

# As Climate Talks Resume, Time is Running Out to Bring Low-carbon Equality to Energy Markets

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**As** 2015 draws to a close, climate change is again in the spotlight as a result of the 21<sup>st</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change in Paris.

The conference was seen as a crucial step towards a new international agreement on climate change to keep global warming below 2 °C. Whatever the outcome, policymakers worldwide still need to tackle the energy markets imbalance that threatens the provision of low-carbon electricity supplies.

This is an issue that has been brought into sharp focus as a result of recent events in the US. In October, the *Entergy Corporation* announced the third early closure of a US nuclear power plant in less than one year. The decision to close *FitzPatrick* in New York state, in late 2016 or early 2017, was blamed on a “flawed” electricity market design “that fails to recognise or adequately compensate nuclear generators for their benefits”.

Entergy said that in planning the closure of *FitzPatrick*, it had taken into account “significantly reduced plant revenues due to low natural gas prices, a poor market design that fails to properly compensate nuclear generators like *FitzPatrick* for their benefits, as well as high operational costs.”

Just a month before, *Entergy* announced that it would close the *Pilgrim-1* nuclear plant in Massachusetts by 1 June 2019, for similar reasons. This followed *Entergy’s* closure of the *Vermont Yankee* nuclear plant in Vermont in December 2014 for the same reason again.

According to the *US Nuclear Energy Institute (NEI)*, while older smaller nuclear plants in the country are particularly at risk, bigger nuclear facilities may also be at risk in some markets. The *NEI* said the situation dates back to the late 1990s, when about half of the states restructured their electricity markets to create competitive markets in which electricity generation, transmission and distribution are separate enterprises.

The need to correct the situation is not a case of the nuclear energy industry seeking special treatment. Even the bipartisan nonprofit *Center for Strategic & International Studies (CSIS)* in the US has spoken out on the issue of imbalances in the energy market.

The *CSIS* said: “Very low prices for natural gas have fundamentally transformed the energy economy, with many positive benefits, but in so doing also contributed to a reduction in the competitiveness of commercial nuclear power.” In addition, the *CSIS* said “state and federal mandates and direct and indirect subsidies for renewable energy, particularly wind, create market distortions in the electricity sector that contribute to undermining the economic viability of nuclear power”.

As the *European Union* prepares for the introduction of a new electricity market design, with *European Commission* legislative proposals expected in 2016, policymakers would do well to heed the unfortunate lessons from the US.

A recent *European Commission* report on investment perspectives noted that an annual investment in generation capacity of some € 50 billion is needed between now and 2030.

*Foratom*, the European nuclear industry trade association, has called for market-distorting subsidies to be “progressively removed, so that the market price reflects the actual cost of generation, including system costs and back-up”.

*Foratom* has rightly stressed the importance of a “technology-neutral” approach – allowing all low carbon generating sources to compete equally. Over the past decade, however, public subsidies have driven the large increase in power generation from renewables, *Foratom* said. The impact on the EU’s nuclear fleet is the threat of early shutdowns and the postponement of new build projects, *Foratom* said.

Independent analysis by consultancy firm *Capgemini* showed recently that the EU’s climate and energy package to date “has focused EU energy policy on sustainability and a low-carbon economy, neglecting two other equally important objectives: security of supply and competitiveness of European companies”.

Direct support for renewables, through subsidies, tax measures, or guaranteed prices, has been very heavily used in Europe “due to their ease of implementation and apparently simple nature”, *Capgemini* said. However, “these tools present some big disadvantages... in the long term they can trigger unacceptable energy drift, they protect inefficient technologies and therefore do not always promote technical progress, and they cause major distortions in the markets by removing any meaning from the signals given by prices”.

In Europe, “the market is oversupplied but not by the right types of energy generation”, *Capgemini* warned. “There is too much volatile generation capacity (solar and wind) and not enough schedulable generation (nuclear and gas-fired plants).”

Europe’s energy balance is already a precarious one. As *Capgemini’s* report also noted, the cost to Germany of its politically-inspired ‘energy transition’ (*Energiewende*), which involves phasing out the use of nuclear and increasing renewables, “is estimated at more than € 1,550 bn until 2030”.

The prospects for northern Europe may not have been helped by the recent announcement that two of the four reactors at Sweden’s four-unit *Ringhals* nuclear plant are to be closed earlier than originally planned. *Vattenfall’s* head of business area generation, *Torbjörn Wahlborg*, said it was “regrettable to close down well-functioning production units but sometimes this is inevitable”. *Wahlborg* said: “Unfortunately, we see market conditions with continued low electricity prices in the coming years. At the same time, we are facing increasing production costs.”

If halting the ravages of climate change is really so important to our planet, as most right-thinking individuals believe that it is, does it make sense to tangle ourselves up in market distorting policies, however well meaning, that are clearly discouraging the operation of and investment in low-carbon, 24/7 baseload power generation?

As we prepare to enter a new year, there is an opportunity for a fresh start and fresh thinking by policymakers and political leaders to tackle this issue.

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