High-level Roundtable: 17 September 2013, Brussels

Delivering EU energy and climate targets -
The role of infrastructure within the EU 2030 framework

Chair’s Summary

Background

Public debate on the emerging 2030 climate and energy policy framework has so far focused on new targets for greenhouse gas emissions reduction, renewables and energy efficiency. The success of the new framework, however, will depend on a wider structural package of measures to ensure alignment between decarbonisation and competitiveness goals.

Delivering network infrastructure in line with the 2030 objectives will be a key condition for accommodating increasing proportions of renewables and achieving cost savings through deeper power market integration. While ‘more and smarter infrastructure’ has been identified as a ‘no regrets option’ by the European Commission, Parliament and Council, the role for infrastructure policy within the new 2030 framework has not yet been clarified.

The roundtable evaluated the role that infrastructure policy can play within the 2030 framework in order to identify the measures needed for the package to succeed. The roundtable aimed to answer three key questions:

1. What infrastructure measures and targets are needed in the 2030 package in order to secure the development of a ‘core European network’?

2. What role can regional approaches play as pathfinders for stronger market integration and cost-effective decarbonisation? What can be learned from the North Seas Grid and other regional initiatives?

3. What role can the 2030 framework play in increasing forward visibility of future European infrastructure need in order to drive cost-effective and efficient investment?

The roundtable meeting was held under the Chatham House rule and was attended by senior officials and decision makers from the European Parliament, UK Department of Energy and Climate Change (DECC), Alstom, European Climate Foundation, Mainstream Renewable Power, Climate Parliament, E3G, North Seas Countries Offshore Grid Initiative
(NSCOGI) secretariat, Statnett, EREC, National Grid, DG ENER, DG Clima, ENTSO-E, Dong Energy, Europacable, and EWEA.

Summary

Introduction and setting the political context:

The political landscape on the onset of the 2030 EU climate and energy package looks fundamentally different than 2007-2008 when there was strong political momentum behind the ambitious EU 2020 climate and energy package. At that time, strong support from the public and the Governments made it possible to agree on an ambitious 2020 EU climate and energy package. A discussant observed that currently there is no clear political leadership among Member States on energy and environmental issues. It was argued that Europe lacks a vision of both a sound environmental and European project. Therefore, 2030 is a pivotal moment to create a European vision that encompasses large scale renewables deployment and market integration. This could have both the aspects of a European ‘grand project’ as well as more regional emphasis.

Europe needs a fundamental reconsideration of the ‘target model’ for electricity markets to accommodate the new reality of large-scale deployment of renewables. This will also define a new role of Europe in the world. It was argued that, therefore, if Europe will decarbonise its power system and maintain its competitiveness, integrating electricity markets and developing smarter infrastructure had to become a core component of the 2030 framework. This would enable great savings and other electricity system benefits.

Furthermore, it was argued that, politically there should be no red lines on this issue in the European capitals. French and German governments could be supportive as electrification and further market integration are key pillars of a new European initiative. UK could be open to further regional trading opportunities. Building political momentum around key regional initiatives, such as the North Seas Countries Offshore Grid Initiative (NSCOGI), could bring in other European countries in other regions that would benefit from lessons learned. However, the next six months will be critical for shaping the deal, and also for giving a clear signal for much needed near term investment.

Panel 1: Infrastructure policy in the 2030 framework:

In this session, the participants discussed the role of new infrastructure investment to deliver 2030 objectives, and how generation and infrastructure policies could be better aligned, and, finally, the role of specific infrastructure targets and measures as part of a 2030 package. Key themes discussed are summarised below.
Regional approaches and longer term European market integration:

GHG emissions reduction, near and long-term security of supply, and competitiveness are the essential pillars of a 2030 framework. Under all future energy scenarios, more renewables and more volatility are expected. Therefore, it was argued that a stronger emphasis should be placed on the transmission grids. This will require significant investment of around €200bn by 2020, one third of which on electricity and two third on gas. The Connecting Europe Facility contribution will be significant for bringing forward projects that might not otherwise be built. Ten-Year Network Development Plans and Projects of Common Interest (PCIs) are important steps to enable grid development and investment that Europe needs in the long-term. A flexible approach whereby the process is reviewed every two years would allow established criteria to evolve with policy changes.

Regional approaches for delivering market integration and encouraging large-scale renewables deployment are attracting significant interest. It is seen as a pragmatic way of dealing with complex cross-border issues and working towards a single market in the longer run. Others argued that governance and financing remain difficult to resolve, and current policy is insufficient to deliver it, but overall, it would benefit European competitiveness. There is potential for NSCOGI to become the champion of a regional approach that can be replicated elsewhere. In the meantime, maintaining an overall pan-European vision will be essential to keep the option of further integration in the future both within the EU and broader European neighbourhood.

