# **ROUNDTABLE**FOR EUROPE'S ENERGY FUTURE

22-23 MARCH 2018 | BRUSSELS

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#### **ROUNDTABLE | Background**

The Roundtable for Europe's Energy Future meets twice a year to contribute to the development of an interconnected grid with empowered markets and consumers within the Energy Union. It consists of CEOs of leading European energy companies, transmission system operators (TSOs) and technology providers.

The Roundtable has been functioning since 2011 and is listed in the EU Transparency Register (101903316808-95). The current Chairman of the Roundtable is Boris Schucht, CEO at 50Hertz.

The Secretariat of the Roundtable is headed by Tor Eigil Hodne, Director of Statnett's EU Office.

Website: www.energy-roundtable.eu

#### **CONTACT**

Tor Eigil Hodne Statnett SF <u>tor.hodne@statnett.no</u>

Tel.: +47 9748 7884

### JOINT MESSAGES FROM THE ROUNDTABLE FOR EUROPE'S ENERGY FUTURE

The Roundtable for Europe's Energy Future (REEF) fully supports the realisation of the Internal Energy Market (IEM) and is committed to further decarbonising our societies in line with the Paris Agreement. Continued **integration will bring visible advantages for European citizens and the industry.** We call for political action in order to bring forward the Energy Union and we underline the **need for a cross-sectoral perspective and cooperation** to keep the energy transition on track.

The REEF also fully endorses the objective of improving the functioning of the market to allow for full integration of renewables and decentralised assets. This should be brought about by **removing barriers and distortions** as well as through **increased access to flexibility sources**. New market-interventions should be avoided.

Once completed, the Energy Union will lead to a low-carbon and competitive economy, which can spearhead renewable energy innovation and the fight against global warming. However, the work is by no means finished.

Cooperation across local, regional and national borders can facilitate the completion of the Internal Energy Market. In this regard, interconnecting countries across regions, including third countries, is critical. Interconnectors are vital for trans-European energy networks and need to be integrated into a well-developed European grid to strengthen regional cooperation. We agree with the Commission that there is a **clear momentum to accelerate the building of key energy networks** and that existing interconnectors should be used more efficiently. Therefore, we fully support the proposal in the Clean Energy Infrastructure Communication of November 2017.

The European citizens and industry would benefit from substantial savings through a better integration of the European Internal Energy Market and the Digital Single Market. New digital technologies affect the generation, transmission and consumption of electricity. Accordingly, the Roundtable stresses the need to accelerate the implementation of the Digital Single Market agenda and to create the **right framework for secure data access and transfer**. We actively support the transition to a fully digital and consumer-centric energy system.

#### **REGIONAL COOPERATION**

Cross-border cooperation and the integration of markets are cornerstones of the European Union in general and of the European electricity sector in particular. Only with cross-border cooperation will Europe be able to realise the transition to a future-proof and climate-friendly energy system in a cost-efficient manner. This is even more true for investment in large-scale renewables generation and infrastructure where national borders should not be an obstacle. Cooperation between governments, regulators, TSOs and other stakeholders on the regional level is an important intermediate step towards the EU Energy Union.

Within the Clean Energy Package, the framework for technical cooperation among TSOs via the Regional Security Coordinators (RSCs) will be developed further in the next years. However, **several topics require the involvement of Member States**, such as decisions on the levels of security of supply, the coordination of the energy mix and regional climate strategies, cross-border investments on infrastructure projects, the consequential costs to overcome congestions, as well as redispatch volumes and transmission tariffs. These decisions have a political and regulatory dimension as they impact national electricity prices, investment decisions and welfare distribution.

Hence, stronger alignment and cooperation among Member States and national regulators is needed. Furthermore, it must be recognised that several factors differ between regions, such as the generation mix and plans for its optimisation, consumption patterns and the grid topology. In this regard, regional solutions will allow more flexibility in the Internal Energy Market.

