, 1992, and 1979.

The Cardinal River mine in Alberta is adjacent to protected areas (Whitehorse Wildland Park and Jasper National Park) and the company is working with the local community to ensure responsible care and protection of these lands. The Cardinal River Operations received the 2006 Alberta Chamber of Resources Major Reclamation Award for its reclamation efforts in the Sphinx Creek mining area near Cadomin. The work involved the creation of fish habitat in an end pit lake and wildlife habitat through the re-vegetation of the surrounding area. The Alberta Ministry of Environment and Sustainable Resource Development selected it as the project that best represented the values and principles of the sustainable land use and reclamation achievement.

LINKS TO OTHER WEB SITES

The Coal Association of Canada	www.coal.ca
Teck Resources Ltd.	www.tech.ca
Sherritt International Corp.	www.sherritt.com
Walter Energy, Inc.	www.walterenergy.com
Grande Cache Coal Corp.	www.gccoal.com
Peace River Coal Inc.	www.peacerivercoal.com
Hillsborough Resources Limited	www.hillsboroughresources.com

Figure 1
Principal Canadian Coal Mines and Ports



Numbers and letters refer to locations on map above.

COAL MINES

Saskatchewan

1. Bienfait
2. Boundary Dam
3. Poplar River

Alberta

4. Sheerness
5. Paintearth
6. Genesee
7. Highvale
8. Coal Valley
9. Cardinal River
10. Obed Mountain
11. Grande Cache

British Columbia

12. Coal Mountain
13. Line Creek
14. Elkview
15. Greenhills
16. Fording River
17. Trend
18. Wolverine
19. Brule
20. Willow Creek
21. Quinsam

PORTS

Nova Scotia

A. Sydney

Ontario

B. Thunder Bay

British Columbia

C. Nepture
D. Westshore
E. Ridley

TARIFFS

Item No.	Description	Canada			United States	European Union	Japan
		MFN	GPT	USA	Canada	Conventional Rate (1)	WTO (2)
27.01	Coal; briquettes, ovoids and similar solid fuels manufactured from coal						
2701.11	Coal, whether or not pulverized, but not agglomerated: anthracite	Free	Free	Free	Free	Free	Free
2701.12	Coal, whether or not pulverized, but not agglomerated: bituminous coal	Free	Free	Free	Free	Free	Free
2701.19	Coal, whether or not pulverized, but not agglomerated: other coal	Free	Free	Free	Free	Free	Free
2701.20	Briquettes, ovoids and similar solid fuels manufactured from coal	Free	Free	Free	Free	Free	3.9%
27.02	Lignite, whether or not agglomerated, excluding jet						
2702.10	Lignite, whether or not pulverized, but not agglomerated	Free	Free	Free	Free	Free	Free
2702.20	Agglomerated lignite	Free	Free	Free	Free	Free	Free
27.04	Coke and semi-coke of coal, of lignite or of peat, whether or not agglomerated; retort carbon	Free	Free	Free	Free	Free	Free-3.2%

Sources: Canadian *Customs Tariff*, effective January 2011, Canada Border Services Agency; *Harmonized Tariff Schedule of the United States*, 2011; *Official Journal of the European Union* (Tariff Information), October 29, 2010, edition; *Customs Tariff Schedules of Japan,* 2011.
GPT General Preferential Tariff; MFN Most Favoured Nation; WTO World Trade Organization.
(1) The customs duties applicable to imported goods originating in countries that are Contracting Parties to the General Agreement on Tariffs and Trade or with which the European Community has concluded agreements containing the most-favoured-nation tariff clause shall be the conventional duties shown in column 3 of the Schedule of Duties. (2) WTO rate is shown; lower tariff rates may apply circumstantially.

