NORTH SEA COMMISSION

Integrated approach to sustainable development of the North Sea Region
THE ENERGY ISSUE DOES NOT STOP AT THE BORDER

It is very clear to the Province of Groningen that the energy issue does not stop at the border. This has been proved once again by developments over the past year, whether they concerned natural gas, energy-intensive industry or the unrest at EU borders.

Along with German partners we increasingly work together on the energy system of the future. This is not only important for our energy security. It also creates jobs, for both skilled workers and high-tech specialists.

The Northern Netherlands and Lower Saxony are both energy regions of national and international importance. They have a history in natural gas and have a national headstart when it comes to sustainable energy.

CLLR JIMMY GRAY

Bis volere sapet
Scientists worldwide agree that climate change is real and that human activities play an important role in this regard. The awareness and sense of urgency among policy makers is increasing; especially European leaders are eager to make it a strategic priority for the European Union.

**Third Country Imports**
Not only because of the potential societal costs that climate change might cause, but also to overcome the increasing dependency of energy imports. Currently Europe is far more than 50% dependent on third country imports with respect to natural gas and far about 80% regarding crude oil. The fact that the energy imports originate from a select number of states makes it an even more pressing and dangerous issue. Especially with the recent geopolitical developments in Eastern Europe.

**Security of Supply**
To address the challenges of climate change and increasing dependency on energy imports, the European Union has committed itself to a number of ambitious targets. These targets are directly related to the three pillars of European energy policy: security of supply, sustainability, and competitiveness.

Although the pillar of security of supply has been the key part of Europe’s energy policy it is emphasized even more due to geopolitical developments. The increasing problem of dependency for energy imports is therefore a major issue and thus the focus on the security of supply is even greater.

**Energy Roadmap 2050**
The 2030 framework builds on the 2020 framework and strategy. It also takes into account the longer term perspective set out by the Commission in 2011 in the Roadmap for moving to a competitive low carbon economy in 2050, the ‘Energy Roadmap 2050’ and The Transport White Paper. The Roadmap envisions a scenario in which a reduction of greenhouse gas emissions by 80-95% is reached in 2050.

**About 20-20-20**
In 2009 through the climate and energy package, the European Union committed itself to ambitious climate change and sustainable energy targets for 2020. To realize such a scenario several strategies and policy documents have been drafted. The first climate and energy package was set in 2007 and adopted in 2009 with three targets to be met in 2020:
- 20% share in renewable energy sources,
- 20% reduction in EU greenhouse gas emissions compared to 1990 levels
- 20% improvement in the EU’s energy efficiency.

This is for the EU as a whole, each Member State has committed itself to their own targets.

The EU 2020 strategy can be viewed as the political guide or operational document for achieving the above mentioned targets. The 2020 energy strategy relates to five priorities concerning
1. interconnecting networks and infrastructures,
2. involving civilians and giving them a stronger voice,
3. speaking as one Europe in relation to third countries,
4. enhancing/improving energy efficiency
5. realizing the target of 20% renewable energy sources.

**About 2030:**
To make the EU’s economy more competitive, secure and sustainable
On the 23rd of October 2014, the European Commission proposed a policy framework to drive continued progress towards a low carbon economy:
- 40% reduction in greenhouse gas emissions compared to 1990 levels
- 27% share of renewable energy sources in the energy mix
- 27% improvement in energy efficiency

The 2030 policy framework aims to build a competitive and secure energy system that
- ensures affordable energy for all consumers
- increases the security of EU energy supplies
- reduces the dependence on energy imports and
- creates new opportunities for growth and jobs.

