The World Continues to Rely on Coal for Stable and Affordable Power

Many countries around the world, particularly nations of the European Union (EU), have attempted to increase the use of renewable energy through mandates and subsidies. As these policies have grown increasingly expensive for national economies attempting to recover from global recession, in addition to reactors being shutdown over concerns with nuclear power, countries around the world are increasingly turning to coal to provide affordable, baseload power.

Even as regulators in the United States try to reduce or, as evidenced by the EPA’s proposed New Source Performance Standards, effectively ban the use of coal for electric power generation, world coal demand is expected to increase by over 40% from 8 billion tons currently to 11.5 billion tons by 20401.

European Union

The return to coal has been most prevalent in Germany, which recently amended its renewable energy laws to reduce targets and cut subsidies for certain types of renewable power sources in order to stem soaring electricity prices2. Germany’s “energiewiede” program required at least 80% of its power needs to be met by renewable energy by 2050, which in practice has caused power rates to become prohibitively expensive, particularly for the country’s manufacturing sector. In fact, during remarks at a recent energy conference in Berlin, a German official warned of “dramatic deindustrialization” if power costs did not come down3.

As a result, German utilities have increased coal use to support intermittent renewable sources and the loss of nuclear power. One utility is pressing ahead with plans to build a 1,100 megawatt lignite-fueled power plant that will begin operating in 2018.

Japan

Japan is another country relying more on coal to meet its baseload power needs. Coal and natural gas now produce nearly 90% of Japan’s electricity, compared to 62% before the Fukushima disaster in 2011. As a country with no significant natural resources, Japanese utilities have found it far more cost effective to import coal than natural gas and expect to increase coal-fired capacity by 47 gigawatts over the next decade4.

Japan’s cabinet also recently approved a new energy plan that recognizes coal as an important long-term electricity source. According to one Japanese official, “our basic stance is to use coal while caring for the environment as much as possible. Coal is economical and stable in supply.”5

China

While many nations have returned to coal due to failed renewable energy policies, China is a case where population growth and an insatiable demand for electricity has required it to utilize coal – along with all other sources of power generation – at an astonishing rate. As coal consumption in the United States remained relatively stable, and even decreased slightly for a period over the last decade, China increased its coal consumption by over 60%, contributing 88% of the total growth in global coal consumption. China is expected to add 30 gigawatts of new coal-fired power each year through 2030, ultimately representing more than half of global coal production7.

1 http://www.eia.gov/forecasts/ieo/coal.cfm
2 http://online.wsj.com/news/articles/SB100014240527023048190045794894340764477734?mg=reno64-wsj
3 http://online.wsj.com/news/articles/SB10001424052702304007504579346774109467020
4 http://online.wsj.com/news/articles/SB1000142405270230468810457946942892719528?mod=WSJ_Energy_2_4_Right&mg=reno64-wsj
7 http://www.eia.gov/forecasts/ieo/coal.cfm