

## THE FUTURE OF COAL-FIRED POWER IN EUROPE

### IMPLICATIONS OF THE EU INDUSTRIAL EMISSIONS DIRECTIVE

Europe is the world's third largest market for coal after China and the US but, unlike these two countries, Europe has a significant reliance on international markets for its coal supply. On the basis of energy content, around 40% of imported hard coal complements around 30% each of indigenous hard coal and indigenous lignite in the EU 27. With total consumption close to 375 M tonnes hard coal and 450 m tonnes lignite, around 70% and 95% respectively is used in electricity generation.

Coal and lignite underpins electricity generation in many member states – the EU average is around 30%, whereas some countries are significantly more reliant, from 40% in Germany to 90% in Poland. But many of Europe's power stations are old, polluting and inefficient by today's standards. At the same time that debate rages about how to regulate a new generation of coal stations, and how to finance carbon capture and storage (CCS), existing stations have to meet ever more stringent requirements in terms of traditional pollutants such as SO<sub>x</sub>, NO<sub>x</sub> and particulate emissions.

Provisions of the Large Combustion Plants Directive (LCPD) already mean that many 'opted-out' power stations must close before 2016 and 'opted in' stations must meet tighter standards from the same date. The new Industrial Emissions Directive (IED) proposed by the European Commission, and largely endorsed by the European Parliament, sought to tighten further the emission limit values for SO<sub>x</sub> and to remove some of the flexibilities for achieving NO<sub>x</sub> reduction by reduced running and by trading emissions permits. This would certainly have forced further power station closures from 2016, and it raised serious security of supply concerns in the UK, Poland and several other countries in Eastern Europe.

The Czech Presidency of the EU was keen to broker a compromise deal at the end of its term but, at the end-June Environment Council meeting, the UK-led initiative to maintain the existing LCPD flexibilities until 2023 failed. The compromise date of 2020 gives a medium-term stay of execution for coal plant, but is well before the time at which significant deployment of new coal with CCS can be expected.

The full implications of this Council decision, once it is ratified by the European Parliament, will have major impacts for power-station operators and coal suppliers in Europe. The investments required to stay within IED limits beyond 2020 will be difficult, if not impossible, to justify against uncertainties caused by tightening in the carbon market and the need to meet renewable generation targets.

A number of key questions and issues arise for companies and investors involved in coal-fired generation and across the coal supply chain:

- What do the new regulations mean and how do different fields and levels of EU regulation interact?
- What is the impact on the overall market for coal in the EU in the short and medium term?
- How do the EU regulations discriminate between different coals available in the market?
- What is the future for suppliers of high SO<sub>x</sub> or high NO<sub>x</sub> coals in Europe?
- Are there low-cost technical solutions available for power stations to meet the new standards?
- When is action needed to meet the new timelines?
- Are there new opportunities for coal suppliers to position themselves in the European market?
- How do these regulations impact the risk/reward balance for investing in coal or coal-fired power?

Energy Edge has a team of experts covering all aspects of international coal markets, power station operation and European environmental regulation to analyse these questions and advise on strategic solutions for companies in the sector. Please contact Nigel Yaxley ([nigel.yaxley@energy-edge.net](mailto:nigel.yaxley@energy-edge.net)) for a preliminary chat or to set up a workshop discussion.