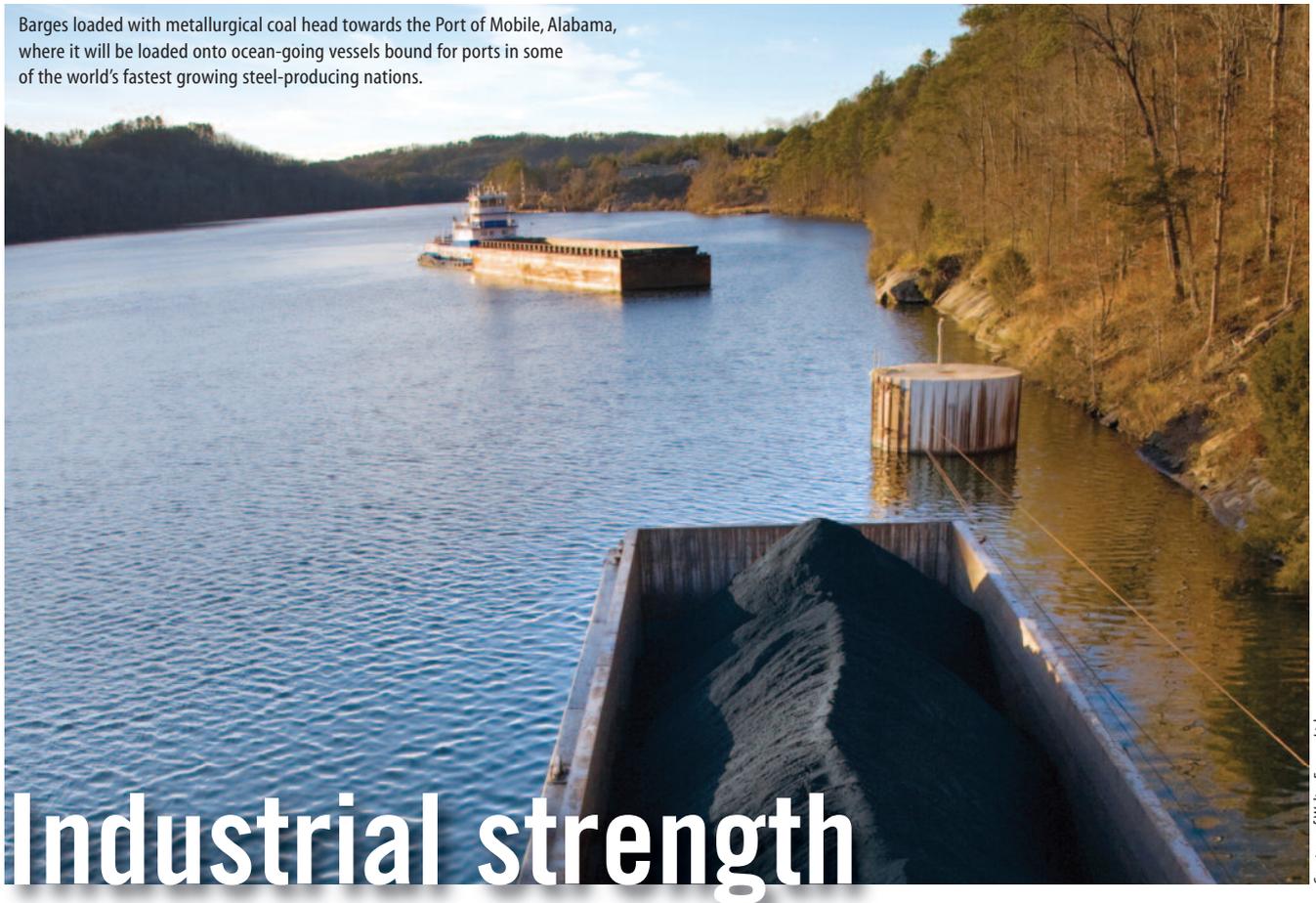


Barges loaded with metallurgical coal head towards the Port of Mobile, Alabama, where it will be loaded onto ocean-going vessels bound for ports in some of the world's fastest growing steel-producing nations.



Courtesy of Walter Energy Ltd.