TABLE 1. CANADA, COAL PRODUCTION, 2009-11

Province	2009		2010		2011 (p)	
	(tonnes)	($000)	(tonnes)	($000)	(tonnes)	($000)
SHIPMENTS						
New Brunswick	x	x	–	–	–	–
Saskatchewan	x	x	x	x	x	x
Alberta	x	x	x	x	x	x
British Columbia	21 193 000	3 203 592	26 040 000	4 253 436	26 661 000	5 691 021
Total	**62 935 000**	**4 406 365**	**68 152 000**	**5 540 967**	**66 736 000**	**7 049 888**

Sources: Natural Resources Canada; Statistics Canada.
– Nil; (p) Preliminary; x Confidential.
Note: Numbers may not add to totals due to rounding.

TABLE 2. CANADA, COAL PRODUCTION BY TYPE, 2008-11

Year	Alberta				British Columbia			New Brunswick	Saskatchewan	Canada
	Bituminous		Subbituminous	Total	Bituminous		Total	Bituminous	Lignite	Total
	Metallurgical	Thermal			Metallurgical	Thermal		Thermal		
	(000 tonnes)									
2008	3 139	3 477	24 988	**31 607**	25 204	958	**26 163**	60	9 921	**67 750**
2009	2 754	3 852	24 425	**31 032**	20 228	967	**21 193**	160	10 550	**62 935**
2010	3 147	4 518	24 183	**31 848**	25 009	1 032	**26 040**	–	10 264	**68 152**
2011 (p)	2 507	4 681	22 762	**29 951**	26 946	488	**27 431**	–	9 731	**67 114**

Sources: Natural Resources Canada; Statistics Canada.
– Nil; (p) Preliminary.
Note: Numbers may not add to totals due to rounding.

TABLE 3. WORLD COAL PRODUCTION AND LEADING PRODUCING COUNTRIES, 2008-10

Ranking	2008		2009		2010 (p)	
	Country	Production (Mt)	Country	Production (Mt)	Country	Production (Mt)
1	China	2 734	China	2 895	China	3 162
2	United States	1 076	United States	988	United States	997
3	India	521	India	562	India	571
4	Australia	398	Australia	403	Australia	420
5	Russia	305	Indonesia	291	Indonesia	336
6	Indonesia	274	Russia	275	Russia	324
7	South Africa	252	South Africa	251	South Africa	255
8	Germany	194	Germany	184	Germany	182
9	Poland	144	Poland	135	Poland	133
10	Kazakhstan	111	Kazakhstan	101	Kazakhstan	112
11	Turkey	79	Turkey	79	Colombia	74
12	Colombia	74	Colombia	73	Turkey	72
13	Canada	68	Greece	65	Canada	68
14	Greece	66	Canada	63	Greece	57
15	Czech Republic	60	Czech Republic	56	Czech Republic	55
n.a.	**World total**	**6 759**	**World total**	**6 823**	**World total**	**7 229**

Sources: Natural Resources Canada; International Energy Agency.
Mt Million tonnes; n.a. Not applicable; (p) Preliminary.
Note: Numbers may not add to totals due to rounding.