**The European Context**
Scientists worldwide agree that climate change is real and that human activities play an important role in this regard. The awareness and sense of urgency among policy makers is increasing; especially European leaders are eager to make it a strategic priority for the European Union.
**ABOUT THE ENERGY UNION**

Europe’s energy policy will be even more focused on the security of supply pillar than before due to the geopolitical developments in Ukraine. The current objectives set out by the new energy Commissioner Juncker consist of:

- Creating a European Energy Union – by pooling resources, connecting networks and unifying our power when negotiating with non-EU countries.
- Diversifying our energy sources – so Europe can quickly switch to other supply channels if the financial or political cost of importing from the East becomes too high.
- Helping the EU countries become less dependent on energy imports.
- Making the EU the world number one in renewable energy and leading the fight against global warming.

**ABOUT THE NORTH SEA**

The energy developments and challenges are a pressing issue all over the world but nowhere the challenges and developments are as prominent as in the North Western part of Europe, especially the countries surrounding the North Sea. Here, when also including Norway, most of Europe’s energy demand is produced.

During the next few decades, some 400 oil and gas platforms will have to be dismantled because exploration and production of fossils is ending. In addition, during the same period, renewable offshore wind capacity, of the order of 50-100GW is being done. These developments are, for now, not coordinated in an integrated manner. That is where organisations like the North Sea Commission can play a key role.

**HOTSPOT FOR ENERGY TRANSITION**

The North Sea, and its surrounding countries are a hotspot for the energy transition. Energy activities are shifting towards the coastal areas, oil and gas platforms in the North Sea need to be dismantled, major investments in offshore wind energy parks and the needed infrastructure are being done. These developments are, for now, not coordinated in an integrated manner. That is where organisations like the North Sea Commission can play a key role.

**ABOUT THE NORTH SEA COMMISSION**

The North Sea Commission is a cooperation platform for regions around the North Sea. Geographically it concerns the North Sea regions of Denmark, Sweden, Germany, the Netherlands, Belgium, UK, France and Norway. The North Sea Commission was founded in 1989 to facilitate and enhance partnerships between regions which manage the challenges and opportunities presented by the North Sea. The North Sea region has the potential to act as an engine for growth in Europe and as a centre of excellence for wider EU issues. Through dialogue and formal partnerships we seek to promote common interests. Especially in relation to European Union institutions, national governments and other organizations dealing with issues that are relevant to the North Sea.

**MAIN OBJECTIVES**

The main objectives of the North Sea Commission are:

- To promote and create awareness of the North Sea region as a major economic entity within Europe.
- To be a platform for developing and obtaining funding for joint development initiatives.
- To lobby for a better North Sea region.

**MAIN THEMES**

Cooperation focuses on 5 main themes:

1. Marine resources
2. Transport
3. Energy and climate change
4. Economic development
5. Culture and tourism

**NORTHSEA REGION 2020**

The North Sea Region 2020 strategy paper regards the North Sea region as a territorial cooperation area. Its strategic focus is on the major challenges and common characteristics where there is added value in transnational action and collaboration. The 5 strategic priorities address the challenges and opportunities facing the North Sea Region. They are at the same time closely linked to the EU2020 objectives and contribute to the implementation of several – if not all – of the EU2020 flagship initiatives.

**VISION**

The North Sea Region has the potential to act as an engine for growth in Europe and as a centre of excellence for wider EU issues through developing existing cooperation efforts, improving policy efficiency and value for public money.

**AIM**

The aim of the North Sea Region 2020 is to:

- Help the North Sea Region remain and improve its performance as a competitive, attractive and sustainable area of Europe.
- More efficiently address common transnational challenges and exploit opportunities related to sustainable economic growth, climate, energy, accessibility and management of the maritime space.
- Ensure a better governed region through cross-sectoral coordination and multi-level governance.
- Provide a potential pilot for different kind of macro-regional strategy than the EU strategies for the Baltic Sea and Danube areas.
SMES ARE THE MOTOR FOR ENERGY TRANSITION IN PIONEERING REGION

Northwestern Germany and the Northern Netherlands form an international region in the future development of the energy sector. In this sense, the region has a pioneering position. Small and mediumsized enterprises constitute the strongest economic motor in this region. The achievement of national and European climate targets in the short.
THE NORTH SEA GRID

Europe’s energy system is changing and none more so than that associated with the generation and transmission of electricity – the development of an integrated North Sea electricity grid is a natural and obvious regional response to this change. The European Union’s Internal Energy Market is an ambitious EU objective aimed at harmonising the energy market through regulatory instruments approved by the European Commission.

