

Interview Jean-Marc Leroy

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Gas needs clear and supportive policies: GIE

- Coal to gas switching could cut up to 20% emissions across Europe
- 56% of gas injected into the French grid could be 'green' by 2050
- 65 million CNG vehicles expected worldwide by 2020

Natural gas is the cleanest fossil fuel and has potential for innovative uses, but whether the commodity establishes itself as the key energy resource of tomorrow in Europe will depend on development of clear and supportive energy policies, Jean-Marc Leroy, president of the Brussels-based Gas Infrastructure Europe (GIE), said in an interview with Platts.

Gas is not only the cleanest fossil fuel but it is also a high-scale resource allowing full integration with the growing renewable energy system, according to Leroy, whose association represents the interests of gas transmission system operators, storage system operators and LNG terminal operators.

The utilization of existing gas power plants to displace coal-fired power could reduce the electric power sector's carbon emissions by 60% globally, he said.

"For Europe, the switch from coal to gas would cut 20% of the carbon emissions. Gas is an extremely powerful instrument to fight for the climate."

Coal to gas fuel switching in Europe?

The last IEA Medium Term Gas Report published in June 2015 said that European natural gas demand fell by approximately 109 Bcm (18%) between 2010 and 2014 to about 475 Bcm, with one of the main reasons being cheap coal taking market share from gas-fired power plants.

"The real issue is the current low carbon price. Today we have no price signal which would allow Europe to reach the targets set by each European state," Leroy said.

Platts emissions price data shows the EUA closing price for December 2016 below Eur5/mt Monday.

"So if the price signal is not sufficient, Europe or member states should intervene with some regulations."

There are two levers available to encourage the switch to take place, he said: a clearer vision from member states on the future of national energy mixes; and some norms on carbon emissions.

Some examples of national interventions have already shown positive results, he said, pointing to the UK, and the coal-fired power plants set to be taken offline by 2025 as a result of the doubling of the UK's top-up carbon tax.

"Germany also has taken some interesting initiatives last summer before the COP21, when they withdrew from the market 2.7 GW of lignite production. This represents a 12 million mt annual reduction [in carbon emissions]," he said. "Germany has also decided to subsidize an additional Eur500 million for the coal to gas plants conversion. This is a considerable effort."

Germany has a target to cut 40% of its emissions by 2020, compared with 1990 levels. They are still half way, said Leroy, pointing to the ambitious target.

Gas demand outlook

In its latest global energy outlook in February, BP forecast long-term global gas demand by 2035 will be 2.8% lower than the 2015 forecast, now rising to 4.85 Tcm/year, due to lower-than-expected demand in Europe.

But Leroy said: “The right indicator is not necessarily demand volume, since everybody works on energy consumption reduction. We have to consider market share instead.”

Natural gas can ensure security of supply when backing up volatile renewables production, with an important advantage in ramp-up rates.

“It takes one and a half hours to switch on a gas-fired plant to its full power, while you need three hours for coal power plants.”

When asked about the persistence of cheaper and abundant coal, he said: “What is the choice? To look at prices or to cut off clients’ electricity?”

“If we want a high proportion of renewables in the energy mix, then gas is an efficient back-up,” he said.

Europe’s future gas strategy is to provide diversified gas supplies and stronger infrastructure connectivity: “Investment cycles last longer (30-50 years) than price cycles. A given investment can start in a low price environment but end in different conditions,” said Leroy, adding that, to allow flexibility, supply should always be slightly higher than demand.

“We are lucky in Europe that most of the infrastructures are already built, to allow this flexibility.”

New uses of gas

Looking ahead to the longer term, Leroy believes that new sources of gas demand will emerge.

Bio-methane, which is gas created from anaerobic digestion of organic waste, is one of these.

“Today Europe produces 140-150 TWh of bio-methane and has a potential to produce 1,000 TWh. Even 50% [of 1,000 TWh] would be good,” said Leroy.

There is about 5 TWh of bio-methane produced and consumed in France today, representing 3% of the market, he said.

“This is not yet significant but, according to the French environmental development and management’s [ADEME] 2014 scenario, in 2050, 56% of the gas injected into the French network will come from green gases.”

“And in some other countries such as Finland, bio-methane represents a significant part of the energy mix already,” he said.

Another emerging gas market with potential is mobility, notably the development of natural gas vehicles (NGV), which use compressed natural gas (CNG) for lighter vehicles, or LNG for longer distances.



“The advantage is that they cut 97% of carbon monoxide, 25% of CO₂ and 60% of NO_x compared with traditional cars,” he said.

There are 20 million of CNG vehicles in the world including roughly 3 million in China, 3.5 million in Iran, 2.7 million in Pakistan, 2.5 million in Argentina, 2 million in India and 2 million in Brazil, said Leroy.

It is expected that 65 million CNG vehicles will be circulating in the world in 2020, representing growth of 18% from 2006.

“In Europe, the development is still slow. The first CNG vehicles were launched in Italy in 1930 and there are around 1.3 million vehicles in Europe, 900,000 are in Italy,” said Leroy.

But an European directive dated of November 2014 requests each European state to implement refueling points every 150 km for CNG and every 400 km for LNG by 2025, for a better EU-wide mobility, he pointed out.

“It shows a will to develop CNG light duty cars and heavy-duty LNG vehicles.”

“This, combined with biogas, means that we will be able to see vehicles fuelled by local gas, which will be great for the European economic balance,” he said, pointing again to the need of clear and supportive European and national policies for this to happen. — Lucie Roux