TABLE 4. CANADA, COAL TRADE, 2009-11

		2009		2010		2011	
		(tonnes)	($000)	(tonnes)	($000)	(tonnes)	($000)
EXPORTS							
2701.11	Anthracite						
	United States	45	9	–	–	275	22
	Dominican Republic	–	–	–	–	7	1
	South Korea	–	–	1	. . .	–	–
	Total	**45**	**9**	**1**	**. . .**	**282**	**23**
2701.12.10	Bituminous coal, metallurgical						
	Japan	6 565 281	1 556 430	8 610 475	1 673 927	7 271 050	1 958 698
	South Korea	4 378 817	779 332	5 296 195	970 368	6 513 564	1 691 761
	China	3 685 487	568 861	4 269 377	843 476	3 073 987	672 709
	Brazil	935 421	197 935	1 638 130	377 107	2 281 341	666 848
	United States	934 452	137 670	1 384 832	289 930	1 357 414	415 829
	Netherlands	837 245	198 457	706 598	148 241	1 264 462	375 971
	Taiwan	794 377	192 477	636 741	140 770	1 068 958	305 472
	Italy	464 316	113 773	1 014 827	197 614	999 519	273 868
	Turkey	831 549	188 032	838 928	183 941	848 526	235 662
	Germany	533 466	114 918	1 250 214	262 232	639 723	166 894
	Finland	257 847	41 203	416 157	90 088	422 471	126 255
	United Kingdom	317 367	62 921	283 517	60 411	429 901	126 067
	India	–	–	–	–	279 602	72 468
	Chile	169 473	48 255	214 862	45 715	216 252	66 624
	France	116 589	36 909	165 532	29 287	207 698	49 233
	Slovakia	–	–	59 063	8 238	220 500	46 512
	Mexico	141 764	25 856	302 480	59 714	192 691	45 615
	Spain	–	–	59 550	20 085	117 828	33 467
	Pakistan	160 310	26 853	108 791	21 520	110 000	31 880
	Egypt	118 786	20 698	–	–	59 560	18 352
	Belgium	–	–	47 723	5 860	54 999	12 810
	South Africa	–	–	69 103	11 664	–	–
	Total	**21 242 547**	**4 310 580**	**27 373 095**	**5 440 188**	**27 630 046**	**7 392 995**
2701.12.90	Bituminous coal, other						
	Japan	2 025 562	194 065	2 004 430	169 394	2 040 054	219 108
	South Korea	2 429 838	211 287	1 527 359	142 333	2 097 677	213 852
	China	821 849	86 579	1 492 729	153 793	1 306 021	147 842
	Mexico	140 888	13 376	394 596	30 278	207 130	17 659
	United States	91 778	8 106	82 629	6 416	43 531	4 624
	Netherlands	–	–	–	–	60 000	2 963
	Cuba	–	–	–	–	162	19
	Other countries	173 391	10 832	99 586	18 201	–	–
	Total	**5 683 306**	**524 245**	**5 601 329**	**520 415**	**5 754 575**	**606 067**
2701.19	Other coal						
	Netherlands	–	–	–	–	38 600	1 980
	United States	495	163	2 592	251	2 644	710
	Japan	599	167	572	81	147	144
	Taiwan	175	141	731	71	870	131
	Spain	258	99	612	227	1 945	112
	Italy	303	57	646	102	902	69
	India	151	39	422	18	969	61
	Saudi Arabia	–	–	–	–	243	46
	Egypt	2 000	31	64	40	195	43