The optimisation of cross-zonal capacity in the market can not only increase social welfare in Europe, but also facilitate further EU internal market integration. Under the Capacity Allocation and Congestion Management (CACM) Guideline, the calculation of cross-border trade capacities is dealt with at a regional level. Member States and national regulators need to be actively involved to determine how, in the future, capacity calculation can be dealt with in the most efficient way. Any solution to this issue must guarantee that it does not undermine social welfare or endanger system security and that it is fully financed.

Therefore, last summer, the Roundtable proposed the concept of "Regional Energy Forums" where Member States, regulators, market participants, European institutions, other stakeholders and TSOs meet to agree on joint solutions to regional challenges. **Member States are invited to use these Forums to bring forward cross-border cooperation on political and regulatory matters**. The Forums should ensure a high degree of transparency of their work by publishing their achievements annually.

The Council and the European Parliament have already included starting points for these "Regional Energy Forums" in their respective positions on the Clean Energy Package. The Roundtable would gladly support the further development of this idea.

- 1) Is regionalisation the way forward for the Energy Union?
- 2) Can the Roundtable members provide further support for the development of Regional Energy Forums?

#### DIGITISATION OF THE ENERGY SECTOR

Digitisation has already made a major contribution to the development of the Energy Union, e.g. via cross-border market platforms where all exchange orders are digitised or via interconnections with an automated calculation of transit flows. Consequently, it creates ample opportunities to operate the power grids even more efficiently. Digital technologies also allow for a secure and more efficient integration of renewables into the electricity system since they provide a better view of all the flexibility options. Likewise, they allow for solutions that can be easily reconfigured in a rapidly changing environment. As such, digitisation is an extremely powerful tool to help make the energy transition a success. However, digitisation also creates challenges for all actors of the electricity system, particularly in terms of data access and management. For these reasons, the members of the Roundtable warmly welcome the Tallinn e-Energy Declaration and its follow-up meeting scheduled in Paris on 19<sup>th</sup> June 2018 and suggest that actions at European level should focus on the following major points:

A digital grid architecture is needed. Digitisation enables predictive maintenance, optimised grid exploitation and transit capacities. It will also help communicate with all sectors of the economy in much more advanced ways than in the past which could provide flexibility to the system (e.g. through load reduction or power provision from batteries). However, this requires a digital grid architecture that enables communication and coordination between system operators and all relevant sectors.

System operators need real-time flexibility data to balance the system. Considering the increasing share of dispersed and volatile renewable energy sources and the higher number of actors interacting with the energy system, extended, real time and easy access to all flexibility data for system operators and consumers is necessary to ensure the system's overall balance between supply and demand at all times.

The Roundtable welcomes the principle of "free movement of data within the EU" promoted by the European Commission and its focus on facilitating its cross-border dimension. It will maximise the value creation for all actors and allows to reap the huge benefits of digitisation.

Data exchange through open data platforms: discussions should include all market players – TSOs, DSOs, consumers and all other stakeholders – to organise data exchange in a way that maximises value creation for all while minimising governance costs. In this regard, the Roundtable supports the leverage of market-driven, open data platforms in the power sector, which will facilitate data exchanges (free, open and interoperable data). This will maximise the offering of innovative digital products and services and create value for all actors involved as well as for society at large.

Platforms will also allow service providers to reach consumers more easily and cost-effectively while at the same time **empowering consumers** to make informed decisions about their energy management. For such platforms to thrive, energy customers must feel **safe in the cloud**, no matter who provides it. Customers need to be confident that when providing access to their data to third parties, they themselves remain in control and their data is safe. In this regard, campaigns could be considered to raise awareness among customers. **Data security in the cloud does not depend on where the data is stored but what control measures, security features and encryption mechanisms** are used to secure it. Besides that, the customer should be able to choose where to store the data.

Furthermore, the REEF invites the European Commission to continue its **efforts to remove existing** barriers to the free flow of data and create the right framework for secure and competitive data access and transfer in the power sector.