Industrial strength

Metallurgical coal operators and developers focused on growth

By Alexandra Lopez-Pacheco

The infrastructure boom is here. According to CIBC World Markets Inc., it will be worth an estimated \$25 to \$30 trillion of new infrastructure investment in the next 20 years. In part, the boom is due to world governments, including Canada's, responding to the 2008 global financial meltdown and the first international recession by pledging trillions to infrastructure spending in order to create jobs and stimulate economies. But also, developed nations have aging infrastructures, and emerging nations need to expand and build new infrastructure to keep up with growth and demands. One way or another, the infrastructure will be built.

And where there is infrastructure being built, there is a need for high-quality coals, which, along with iron ore, are the key ingredients needed to make steel. In fact, according to the World Coal Association, more than 60 per cent of total global steel production is dependent on metallurgical coal.

From the perspective of steel manufacturers and their customers, there is a huge problem. "There is not enough metallurgical coal production in the world to satisfy the growth in demand," says Robin Goad, president and CEO of London, Ontario-based Fortune Minerals Limited, whose Mount Klappan project in northwest British Columbia contains

2.8 billion tonnes of anthracite coal, valuable as a pulverized coal injection (PCI) coal in blast furnaces because of its low volatility and high energy content.

"There are large deposits in Mongolia and also in southern Africa, but Indian crude steel production is anticipated to quadruple in the next decade," Goad says. "Brazilian crude steel production is anticipated to quadruple over the next 20 years. In Japan and South Korea, growth in the demand for coal is increasing at about three per cent per year and some of the traditional suppliers are no longer supplying."

Where will it come from?

Until just a couple of years ago, China was the world's largest producer of anthracite coal, but in 2009, the country announced it would no longer export its premium PCI coal. Last year, according to the World Coal Association, China imported an estimated 48 million tonnes of coking coal.

The world's second largest producer of anthracite coal, Vietnam, announced earlier this year that it was raising tax on coal exports to 20 per cent from 15 per cent. As well, it would gradually cut coal exports to three million tonnes per year by 2015 from 16.5 million tonnes this year, while raising imports to six million tonnes of coal per year by 2015.

In the last decade, the price of metallurgical coal has risen, on average, from US\$40 per tonne to close to US\$230 per tonne in 2011. According to The AME Group, a global firm of economists in the metal and mineral industries, for the more than 20 metallurgical coal mines in Canada – both in operation and in development – that is good news. The combined products of those mines in production make Canada the second largest exporter of metallurgical coal – at least that is until last year, when it was bumped down to third place by the U.S.

“Traditionally, the U.S. is a large metallurgical coal producer, but we call them a swing producer,” says Kevin Stone, senior commodity analyst, Natural Resources Canada. “When the market is good, they export more. When it’s not so good, they export less. Right now, the market is good.”

In 2010, Canadian companies exported 8.6 million tonnes of metallurgical coal to Japan, 5.3 million tonnes to South Korea, 4.3 million tonnes to China, 1.6 million tonnes to Brazil, 1.4 million tonnes to the U.S., 1.3 million tonnes to Germany and one million tonnes to Italy, as well smaller amounts to 13 other countries. And metallurgical coal comprised 83 per cent of all Canadian coal exports.

Australia is the world leader in metallurgical coal production and exports, and everyone else, says Stone, is way behind the top three exporters. “And I don’t see that changing, at least in the next three to five years,” he says.

Growth from coast to coast

So the country’s largest reserves, which are in Western Canada, are in high demand. Not surprisingly, there has been a flurry of activity in the sector in recent years. In August, Fortune Minerals announced it had finalized a partnership for its Mount Klappan project with South Korea’s POSCO, the world’s third largest steel producer. In the same month, Xstrata Coal announced it had purchased a metallurgical coal mining company in British Columbia, First Coal Corporation, for C\$147 million. The acquisition provides Xstrata Coal with access to coking coal exploration leases in BC.

But it is not Xstrata’s first metallurgical coal mining project in Canada. Since 2006, the company has been working on Cape Breton, Nova Scotia’s Donkin coal project, which is expected to produce approximately 2.75 million tonnes per annum of washed export grade metallurgical coal when it is operational.