	Other countries	436	178	1 062	315	690	29
	Total	**4 417**	**875**	**6 701**	**1 105**	**47 205**	**3 325**
2701.20	Briquettes, ovoids and similar solid fuels manufactured from coal						
	Saint-Pierre and Miquelon	–	–	–	–	9	1
	Netherlands Antilles	–	–	–	–	..	...
	Ireland	–	–	1	...	–	–
	Italy	–	–	54	5	–	–
	Total	**–**	**–**	**55**	**5**	**9**	**1**
2702.10	Lignite whether or not pulverized, but not aggolmerated						
	United States	128 610	15 032	131 606	15 723	120 284	14 728
	Pakistan	–	–	–	–	7 064	487
	Italy	–	–	–	–	694	48
	Brazil	66	28	–	–	617	43
	Other countries	319	22	76	5	173	12
	Total	**128 995**	**15 082**	**131 682**	**15 728**	**128 832**	**15 318**
2702.20	Agglomerated lignite						
	United States	52	10	391	82	367	67
Total exports		**27 059 362**	**4 850 801**	**33 113 254**	**5 977 523**	**33 561 316**	**8 017 796**
IMPORTS							
2701.11	Anthracite						
	Russia	156 731	28 723	27 112	4 098	144 971	21 377
	United States	127 279	13 834	155 955	17 868	223 877	20 864
	Ukraine	40 826	5 998	137 555	20 166	107 843	17 121
	United Kingdom	1 693	543	1 066	455	2 905	852
	Germany	–	–	1	...	3 220	407
	Other countries	13	9	512	216	374	45
	Total	**326 542**	**49 107**	**322 201**	**42 803**	**483 190**	**60 666**
2701.12.00.11, 2701.12.00.12	Bituminous coal, metallurgical						
	United States	2 184 927	235 637	3 092 422	383 362	3 770 007	528 492
	United Kingdom	–	–	–	–	58	12
	Canada	15 164	2 636	–	–	6	1
	Total	**2 200 091**	**238 273**	**3 092 422**	**383 362**	**3 770 071**	**528 505**
2701.12.00.91	Bituminous coal, other, high volatile						
	Colombia	1 142 288	85 260	1 586 972	132 338	1 239 637	113 898
	United States	4 087 582	380 257	3 724 283	338 495	1 325 054	111 289
	United Kingdom	197 638	15 228	–	–	226 668	29 383
	Venezuela	79 094	12 527	31 746	2 984	61 050	4 246
	Other countries	208 420	21 743	17 766	1 510	..	...
	Total	**5 715 022**	**515 015**	**5 360 767**	**475 327**	**2 852 409**	**258 816**
2701.12.00.92	Bituminous coal, other, low volatile						
	United States	111 043	11 641	7 342	3 041	874 380	16 268
	Colombia	7 000	1 491	26 410	7 354	35 911	8 165
	Norway	–	–	7 996	1 612	7 000	1 505
	Other countries	20	5	23	12	157	4
	Total	**118 063**	**13 137**	**41 771**	**12 019**	**917 448**	**25 942**
2701.19	Other coal						
	Colombia	780 281	100 696	430 597	37 574	508 668	46 545
	United States	3 287 658	130 801	3 356 006	123 329	813 404	40 760
	Other countries	543 777	33 860	2 496	271	90	3
	Total	**4 611 716**	**265 357**	**3 789 099**	**161 174**	**1 322 162**	**87 308**
2701.20	Briquettes, ovoids and similar solid fuels manufactured from coal						
	China	907	100	223	25	178	20
	United States	101	12	77	8	123	14
	Netherlands	–	–	–	–	59	7
	Malaysia	–	–	–	–	18	2
	South Korea	16	2	1	...	12	1

	Other countries	17	2	174	20	6	. . .
	Total	**1 041**	**116**	**475**	**53**	**396**	**44**
2702.10	Lignite whether or not pulverized, but not aggolmerated						
	United States	1 506	148	3 618	359	6 904	446
	Other countries	. .	. . .	–	–	–	–
	Total	**1 506**	**148**	**3 618**	**359**	**6 904**	**446**
2702.20	Agglomerated lignite						
	United States	172	56	464	150	550	179
	South Korea	. .	. . .	–	–	–	–
	Total	**172**	**56**	**464**	**150**	**550**	**179**
Total imports		**12 974 153**	**1 081 209**	**12 610 817**	**1 075 247**	**9 353 130**	**961 906**

Sources: Natural Resources Canada; Statistics Canada.
– Nil; **. .** Not available; **. . .** Amount too small to be expressed.
Notes: Numbers may not add to totals due to rounding. Harmonized System (HS) code descriptions in this table may have been abbreviated. For detailed HS code descriptions related to this commodity, please refer to the corresponding tariffs table.

TABLE 5. CANADIAN COKE TRADE, 2009-11

		2009		2010		2011	
		(tonnes)	($000)	(tonnes)	($000)	(tonnes)	($000)
EXPORTS							
2704.00	Coke and semi-coke of coal, of lignite or of peat, whether or not agglomerated; retort carbon						
	United States	164 484	48 998	71 861	14 994	256 450	97 189
	Netherlands	–	–	–	–	38 857	3 724
	Cuba	879	359	1 168	424	2 353	735
	Other countries	46 487	6 983	154	48	–	–
	Total	**211 850**	**56 340**	**73 183**	**15 466**	**297 660**	**101 648**
IMPORTS							
2704.00	Coke and semi-coke of coal, of lignite or of peat, whether or not agglomerated; retort carbon						
	United States	260 373	44 392	449 056	57 790	350 454	100 787
	Poland	–	–	–	–	27 877	11 385
	Colombia	33 559	7 412	10 329	1 061	23 661	9 015
	Germany	1 129	535	1 605	706	1 323	579
	China	33 475	18 497	213 096	114 003	1	1
	Other countries	17 493	1 861	75 446	30 058	4	2
	Total	**346 029**	**72 697**	**749 532**	**203 618**	**403 320**	**121 769**

Sources: Natural Resources Canada; Statistics Canada.
– Nil.
Note: Numbers may not add to totals due to rounding.

