

With nearly 80% of its electricity generated by nuclear power, France has little need for coal, at least as far its own national energy needs are concerned. But that hasn't stopped plans for new coal-fired power plants.

A small revival in France

| by Yves de Saint Jacob

There is no longer any coal produced in France: the last mine in the Lorraine region closed in April 2004, and the national coal board Charbonnages de France, set up after the Second World War, was formally dissolved on January 1, 2008.

But France still imports coal – from Australia, South Africa and, increasingly, from Russia – for its existing coal-powered plants, which constitute about half of the country's 30 fossil-fired power units still active. In addition, French companies working abroad help construct coal-fired plants and conduct technological research into 'clean coal' and gasification, enabling them to increase their 'expertise' export potential, particularly in emerging nations like China and India.

EDF, the national electricity giant, has no plans to develop new coal stations in the short term. Between now and 2012, its fossil-fired power capacity is set to increase from 10,000 MW to 14,000 MW solely through the construction of new gas- or oil-fired power stations. EDF intends only to modernise its most powerful coal-fired stations.

Still, EDF has no intention of abandoning coal. According to a prudently worded official statement, EDF 'has ambitions to develop the latest generation coal-fired power stations in France,' although there's no mention of a time frame. To that end, it is conducting research into 'clean coal'; in particular, it is trying to increase the

efficiency of its power plants. The company is also involved in the construction of coal-fired power stations outside of France, especially in Asia.

The capture and storage of CO₂ is seen as the ideal solution, but at EDF, they believe it will take another 20 years or so to arrive at a stable and economically realistic technology, and it could take even longer to get the public on board. They also believe it is essential that a clear and precise legal framework is set out for carbon capture and storage in a way that avoids distorting competition at the global level.

It is independent investors we have to thank for the rare projects involving new coal-fired thermal power stations. Two are planned for the port of Le Havre, where practically all of France's coal imports land. The new private electricity company Poweo, as well as the established SNET (heirs to Charbonnages de France, who were taken over first by Spain's Endesa and then by Eon of Germany), plan to install two 800 MW units by 2012 at the mouth of the Seine estuary. Ecologists in the region are up in arms, as hostile to the return of coal-fired electricity as they are to the construction in the same port area of a large methane terminal.

Less credibly, private investors are trying to reopen mines and place power stations above them, a move still blocked by the French cabinet. This is the case at Bertholène

in the southwestern Aveyron region, where a British mining company, ATH Resources, is investigating how to revive a closed-down pit. Another project is under consideration at Lucenay in the heart of the Morvan region of Burgundy. It would involve an open-cast mine to exploit a recently discovered rich seam and feature a thermal power station of some 1,000 MW. Although the project does have some supporters who say it will create jobs, it is strongly opposed by local residents and looks to be dead in the water, especially since President Nicolas Sarkozy recently reiterated his faith in nuclear power on a visit to Le Creusot in the same region.

The emphasis EDF has placed on research is shared by other French energy companies. The Total group is concentrating its research on capture and storage in an important pilot project at Lacq in the southwest. It has also started a pilot project for making plastics from methanol, which could be a derivative of coal rather than being extracted from the naphtha in oil. The project has opened near the giant Total Petrochemicals factory at Feluy, Belgium, and it is no secret at Total that the longterm strategy is to set up such industrial units close to the energy source, as was done with gas reservoirs in Qatar and with China's and India's gigantic coal deposits. Expertise in the treatment of coal and its gasification will be, at the very end of the line, the key to unlocking the door to the massive Chinese and Indian markets. ■