

“PEAK COAL” IN ASIA?

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Overview

There have been divergent opinions presented in the past year regarding the topic of “peak coal” in Asia. Some analysts have suggested that recent energy policy in China will mean a reduction of coal consumption in Asia and a peaking of coal production (Pearce, 2014) while others have forecasted that “peak coal” will not occur in the short to medium term (IEA, 2014). As to which forecast is more accurate depends on the weight recent policy developments have in influencing coal consumption. Supporters of “peak coal” believe that decarbonisation efforts by China has stalled the use of coal in generating electricity in that country and given the significant size of the Chinese electricity sector this will lead to lower coal consumption in Asia as a whole. Detractors point to recent declines in coal consumption in China as being more related to economic conditions than to recent energy policy. Furthermore, India and other Asian countries will also drive continued growth in coal consumption. This paper presents an analysis of key inputs that have driven the growth in coal consumption in Asia and resulted in increased demand for coal. In addition, a long-term price equilibrium model is presented to identify the influence that commodity coal prices will have on delaying “peak coal” in Asia.

The paper is structured as follows: An introduction provides background on the growth of coal markets in Asia both in terms of production and consumption. A second section identifies the principle drivers of increased coal consumption and how increasing production declines in consuming Asian countries have been met by surplus producing countries. The third section addresses the correlative strength of certain drivers to the growth in the consumption of coal including the application of the pricing model. In section four a discussion of the results of the statistical analyses is undertaken and in the final section the implications of these results are presented.

Methods

Multivariate multiple regression

Results

First, Australia and Indonesia have exploited the declining production of indigenous coal in consuming countries with substantial growth in production exports.

Second, GDP growth is significantly correlated with growth in coal consumption with the price of imported coal having a lesser significance in correlation.

Third, current import prices in real terms for coal are below the long-term price equilibrium and with lower production costs suggests continued economic value for consuming coal.

Four, “peak coal” is less likely to occur in the near to mid term supporting forecasts by detractors of the “peak coal” prediction.

Conclusions

While economic growth in Asian countries is forecasted to decline slightly over the near to mid term, the overwhelming reliance on coal by emerging Asian countries will continue to result in the growth in consumption of coal. Current energy policies that seek to limit carbon emissions or to protect domestic industries are not significant enough to limit this growth. The prediction of “peak coal” in the near term is unlikely to take place and only more

aggressive policies to limit carbon emissions at the expense of higher energy costs will result in reduced coal consumption and related coal production in the Asia-Pacific region.

References

IEA (2014), Medium-Term Coal Market Report 2014, Market Analysis and Forecasts to 2019. International Energy Agency, Paris.

Pearce, F. (2014), "Peak Coal: Why the Industry's Dominance May Be Over", *Environment 360*, Yale School of Forestry & Environmental Studies, 19 June 2014.