High standards for interoperability are key drivers for the digitisation of the energy sector in Europe. Accordingly, the European Commission should facilitate a harmonised and effective deployment of standards across Member States. In a period of rapid technological change, those standards should not be too restrictive in order to allow for innovation and they should be based on existing digital standards. Considering the rising share of information technologies in the global electricity consumption, the Roundtable members also invite the European Commission to support R&D and innovation projects aimed at developing 'green' standards in this field.

Electric grids are the backbone of all economic activities and a critical European infrastructure. Evolving cyber threats can make them more vulnerable. This is even more true in view of the increasing numbers of distributed resources and connected devices that can interact with the system as well as bi-directional energy flows, which mean a much stronger interdependency in terms of cybersecurity among market players. In this regard, the **Roundtable welcomes the steps taken by the Commission towards a common cybersecurity framework and market design**: the NIS Directive, the proposed Regulation on risk-preparedness in the electricity sector and the updated EU Cybersecurity Strategy.

The Commission should also **facilitate common actions** in terms of risk management, appropriate response in case of a cyberattacks, continuous improvement of cyber-resilience and enhancement of required capacities and competences for the energy sector through a progressive **harmonisation of cybersecurity requirements across European countries:** 

- To this aim, the Roundtable considers it to be essential to promote cybersecurity certifications for all actors of the power system. These should be industry-driven and process-oriented, while keeping in mind that cybersecurity is as much about behaviour as it is about technology.
- Cooperation between grid operators and other involved actors should be improved as well, through
  continued standardisation, efficient information exchange about security incidents, common
  business continuity plans, and crisis exercises organised at both national and EU level.

Significant investment is needed to thrive in a digital economy. It is overly complicated to obtain regulatory approval for new software solutions aimed at using the existing infrastructure in a more efficient way: the collective interest is not yet taken into account in the remuneration scheme of today's TSOs and DSOs. In this rapidly evolving field, it is important to foster more flexible solutions than constructing new power lines or plants, especially since the latter are more expensive and poorly accepted by the population. In this light,

- national energy regulators should be encouraged to incentivise digital investment.
- European funding programs should finance **pilot projects** that are expected to enhance synergies between the energy and digital sectors.

- 1) How can the Roundtable members contribute to open data platforms?
- 2) Does the Commission plan any measures to encourage Member State incentives for investments for the digitisation of power grids?

#### **ELECTROMOBILITY**

In order to reap the environmental and systemic benefits of electromobility, a strong commitment that encourages the industry to accelerate its deployment across Europe is needed. Therefore, the Roundtable broadly welcomes the European Commission's "Clean Mobility Package" of November 2017 which sets Europe on course to electrify transport.

- Clean transport technologies are maturing fast with an accelerating pace of low- or zero-emission cars, vans, trucks, buses, and also ships, being tested and entering the market. The energy transition of the transport sector is underway, but its success relies on a predictable regulatory environment which helps companies reduce the risks of new investments. Therefore, the Roundtable supports a clear EU objective of reducing CO<sub>2</sub> emissions in the road transport sector by 2025 and 2030.
- In comparison with the pace of technological change, public policy support is lagging behind, especially when it comes to the expansion of a high-capacity charging infrastructure, including fast charging points, across Europe which is critical to unlock mass-market uptake of electric vehicles. The combined grants and loans made available under the Connecting Europe Facility and the NER3000 programmes are appropriate, albeit insufficient, tools to de-risk investment. The Roundtable encourages policymakers to maintain the EU's financing facilities for electric vehicles and infrastructure in the next budgeting period.
- At their meeting on 18 October, European Commission Vice President Maroš Šefčovič and the Roundtable CEOs discussed ways to foster cooperation between regulators, manufacturers and infrastructure operators in order to address cross-sectoral mobility and its smart integration into the energy system. The Roundtable believes that it would be helpful to create a high-level cross-industry group to reflect on synergies between electromobility and grid investments. While the European power system is strong and generation adequacy is carefully monitored, in the long term, electromobility is likely to increase peak transmission demand. Also, local bottlenecks are likely to emerge in specific areas with a quick uptake of electric vehicles. However, if smart charging is adopted, the increase will be manageable. Electromobility can even help lower the cost of system balancing by integrating vehicle-to-grid solutions, meaning lower bills for consumers too. Regular exchange between key actors from the energy, telecoms and transport sectors should take place on topics like:
  - Legal and regulatory measures to incentivise the expansion of smart charging stations, including DC smart charging stations, and the refitting of existing non-smart infrastructure.
  - Measures to ensure a cost-efficient integration of new charging stations into the European grid, including adequate incentives for TSOs and DSOs to invest in the necessary IT solutions.
  - Interoperability and harmonisation of IT communication protocols between cars, charging stations and the overall energy system. As today with gas stations for traditional cars, all drivers of electric vehicles should be able to charge at any public charging point in Europe without complications and participate in system-friendly smart charging services.
  - Measures to develop a leading market for energy storage solutions in Europe. Battery storage for electric vehicles is an important element to foster electromobility. However, the existing power system can provide important storage solutions through the utilisation of the flexibility in hydropower. The integration of storage systems into the power grid should therefore also be included in the EU's industrial and energy strategies.

