

Impacts of seaborne trade on coal importing countries – Pacific market

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In past decades, coal-fired power stations in many OECD and non-OECD countries in the Asia-Pacific region were designed for local domestic coals, but in recent years, the increase of imported coal into certain regions has resulted in a convergence between international markets and traditional domestic markets. Imports have increased in many coal producing regions and the influence on these domestic markets has been twofold. Firstly, imported coal displaces domestic production, adding pressure to domestic industries in some regions; and secondly international price trends may drive prices of what remains of the indigenous market for coal.

This report is published alongside two other reports on global trade and Atlantic markets that examine both general and regional specific factors that have influenced the seaborne trade in coal. Coal reserves and production trends are discussed along with the changes in the coal mining industry and the regulations and policy that govern it.

The report focuses on a small sample of OECD and non-OECD countries – Korea, Japan, China, and India. These countries are some of the largest importers of hard steam coal in the world today, and will continue to be so in the future. Japan and Korea are examples of two countries which have poor domestic fossil fuel reserves, and as such these markets have seen a massive role for imported coals. Being such large coal importers, Japan and Korea have long been price setters in the international coal market.

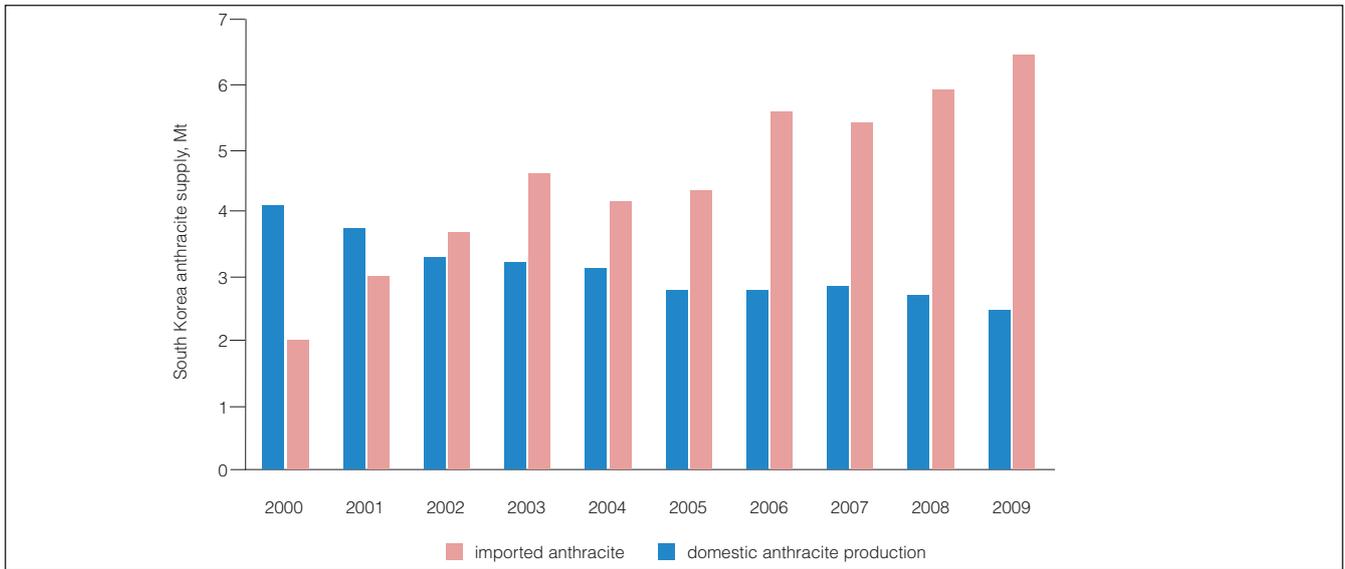
China and India are emerging economies that have rich reserves of coal, and are dominated by domestic coal production. However, China and India have relatively small imports when compared with domestic production, but have a large role in the seaborne market, and are having an increasingly profound influence on world prices as far as Europe and parts of North America. With these two countries possibly becoming the leading importers of steam coal in the world, the role of Japan and Korea as major importers and price setters could diminish.