TABLE 6. CANADIAN COAL TRADE, HISTORICAL, 2000-2011

Year	Metallurgical (1)		Thermal (2)		Total Canada	
	(000 t)	($000)	(000 t)	($000)	(000 t)	($000)
EXPORTS						
2000	30 305	1 632 441	2 196	89 358	32 501	1 721 799
2001	26 914	1 715 603	2 782	118 785	29 696	1 834 388
2002	22 964	1 582 580	2 222	108 642	25 186	1 691 222
2003	23 716	1 480 528	1 389	77 651	25 105	1 558 179
2004	23 847	1 600 072	2 013	121 322	25 860	1 721 394
2005	26 710	3 116 245	1 492	99 320	28 202	3 215 565
2006	24 639	3 053 752	3 036	167 493	27 675	3 221 245
2007	26 644	2 698 844	4 030	227 173	30 674	2 926 017
2008	26 777	5 661 036	4 660	465 936	31 437	6 126 972
2009 (r)	21 243	4 310 582	5 817	540 222	27 060	4 850 804
2010	27 373	5 440 188	5 740	537 335	33 113	5 977 523
2011	27 630	7 392 995	5 931	624 799	33 561	8 017 794
IMPORTS						
2000	3 493	183 214	15 932	755 576	19 425	938 790
2001	3 987	229 475	15 443	799 304	19 430	1 028 779
2002	4 315	283 037	18 321	809 983	22 636	1 093 020
2003	3 294	180 633	19 422	718 240	22 716	898 873
2004	3 429	242 848	15 585	742 716	19 014	985 564
2005	4 199	366 800	16 885	899 321	21 084	1 266 121
2006	4 253	407 436	16 615	885 120	20 868	1 292 556
2007	3 352	289 771	15 116	794 937	18 468	1 084 708
2008	3 286	351 584	17 277	980 272	20 563	1 331 856
2009 (r)	2 200	238 273	10 774	842 937	12 974	1 081 210
2010 (r)	3 092	383 362	9 518	691 887	12 610	1 075 249
2011	3 770	528 505	5 583	433 399	9 353	961 904

Sources: Natural Resources Canada; Statistics Canada.
(r) Revised.
(1) Metallurgical includes Harmonized System code numbers 2701.12.00.11 and 2701.12.00.12 for imports and 2701.12 and 2701.12.10 for exports. (2) Steam includes Harmonized System code numbers 2701.11, 2701.19, 2701.12.00.91, 2701.12.00.92, 2701.12.00.99, 2701.20, 2702.10 and 2702.20 for imports and 2701.11, 2701.12.90, 2701.19, 2701.20, 2702.10 and 2702.20 for exports.
Notes: Includes domestic exports only. Numbers may not add to totals due to rounding.

TABLE 7. CANADA, COAL CONSUMPTION, 2000-2010

Year	Electricity	Steel	Industrial Energy	Producer Use	Non-Energy	Total
	(000 tonnes)					
2000	55 829	4 265	1 959	160	469	**62 682**
2001	55 540	4 255	1 870	335	396	**62 396**
2002	55 612	4 201	1 810	216	413	**62 252**
2003	55 122	4 174	1 974	284	424	**61 978**
2004	51 337	4 371	2 355	264	489	**58 815**
2005	51 739	4 289	2 368	72	1 765	**60 234**
2006	50 785	4 325	2 411	24	1 832	**59 378**
2007	55 591	4 304	2 482	70	1 757	**64 203**
2008	50 726	4 257	2 622	112	1 444	**59 161**
2009	42 209	3 044	2 080	91	1 218	**48 641**
2010	43 745	3 872	2 347	46	192	**50 201**

Sources: Natural Resources Canada; Statistics Canada.
Note: Numbers may not add to totals due to rounding.