It was noted that significant technological advancements enable system operators to cope with flexible and intermittent generation capacity. On the other hand, technology risks remain in moving towards a meshed network as some of the technologies involved are not commercially proven.

Bottom-up vs. top-down approaches:

Some discussants observed that the gap between high level political narrative and bottom up detailed technical work on infrastructure is growing and strengthens the sense of uncertainty. Longer term uncertainty means that there is little construction/new built underway. One discussant argued that to break this uncertainty, moving into the implementing and delivery phase with clear rules is necessary. Public acceptance remains a critical issue and overcoming this challenge requires strong political leadership. Finally, there are many questions around the underpinning assumptions of current transmission scenarios. There are significant uncertainties in regards to future electricity demand, conventional generation capacity and market arrangements. Technical transmission planning needs a paradigm change, and system operators need greater visibility on the overall direction.

A discussant emphasised the role governments need to play and pointed out the infrastructure is a great economic stimulus and essential for competitiveness. A ‘guided’ market approach from governments is needed to drive the necessary private investment and also spur the next stage of technology development and innovation.
On the innovation point, one participant observed that the European industry has the leadership role and capabilities, yet needs ‘the security of long term perspective’ from the Governments. It was noted that China and US technology companies are catching up fast and China is planning to peak coal before 2020 and extreme weather events are changing the US perception on climate risk. Therefore, it would be a mistake to underestimate these emerging players and rely on current European leadership.

**Specific infrastructure targets and measures in 2030 package:**

The participants discussed whether the 2030 package provides an opportunity to ensure alignment between Europe’s climate policies and its approach to infrastructure. A discussant suggested that this could take the form of targets for a strategic European network within the 2030 package. This would set quantified target capacities for key corridors, and would replace the current ‘Barcelona’ target that sets a standard 10% target for interconnection transfer capacity across countries. A targeted financial mechanism and institutional capacity at regional level could support delivery.

Alternative means of setting out infrastructure priorities in the 2030 context, such as targeting Ten-Year Network Plan delivery or Projects of Common Interest, were also discussed.

Some suggested that PCIs on their own were not sufficient, and market changes, and hence political leadership, were necessary. Furthermore, political leaders need a strong vision to prioritise scenarios and outcomes – a solely bottom up approach would not provide that vision. If we take a bottom-up approach alone, it was argued that the infrastructure that will get built would be sub-optimal and too late.

**Panel 2: The North Seas Region as a case study and the 2030 framework:**

In the second session, the participants focused on the lessons learned from North Seas Countries Offshore Grid Initiative and other relevant regional approaches, and discussed the need of forward visibility on policy goals to enable infrastructure decisions.

There is a significant number of early stage interconnection and offshore wind projects in the project pipeline in the North Seas region. However, significant level of policy and regulatory uncertainty means that many of these projects may not be realised. Therefore, it was argued that a strong signal from the 2030 package could provide forward visibility for these projects.

On the role of NSCOGI, one discussant argued that a more holistic role, beyond facilitation, was needed, including identification of the value of security of supply, developing regional market arrangement, and model demand and storage. This could set an example across the EU on how to drive large-scale renewables deployment and market integration. However, one participant noted that NSCOGI needs stronger political momentum and regulatory
cooperation between national governments. A set of political decisions will be needed to establish a strategy, key priorities and delivery tools.

One discussant noted that infrastructure projects, in particular combined offshore wind and interconnector projects, have great potential but they are not getting built mainly due to regulatory risks and revenue uncertainty. Also, the business case for infrastructure projects vary due to different ‘philosophies’ in different countries, one focused on maximising socio-economic benefits as in Denmark and the other focused on maximising the commercial case for investment as in the UK. Another participant noted that despite a small contribution to the overall bills, transmission was heavily regulated. Permitting process remains a challenge. In the North Seas region, historically infrastructure was built under optimum levels due to risk-averse nature of regulators. On the other hand, once built, interconnections have historically never been stranded unless it is intentional, and generally exceed revenue expectations. Therefore, there is a bigger risk of under-investment in infrastructure in the region rather than stranded assets. It was argued that clear public policy objectives are needed to provide cover for more strategic investment. In that regard, one discussant noted that the traditional cost-benefit analysis (CBA) is an intrinsically blunt tool for strategic investment. Many decisions around CBAs are inherently political decisions that require judgement about risk and future generations, and regulators can’t create this knowledge automatically.