

# Torn in the USA

The US presidential elections represent an important cornerstone for both US and global energy policies. The continuation of current policies aimed at the low carbon energy transition should not be taken for granted.

Social and technological innovations have increasingly become a central component of wellbeing for modern societies. Innovation is also an important characteristic of the energy sector and has the potential to transform the energy landscape. Future energy markets will be increasingly decentralized, with a key role being played by individual customers and end users as opposed to aggregate demand.

As always, the forces driving radical changes do not happen in a vacuum and they will need to overcome existing powerful economic interests, institutions and political powers that are likely to oppose the transition. Moving energy systems to the next phase therefore requires strong political will, able to overcome resistance and govern the complexities that will emerge with greater systems integration.

Despite its particular national and local dimensions, US energy policy is deeply relevant to the world economy. It has huge potential to move global markets and reshape international politics. As such, the electoral campaigns for the forthcoming presidential elections in the US, the largest energy-consuming country in the world, reveal the different energy policy visions that the candidates aim to pursue. Factors such as climate change, unstable oil prices and the shale gas revolution — a popular and divisive topic in many states in the US (article no. 16163) — raise questions about how US energy policies might affect current patterns of development and energy policies at different geographical scales: global, national and regional.

At first glance, the energy agendas of Hillary Clinton and Donald Trump appear irreconcilable, being designed for different target stakeholders and voters. However, neither candidate seems prepared to engage with a radically innovative approach, not least because of the limited electoral payoff. Accordingly, the elected candidate will need to cope with the growing pressure for low-carbon energy systems while trying to accomplish their electoral pledges.

The energy transition is often associated with environmental sustainability, equity and efficiency. But it can also cause job losses, outsourcing, reduction of privacy and security threats, and give room to exploitation and

abuse of market power. While the overall balance aims to be globally positive, those adversely affected by the transition process, normally belonging to the most vulnerable parts of our societies, might find support from populist movements and oppose it. On the other hand, those familiar with new technologies and better acquainted with a more interconnected society are likely to support more innovative practices. These opposing attitudes are somewhat reflected in the presidential campaigns: Trump has explicitly supported the development of US fossil fuel resources while promising to cancel the Paris Agreement, while Clinton has proposed to increase public spending on clean energy research and development and pledged to strengthen US support for the Paris Agreement.

The Democratic administration has built its energy policy around clean, affordable and reliable energy. Clinton is expected to operate in continuity with President Obama, supporting the Paris Agreement and promoting energy efficiency to cut oil consumption by one third. However, according to Joseph Aldy (article no. 16162), Clinton's energy policy will inevitably continue to concentrate on what is feasible through executive actions, therefore limiting the possibility that radical reforms, such as a generalized carbon tax, might effectively be proposed and approved by a divided Congress.

Similarly, Trump's campaign reflects the Republican mainstream positions on energy policy, being centred on energy independence and deregulation. In his Comment, Michael Giberson (article no. 16156) suggests that a forthcoming Trump administration would likely use energy independence goals to make trade in energy interests subordinate to foreign policy and employment concerns. Trump offers a pro-resource development vision, but his egocentric approach to policy would inject significant uncertainty into the system, with the unintended but predictable consequence of a riskier, costlier, and less innovative business environment.

These diverging approaches will have to deal with progressive instability in the oil market which is now under strong pressure to revise its long-term strategy. Amy Myers Jaffe

(article no. 16158) describes in her Perspective how the strong uncertainties generated by technology innovation have created enough pressure to change oil price policies. Oil-producing countries are now increasingly concerned with potentially declining oil prices and the risk that existing oil assets become stranded. As a result, low-cost reserves are now being fully exploited, offering oil supply at a cheap price that remains cost-competitive compared to cheapening renewable resources.

The traditional development of international energy markets, mostly concerned with the production and export of oil, has seen the US playing a fundamental role in policing global energy supply routes and supporting — via diplomatic and market strategies — its strategic allies, especially in European countries. Although a radical shift in global energy policy is difficult to envisage in the near future, according to David Koranyi (article no. 16160) an inward-looking US might emerge further along the curve, leading to a new world order with a less prominent engagement of the US in international energy policies. This attitude could slowly erode those international institutions that are fundamental to securing energy supply in Europe, and thereby force European countries to develop a more autonomous external energy strategy.

Whatever the result of the election, strong leadership will be necessary to implement the winning candidate's proposals. Traditional command and control type policies call for an interventionist approach and require that policymakers have enough power to direct energy markets. At the same time, decentralized energy systems and innovative policies cannot be passively adopted: they require adequate national and international regulation to promote their positive effects while limiting any adverse impacts. This month's issue provides an illustration of the main elements that will characterize US energy policies in the next four years but that will also define the energy sector for many years to come. However, many questions remain open. Will international institutions able to govern the growing interconnections between domestic energy markets emerge? Which direction will the energy transition take? Will the US be able to lead the low-carbon transition? We will find out soon. □