- 1) How can the Roundtable better contribute to the EU Battery Alliance?
- 2) Can the EU contribute to standardisation in order to create an internal market for e-mobility?

#### **BREXIT: EU-UK ENERGY & CLIMATE ARRANGEMENT**

The EU has facilitated the development of key infrastructure projects that benefit EU and UK consumers alike:

The UK and the EU currently share 4 GW of interconnection capacity (Ireland, France and the Netherlands). In addition to this, significant investments are being made in further interconnection projects including more than 3 GW of additional capacity currently being constructed (Norway, France and Belgium). Also, there are planned projects labelled as projects of common interest (PCI), e.g. to the Netherlands, Norway and Denmark. These interconnectors provide significant mutual benefits for the EU and the UK. They result in lower energy prices for consumers and businesses across Europe, increase security of supply, help integrate the increasing levels of renewables in the European energy system and have contributed to place our European companies at the top of the high-voltage industry.

Considering this mutual benefit brought about by interconnectors and the consequently integrated market, the negotiations on the future EU-UK energy deal should aim at minimising the potential negative impacts of Brexit for both the EU and UK industry. This can best be achieved through an arrangement based on continued cooperation that is as close as possible to the framework of the EU Internal Energy Market.

The Roundtable members strongly support a future energy market that aims at:

- Ensuring that both parties continue working together to tackle the challenges of climate change and the commitments under the Paris Agreement, in particular with a cost-efficient decarbonisation of our sectors through a strong EU Emission Trading System and effective carbon prices;
- Maintaining a high level of energy security of supply for both the EU and UK;
- Continuing the development of energy market competition and exploit economies of scale as long as there are mutual benefits;
- Ensuring a **stable regulatory framework** to attract the right level of investment in interconnectors.

Our sector is currently facing a significant level of regulatory uncertainty. It is therefore vital that the Brexit negotiations provide some clarity on the future cooperation on energy as early as possible and no later than October 2018. In order to preserve those mutual benefits, the Roundtable considers that the following key principles should be implemented as a basis for any future EU-UK energy relationship:

- 1. Ensuring the free flow of energy based on market principles between the EU and the UK to safeguard security of supply
- 2. Ensuring energy regulatory alignment to maintain efficient trading mechanisms and security of supply

Going forward, the UK and EU energy markets should operate in accordance with aligned principles, in particular as regards the trading mechanisms set out in the IEM, security of supply cooperation and the commitment to make possible capacity markets work across borders. An EU-UK regulatory convergence will be essential to preserve mutual benefits. The continued participation by UK companies in bodies like ENTSO-E will be key in allowing a high degree of cooperation on energy matters. In addition, a specific cooperation mechanism should be created to ensure that any new EU or UK legislation on energy is brought into the scope of the agreement and allows for dynamic regulatory alignment.