That project could add an interesting twist to the story of metallurgical coal in Canada, since almost all metallurgical coal projects in the country – both operational and in development – are in British Columbia and Alberta. “The country exports almost all its metallurgical coal,” says Stone. “We imported 3.1 million tonnes of metallurgical coal from the U.S. in 2010 to be used in the Canadian steel industry, primarily in central and eastern Canada. The reason why it was imported is essentially geography. Transportation costs from

the U.S. to central Canada are relatively lower compared to transporting coal from western Canada.”

Last year, U.S.-based Walter Energy, Inc. acquired Vancouver-based metallurgical coal producer Western Coal Corp., which has mines in north-east British Columbia, West Virginia, U.S., and in South Wales in the U.K. “We liked [Western Coal’s] growth story and its plans to increase coking coal production volumes 133 per cent by 2013,” said representatives for Walter Energy at the time.

Teck Resources Limited, the world’s second largest exporter of seaborne metallurgical coal, with five mines in British Columbia and one in Alberta, has said it is taking steps to increase its production levels, as has Alberta-based Grande Cache Coal Corporation, which holds coal leases covering over 22,000 hectares in the Smoky River Coalfield in west-central Alberta. In July, Grand Cache got approval to proceed with the development of a new underground operation.

Other new projects include the Raven underground coal mine on Vancouver Island, being developed by an alliance between Compliance Energy Corporation, Itochu Corp. of Japan, and LG International Corp. of Korea. It will, if it proceeds, produce metallurgical coal for export.

At the mercy of Mother Nature

For all the opportunities, the sector also has its challenges. “It takes so long for the industry to build the capacity,” says Stone. “However, it is influenced by short-term fluctuations in the global market, because Canada’s metallurgical coal producers depend on foreign orders. The industry is a captive producer and the sector really has to deal with the fluctuations in global demands,” he explains.

In fact, Canada’s metallurgical coal production declined by almost eight per cent in 2009 due to the global recession. Another significant challenge to metallurgical mining is nature. Take Australia metallurgical coal production, for example. This country’s production was temporarily devastated as a result of the floods that ravaged the eastern part of the country, although, as Stone points out, production and exports are almost back to normal.

The reason the metallurgical coal sector can be so susceptible to the forces of nature is primarily because, more often than not, the coal needs to be hauled from remote and underdeveloped regions to large ocean bulk terminal ports for export within established seaborne trade routes. “Most of Canadian coking coal has very good quality characteristics,” says Gordon Gormley, who has developed a number of Canadian and international coking coal properties and is now acting as a private consultant. “The problem is that most of it is in the mountains in very rugged terrain, having extreme temperatures, and needs big equipment and big plants. Most of the coal requires



Courtesy of Fortune Minerals Limited

Source: WCA, IEA, WSA

TOP MET COAL EXPORTERS 2010 est. (millions of tonnes)		TOP MET COAL IMPORTERS 2010 est. (millions of tonnes)	
Australia	155	Japan	58
United States	51	China	48
Canada	27	India	30
Russia	14	Korea	28
Mongolia	11	Brazil	12

wash plants, and that requires infrastructure, power and tailings ponds. You need rail and you need a town that's close enough to drive to it."

"Port capacity to handle new coking coal and the environmental assessment process by federal, provincial, Aboriginal and occasionally U.S. federal and state agencies also pose significant challenges for future developers," says Gormley. "We need facilities that can handle shipments of up to 150,000 tonnes, such as Westshore coal export ter-

minal south of Vancouver, but it took a lot of time and money to build that. Fortunately, in northeast British Columbia, the Ridley Terminal has some excess capacity, which a lot of people plan on using, but there's still a limited port bottleneck issue if Canada is to develop all the coking coal it could. The U.S. has commenced using Westshore Terminals for its coal exports as that country now faces similar port capacity shortages as it tries to expand its own coal sales to Asian markets."

Meanwhile, resource nationalism is spreading to many parts of the world and that, says Goad, is an issue the mining sector in general is facing. "This is particularly the case in metallurgical coal," he says. But in Canada, resource nationalism in other countries has a silver lining when it comes to metallurgical coal – as long as Canadian governments are not hit by the fever and start wanting a bigger piece of the pie through higher taxes and royalties, as it will only increase world demand. Overall, these are indeed exciting times for the world's third – sometimes second – largest producer of metallurgical coal. **CIM**



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