TABLE 8. CANADA, COAL MINES, 2011

Mine	Owner	Operator	Location	Production Capacity (Mt/y)		Product
				Mine	Plant	
COKING COAL						
Fording River	Teck Resources Ltd.	Teck Coal Ltd.	Elkford, B.C.	8.7	9.5	Bituminous coking
Elkview	Teck Resources Ltd.	Teck Coal Ltd.	Sparwood, B.C.	6.0	6.5	Bituminous coking
Greenhills	Teck Resources Ltd.	Teck Coal Ltd.	Elkford, B.C.	5.0	5.0	Bituminous coking
Coal Mountain	Teck Resources Ltd.	Teck Coal Ltd.	Sparwood, B.C.	2.5	3.5	Bituminous coking
Line Creek	Teck Resources Ltd.	Teck Coal Ltd.	Sparwood, B.C.	3.2	3.5	Bituminous coking
Cheviot (Cardinal River)	Teck Resources Ltd.	Teck Coal Ltd.	Hinton, Alta.	1.7	3.0	Bituminous coking
Perry Creek (Wolverine)	Walter Energy, Inc.	Walter Energy's Western Coal	Tumbler Ridge, B.C.	2.0	3.0	Bituminous coking
Brule	Walter Energy, Inc.	Walter Energy's Western Coal	Chetwynd. B.C.	1.5	2.0	Bituminous PCI
Willow Creek	Walter Energy, Inc.	Walter Energy's Western Coal	Chetwynd. B.C.	1.7	2.0	Bituminous coking, PCI
Grand Cache	Winsway Coking Coal Holdings Ltd. and Marubeni Corp.	Grande Cache Coal Corp.	Grande Cache, Alta.	2.0	2.5	Bituminous coking
Trend	Anglo American plc	Peace River Coal Inc.	Tumbler Ridge, B.C.	1.0	2.0	Bituminous coking
THERMAL COAL						
Coal Valley	Sherritt International Corp.	Sherritt's Mountain Operations	Edson, Alta.	4.0	4.0	Bituminous thermal
Obed Mountain	Sherritt International Corp.	Sherritt's Mountain Operations	Hinton, Alta.	1.2	1.2	Bituminous thermal
Quinsam	Vitol Group	Hillsborough Resources Ltd.	Campbell River, B.C.	0.5	0.5	Bituminous thermal
Paintearth	Sherritt International Corp.	Sherritt's Prairie Operations	Forestburg, Alta.	3.5	n.a.	Subbituminous
Sheerness	Sherritt International Corp.	Sherritt's Prairie Operations	Hanna, Alta.	4.0	n.a.	Subbituminous
Genesee	Sherritt International Corp. (50%) and Capital Power Corp. (50%)	Sherritt's Prairie Operations	Warburg, Alta.	5.6	n.a.	Subbituminous
Highvale	TransAlta Corp.	Sherritt's Prairie Operations	Seba Beach, Alta.	13.0	n.a.	Subbituminous
Boundry Dam	Sherritt International Corp.	Sherritt's Prairie Operations	Estevan, Sask.	6.5	n.a.	Lignite
Poplar River	Sherritt International Corp.	Sherritt's Prairie Operations	Coronach, Sask.	4.0	n.a.	Lignite
Bienfait	Sherritt International Corp.	Sherritt's Prairie Operations	Bienfait, Sask.	2.8	n.a.	Lignite

Sources: Natural Resources Canada; Statistics Canada.
Mt/y Million tonnes per year; PCI Pulverized coal injection; n.a. Not applicable.
Note: Only mines with a production capacity over 100 000 t/y are listed.