#### 3. Ensuring continued cooperation on wider energy and climate change issues

The agreement should lay out joint cooperation mechanisms to ensure that climate change issues are tackled in a coordinated way. This should include a continued participation of the UK in the EU ETS in

order to support market-based decarbonisation of the power sectors in all regions. The EU and the UK should also continue to work jointly to enhance the development of renewables, especially in the North Sea Region.

#### 4. Ensuring funding for energy projects

EU infrastructure funding, through dedicated schemes such as the Connecting Europe Facility, has played a pivotal role for interconnector projects where both EU/EEA and UK companies are involved. The future energy agreement should provide adequate funding for interconnectors between the EU/EEA and the UK.

- 1) How can we prevent negative consequences for the IEM in case of delayed Brexit?
- 2) How does the Brexit transition deal look like with regard to energy, climate and interconnectors?

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// RÉSUMÉS

## **50HERTZ BORIS SCHUCHT**CEO

Boris Schucht joined 50Hertz Transmission as Chairman of the Management Board in 2010. Mr Schucht is committed to a sustainable energy transition by maintaining a high level of security of supply while integrating large amounts of volatile renewable energies - by facilitating the development of the European power market and by extending transmission grid if necessary. Previously, Mr Schucht was a member of the Management Board of WEMAG. Prior to this, he was Vattenfall Europe's authorised officer in different positions. He is a member of the Assembly of the European Network of Transmission System Operators for Electricity (ENTSO-E).



## ABB CLAUDIO FACCHIN PRESIDENT POWER GRIDS DIVISION

Currently President of the Power Grids Division, Claudio Facchin joined ABB in 1995 and, since then, has held numerous managing positions, including as the Head of Global Business Unit Substations, Head of ABB's North Asia region and President of the Power Systems division. Since 2013 he has been a member of ABB's Group Executive Committee. Mr Facchin holds a degree in mechanical engineering with a focus on industrial engineering from Politecnico di Milano.



AMAZON WEB
SERVICES
GUIDO BARTELS
MANAGING DIRECTOR
NORDICS AND BALTICS

Guido Bartels was appointed Managing Director Nordics & Baltics at Amazon Web Services in August 2017. Prior to that, he had a long international career at IBM, holding general management positions for the Nordics Region, as well as for the Global Energy and Utilities Industry among others. From 2007 to 2011 he served as the Chairman of the GridWise Alliance, and in 2010, he initiated the set-up of the Global Smart Grid Federation where he is serving as Emeritus Director. For two consecutive terms, Mr Bartels was also a member of the Electricity Advisory Committee to the U.S. Department of Energy.



AUSTRIAN POWER
GRID
DR. ULRIKE
BAUMGARTNERGABITZER
CEO

Dr. Ulrike Baumgartner-Gabitzer has been the CEO of the Austrian transmission system operator Austrian Power Grid AG since 2014. She holds a PhD in law. During her career, she held several executive positions in the electricity sector, among others as a Board Member at VERBUND AG and as the Secretary General of the Austrian Association of Electricity Companies. In addition, she served as the Head of the Austrian Vice-Chancellor's cabinet as well as a Member of the Austrian Parliament.



ELIA
CHRIS PEETERS
CEO

Chris Peeters obtained a Master's degree in civil engineering at the University of Leuven, Belgium and has been the CEO of the Elia Group since 2015. Prior to that, Chris Peeters headed the business consulting activities of Schlumberger in Europe, Russia, Africa and the Middle East. Earlier on, he spent 14 years with McKinsey & Company as a Partner, specialising in the energy sector. During the first ten years of his career, he founded an engineering firm and subsequently a manufacturing company for building materials, before joining Hoogovens Aluminium as the Sales & Technical Manager for part of Europe.



GE
GERHARD SEYRLING
GENERAL MANAGER,
EUROPE, RUSSIA & CIS
REGION, GRID
SOLUTIONS
GE POWER

Gerhard Seyrling is the Grid Automation General Manager at Grid Solutions, a General Electric and Alstom joint venture in GE's Energy Connections business. Mr Seyrling has acquired 28 years of experience with Alstom Grid in the T&D business. He began his career by holding various positions in the R&D of high voltage switchgear and power transformers as well as leading high voltage switchgear factories in Switzerland and France. He holds a degree in electrical energy engineering from Austria's Technical University of Vienna. Mr Seyrling is a member of the German National Committee of CIGRE and President of the T&D Europe Association.



