Investor Newsletter

GREENPEACE

Coal Market Update

May 2012

Growing uncertainty for medium term coal export market: Are assumptions behind coal export projects sound?

This Coal Market Update summarizes general developments in early 2012 that could weaken coal import and export volumes across key countries. Greenpeace tracks coal market developments worldwide through specialist staff in 28 offices, including the United States, Australia, China, India, South Africa and Indonesia.

Key points:

- China's official targets to curb growth of coal use and expand domestic production could significantly curb demand for international coal
- Developments in India highlight several barriers to coal import growth
- Coal export infrastructure projects in Australia and the United States face growing public opposition and increasing regulatory risks

Companies mentioned:

- Coal India Limited (CIL) (BSE: 533278, NSE: COALINDIA)
- Adani (BSE: 512599, NSE: ADANIENT)
- BHP Billiton (LSE: BLT, NYSE: BHP, NYSE: BBL, ASX: BHP, JSE: BIL)
- Rio Tinto (ASX: RIO, LSE: RIO, NYSE: RIO)
- GVK Group (GVK Power & Infrastructure Ltd; NSE:532708)
- Ambre Energy (unlisted, planning IPO by June 2012)
- SSA Marine, Carrix (unlisted)

China

China's official targets to curb growth of coal use and expand domestic production could significantly curb demand for international coal. The new coal industry five-year plan, released in March, aims to limit coal consumption to 3.9 billion tonnes in 2015, which would reduce growth rates in coal use to less than half recent levels. The plan also reflects growing unease over dependence on coal imports, and sets a target of returning to the pre-2009 situation of surplus capacity in domestic coal production by 2015. If achieved, the targets would result in a large drop in global demand for internationally traded coal.

The new target is not a minimum planning target but an indicative upper limit on the amount of coal to be burned in the country. The target is a direct consequence of the reduction goal in CO2 intensity that China has committed to on the highest level, both domestically and internationally, and that the leadership has pledged to implement fully. Under the binding energy intensity target of the previous five-year plan (11th FYP), the country reduced energy intensity by 19%.

> *The share of coal in the primary energy mix will decrease substantially, due to adjustment of energy structure, environmental protection and control of PM2.5 [fine particulate] emissions. A reasonable limit on coal consumption, limiting the economically unreasonable coal demand and, slowing down coal consumption*

> *growth, is also a prerequisite for the sustainable development of the coal industry; therefore, coal consumption in 2015 should be limited to 3.9 billion tonnes.* — Coal Industry 12th Five-Year Plan, NDRC (translation by Greenpeace)

Air pollution is causing public uproar and spurring new regulation. Air pollution from coal-fired power plants is estimated to have killed 160,000 people in 2007. Eastern provinces have experienced intense air pollution episodes during the past year.

New air pollution rules should have a significant impact on coal use: the OECD estimates that a least-cost strategy for cutting health impacts of air pollution in emerging economies would achieve 50% of the reductions through end-of-pipe emission controls and 50% by changing the energy mix – even if no value is assigned to reducing CO2 emissions. The new coal consumption limit recognizes the massive environmental damage and climate pollution caused by the rapid increase of coal use in China.

New policies likely to emerge to cut coal demand. China's new coal consumption target demonstrates the growing willingness of the central government to move away from coal. Implementation of the target will require new policies e.g. integrating compliance with the target into the local governors' performance reviews; provincial caps on total energy use; faster deployment of renewable energy and energy efficiency measures; and increased use of natural gas.

India

Demand for imported coal in India has stayed below expectations. Despite a major domestic production shortfall, India's thermal coal imports only rose by approximately 8 million tonnes in 2011. This was only a quarter of the increase in imports of 32 million tonnes projected by India's coal ministry for the fiscal year.

The power market in India is helping to put the brakes on import growth. Importing the quantity of coal needed to meet domestic production shortfalls would require extensive reform of the electricity tariff and tariff collection system in India, which is very difficult politically. Tariffs would need to be raised radically, resulting in renewable energy (and possibly imported gas) becoming more cost competitive as well.

New contracts are unlikely to boost coal imports. A Presidential directive issued to Coal India Limited (CIL) on April 3 requires them to sign fuel supply agreements with power producers assuring them that 80% of committed coal will be delivered. This would require CIL to import coal in the event of a shortfall. However on April 16 it was announced that the penalty would only be an average of 0.01% of shortfalls and would not come into effect for three years. The penalty is likely too low to drive import growth. CIL only plans to import 10 Mt in FY2012-13, also indicating that the tug-of-war between CIL, government and power producers is unlikely to give a major boost to imports.

Australia

Abbot Point coal port expansion faces setbacks and new regulatory hurdles. UNESCO has warned that Australia's mining boom is putting the iconic Great Barrier Reef at risk. A Galaxy poll, commissioned by Greenpeace Australia Pacific, found that 76% of Australians were opposed to the development at Abbot Point.

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If built, the proposed Abbot Point coal export port would be the largest in the world. If all the proposed coal export developments in the region go ahead, more than 10,000 coal carriers would pass through the Great Barrier Reef World Heritage Area per year by 2020, up from 1,722 ships in 2011. UNESCO is preparing a report on the threats to the reef for the World Heritage meeting in St Petersburg in June, which is expected to make recommendations to the Australian government.

Recognizing the need to further scrutinize the environmental impacts, the Australian Environment Minister has pushed back the due date for his decision from March to December for environmental approval of the multi-cargo facility at Abbot Point.

On April 20, the world's third biggest mining company, Rio Tinto, announced it was pulling out of the Abbot Point project, citing higher costs and shifts in global markets. The proponent of the Abbot Point port expansion is the government-owned North Queensland Bulk Ports Corporation Ltd. The first three terminals of the port have been allocated to Adani, BHP Billiton and GVK.

The United States

Oregon governor calls for a sweeping review of Northwest coal exports. On April 25, Oregon Governor John Kitzhaber called for an extensive federal government review of planned coal exports from Northwest ports. In his letter to federal government authorities he requested a programmatic environmental impact statement (EIS), which would review the cumulative impact of multiple export projects, citing concerns over diesel and coal dust pollution, as well as mercury drifting back to Oregon from coal fired power stations in Asia. The US Environmental Protection Agency had a week earlier called for a broad and thorough assessment, noting that the Port of Morrow coal export project in Oregon has "the potential to significantly impact human health and the environment". The Port of Morrow project is being developed by a subsidiary of Ambre Energy.

A groundswell of opposition to coal exports is building along the Washington and Oregon coasts, signaling future delays and regulatory risks for a number of projects. In February, petitions with 40,000 signatures against coal exports were delivered to Washington state's Public Lands Commissioner. A Washington Post journalist blogs that the coal exports are "hardly set in stone", and the fight could become another Keystone XL, an oil pipeline proposal which became a headline battle in 2011 before the environmental approval was delayed by at least 12 months by President Obama.

A group of 160 doctors in a community along the route for coal exports from a proposed port at Cherry Point, Washington has called for a review of the health impacts of increased train traffic. They've expressed concern over coal dust from uncovered wagons, diesel exhaust from trains and ships, the impact on emergency response times, and mercury being carried in air currents from Asia. The Cherry Point coal export terminal is being developed by SSA Marine, whose parent company is Carrix Inc.

The US EPA has announced new rules to limit carbon dioxide emissions from new coal-fired power stations. The rules effectively mean that new coal-fired power stations would not be built unless they were fitted with carbon capture and storage technology (which is yet to be commercially proven in coal plants and is highly likely to be cost prohibitive). EPA was also considering measures to reduce carbon dioxide emissions from existing plants, though reference to this was cut from the announcement.