The change in the electricity system is characterised by:
- increased share of energy generated from renewables - resulting in a fluctuating supply;
- increased share of energy generated locally and from a mix of locally-based sources - resulting in a decentralized supply model;
- challenges in the ability of the current transmission system to balance supply with demand - resulting in a need for a grid to allow the transmission of energy from points of generation to points of consumption;
- the establishment of the Agency for the Co-operation of Energy Regulators (ACER) to monitor and deter market manipulation;
- a drive towards joint electricity trading;
- the priority given to an Interconnection Plan for Europe; and
- a desire to have transparency in prices.

The liberalisation of the electricity market and its increased integration in one internal market creates challenges for ensuring generation adequacy, reliability and affordability. How has this come about? - In 2009 the European Union adopted a climate and energy package that sought to deliver what has become known as the 2020 targets; namely:
- 20% reduction in EU greenhouse gas emissions from 1990 levels;
- 20% of EU energy generation to come from renewable resources; and
- 20% improvement in the EU’s energy efficiency.

The continued drive by the EU to realise a low carbon economy and greener society is evidenced by proposals in 2014 to reduce greenhouse gas emissions by 40% and increase to 27% the share of energy derived from renewable sources.

This policy, which has a greater environmental focus, has resulted in serious challenges in delivering sustainable, secure and affordable energy as a key element for future sustainable social and economic growth.

In theory the EU internal energy market is proposed to deliver a number of benefits such as increased integration of cross-border interconnections, the coupling of cross border exchanges, as well as price liberalisation - resulting in improved security of supply and the smoothing of price differentials across the continent and a consequential reduction in prices.

Energy is of particular relevance to the North Sea Commission as the North Sea region (UK, Scandinavia (ex Finland); Germany, France and the Benelux countries) represents 60% of Europe’s demand whilst the region provides 70-75% of Europe’s energy infrastructure. In addressing this challenge, the North Sea Commission urgently proposes a coordinated response involving the regions, nations and the E.U. within the framework of a regional strategy for the future development of the North Sea region.

Such an integrated approach, encompassing the whole energy system in North West Europe - multi source generation, transmission and storage will, the Commission believes, deliver cost savings and allow for a unified message to be presented to the European public as to the economic, societal and environmental benefits of the E.U.’s energy policy as opposed to a reliance on finite fossil fuel supplies which are increasingly sourced from outside the European Union.

At the heart of this proposal is a meshed North Sea Grid – as part of a pan European grid. A meshed grid, the Commission believes, is essential to balance energy generation from diffuse and fluctuating renewable sources with both domestic and commercial demand. A meshed model will minimise the overall length of grid and therefore the cost to consumers of facilitating the transmission of electricity around the region.

However much remains to be done. Research is required on the costs and technical challenges of such a grid, on the legal & regulatory challenges of international energy transmission and the challenges of energy storage. No single entity can on its own ensure adequacy, reliability and affordability of the electricity system across Europe.

Finally the public, who will ultimately fund such a project, needs to be convinced of its merits. The delivery of any message on energy is often very challenging as there are many individual, community and national perceptions and opinions to deal with. While the overall need to generate and transmit electricity as effectively and efficiently as possible is widely accepted, there is no European consensus on how on the best means of doing so.

If the 20:20:20 targets and the more ambitious targets envisaged for 2050 and beyond are to be met, time is of the essence. The North Sea Commission is of the opinion that a development strategy for the North Sea region presents an ideal platform to further both the debate on and delivery of an E.U.-wide integrated energy and climate change strategy, with a North Sea Energy grid at its heart.

The North Sea Commission therefore asks the European Commission and Parliament to ensure that this proposal is at the heart of the preparatory action on the North Sea Region.