### TENNET BEN VOORHORST COO

Ben Voorhorst was appointed as TenneT's COO in 2006. In the past, he held various management positions within TenneT, he was the Head of Information Provision at SEP (TenneT's predecessor) and occupied various management positions in the software industry. Mr Voorhorst is a member of the Supervisory Board of NOVEC, a member of the Board of the Dutch association Netbeheer Nederland, a member of the Supervisory Board of Energie Data Services Nederland, a member of the Board of the Netherlands Association for Energy Data Exchange and the Vice-Chair of the Board of ENTSO-E. Mr Voorhorst is also a member of the Dutch National Cybersecurity Council and represents the critical infrastructure sector.



#### MAVIR KAMILLA CSOMAI CEO

Kamilla Csomai joined MAVIR Ltd. in 2010 and held various management positions, including as the Deputy CEO for Market Operation and Finance as well as Supervisory Board member, before becoming the company's CEO in 2015. Prior to taking over the office of CFO at MVM OVIT Ltd. in 2011, she worked in the telecommunications sector in different financial management positions. In addition to being a member of MAVIR's Board of Directors, Ms Csomai is a member of the Board of ENTSO-E as well as the Chairperson of the Supervisory Board of KOM Ltd., the TSO's smart grid project company.



#### NATIONAL GRID ZAC RICHARDSON HEAD OF BUSINESS DEVELOPMENT

Zac Richardson is an engineer with 20 years' experience in National Grid's regulated TO business. He has held a wide variety of roles over this period, including in front-line operations and strategy and transmission planning. In May 2016, Mr Richardson joined National Grid's Business Development team to lead the development of future interconnector projects, including the Viking link to Denmark, and to ready the business for increased competition in onshore transmission. He is currently Head of Business Development at National Grid.



RTE
OLIVIER GRABETTE
BOARD MEMBER;
DEPUTY DIRECTOR
GENERAL ECONOMY;
MARKETS AND
INNOVATION

Olivier Grabette is the Deputy Director General for Economy, Markets and Innovation at RTE. He has held numerous positions in electricity transmission networks engineering in France and abroad (EDF) before joining RTE maintenance activities in 2002. From 2006, he held various management positions at the Network Expertise Centre of RTE. In 2012, he created the Department of R&D at RTE. Since 2014, he has accompanied the RTE Presidency in steering innovation on Intelligent Electrical Networks (Smartgrids).



STATKRAFT
JULIE WEDEGE
ACTING SVP HEAD OF
PUBLIC AFFAIRS

Julie Wedege serves as Acting SVP Head of Public Affairs in Statkraft, working on political and regulatory matters. She was previously Assistant Director in the Oil and Gas Department in the Norwegian Ministry of Petroleum and Energy. She has also worked in the Ministry of Trade and Industry with industrial policies, trade negotiations and EU matters. She graduated from the University of Bergen in Comparative Politics, has experience from the ARENA-program (Advanced Research on the Europeanisation of the Nation-State) and holds an MSc in Political Theory from London School of Economics.



STATNETT AUKE LONT CEO Auke Lont has been the Chief Executive Officer of Statnett since 2009. He previously held the positions of Managing Director at Econ Pöyry Analysis and Senior Vice President at Nordic Energy at Statoil Norway. Other stages of his career include positions as Managing Director at Naturkraft and Senior Economist and Manager at ECON Analysis. Mr Lont holds a Master's degree in econometrics from Vrije Universiteit van Amsterdam.



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The Secretariat of the Roundtable is headed by Tor Eigil Hodne, Director of Statnett's EU Office <a href="mailto:tor.hodne@statnett.no">tor.hodne@statnett.no</a>
Website: <a href="http://www.energy-roundtable.eu">http://www.energy-roundtable.eu</a>