While this latter point is impossible to predict at this point, the report nonetheless attempts to understand the price competitiveness of domestic coals versus imported coals on a country by the country basis. In addition, the study compares the quality of these coals within the

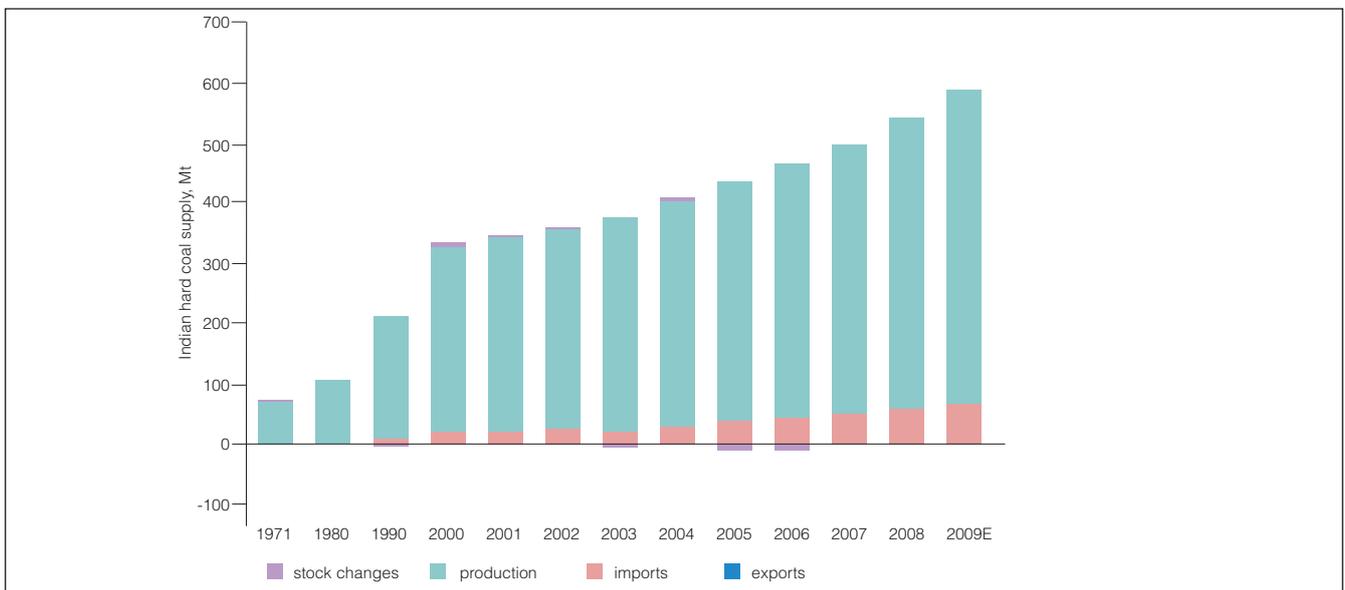
context of meeting environmental regulations and tries to understand what role imported coal can play as a blend coal, particularly in India where indigenous coal contains high amounts of troublesome ash.

One of the most important aspects discussed in this report is the facilitation of coal imports, in other words the availability of appropriate inland logistics to get imported coal to the power stations in these countries. While the transportation modes of coal export countries is well reported and understood in the media, less is published regarding the modes of transport used for moving coal from import ports to the destination power station. This report identifies the major power stations in the sample countries that import coal, or could feasibly import coal based on their geographic location. The IEA CCC has attempted to map these power stations in each country, as well as locating the ports of entry, and the inland transportation links (rail and river) that connect these ports to the power stations.

Japan and Korea are dependent on coal imports; their power stations are almost all located on the coastal and therefore capable of receiving coal supplies from the international market. The key suppliers are Australia and Indonesia which are the world's major exporters of hard coal. China and India have a wealth of coal reserves, but require increasing amounts of imports to fill the gap left by the massive demand for coal by the nation's growing number of power stations. In China, some of the most economically powerful regions are in the south and south eastern regions of the country, and are also the regions where power demand is high. Coal reserves are located inland towards the regions in the north of the country, in Shanxi, Shaanxi and Inner Mongolia. Coal producers operate cost-effective operations, and a few years ago were once net-exporters of coal to the world market; today, China is a net-importer. India is also a net-importer of coal and in time could be the largest importer of steam coal in the world. India's indigenous coal is of low grade and undesirable by world standards, but extremely cheap to produce compared with imports. Consequently, India's coal importers are not looking for the highest quality coal, but cost-effective coal to blend and replace the high ash coal that is produced domestically.



Korean anthracite supply, Mt



Indian hard coal supply, Mt

Worldwide, internationally traded coal will continue to shape many domestic coal markets. Each country has specific issues related to domestic coal supplies, and imported coal will continue to complement or replace

these supplies for the foreseeable future.

Each issue of *Profiles* is based on a detailed study undertaken by IEA Clean Coal Centre, the full report of which is available separately. This particular issue of *Profiles* is based on the report:

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