Creating a secure and undistorted European energy market

& Bird & Bird

Steigenberger Grandhotel

4th February 2014 Brussels

Session 1 – Promoting integration of the IEM

Completing the internal energy market – national regulator's perspective – Reuben Aitken, Senior Manager, European Electricity Transmission policy, Ofgem

ofgem Making a positive difference for energy consumers

Completing the Internal Energy Market

CROSS BORDER CO-OPERATION

A National Regulator's Perspective

Reuben Aitken

04-02-14

ofgem Making a positive difference for energy consumers

Outline

- **DRIVERS AND EU CONTEXT**
- **GB CASE STUDY**
  - NON-GB Generation – challenging work in progress

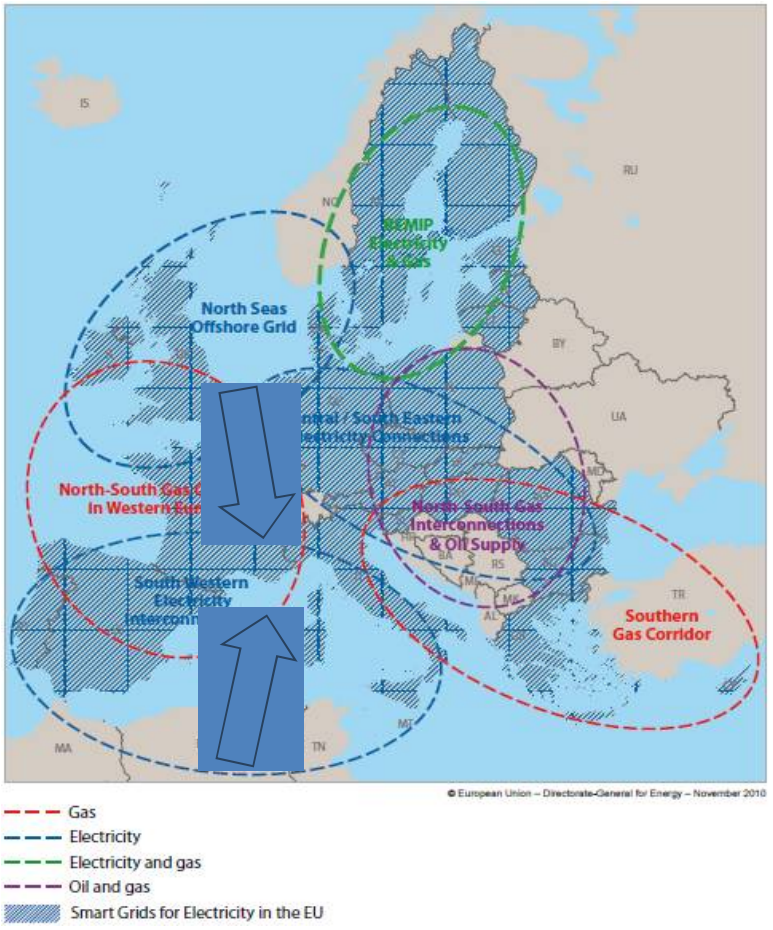
ofgem Making a positive difference for energy consumers

Challenges across Europe –
market integration, offshore grids and interconnection

- Large increase in renewable generation across Europe with increased trading between member States foreseen to meet 2020 renewables targets.
- Post 2020 vision – bulk transfer of renewables to high demand areas across Europe.
- Increase in electricity infrastructure investment to support these developments – single electricity system – our EU goal.

Leading to...

- a change in infrastructure use across Europe
  - Domestic → Europe wide
- the need for an increase in coordination between Member States
  - working with neighbouring countries to develop integrated infrastructure
- and an increase in integrated projects combining different types of transmission infrastructure
  - North Sea in particular



European Commission: Priorities for 2020 and beyond. A Blueprint for an integrated European energy network

ofgem Making a positive difference for energy consumers

Current European initiatives
to combat these challenges

Energy Infrastructure legislation, further coordination and renewable trading are on the European agenda...

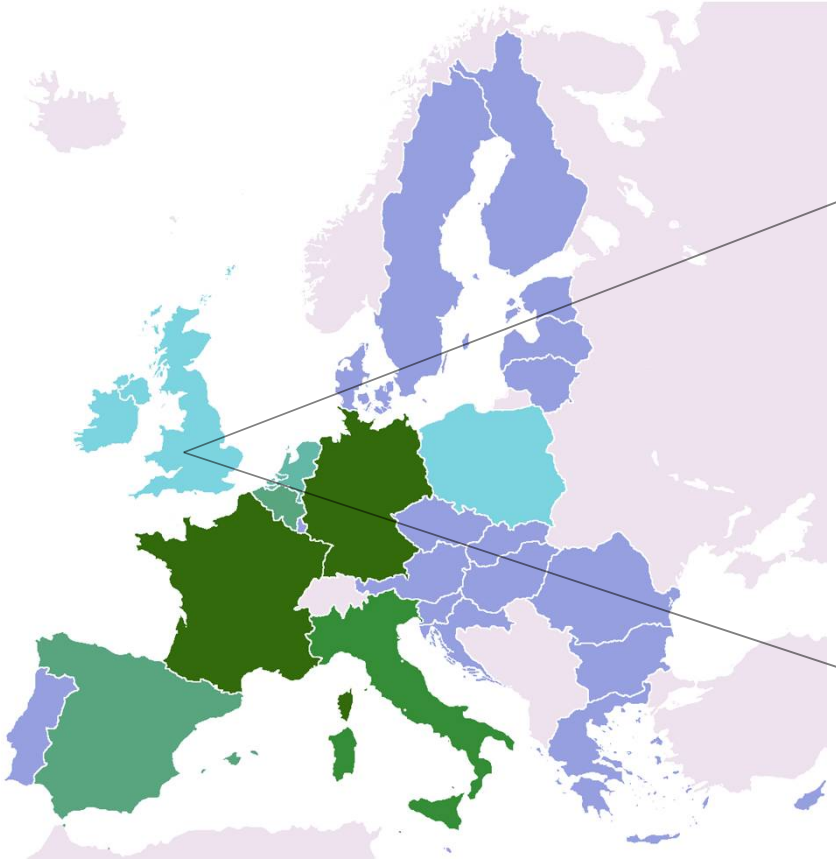
- **Energy Infrastructure Package**
  - Why: €200bn needed in energy infrastructure to meet the 2020 energy and climate goals
  - Selection of 'Projects of Common Interest' – need to grant appropriate regulatory incentives to higher risk projects

- **North Seas Countries Offshore Grid Initiative (NSCOGI)**
  - Framework for regional cooperation between North Seas countries (Government led with MOU signed in 2010)
  - Current and future strategic grid infrastructure developments
  - Identifying grid development, market and regulatory, and planning barriers in the North Seas
  - Further industry engagement in the current phase of the work

- **Renewable trading possibilities...**

ofgem Making a positive difference for energy consumers

Case study: Transmission planning and delivery in GB



The GB case study – how the European challenges impact the GB network

ofgem Making a positive difference for energy consumers

GB case study:
Network planning and delivery

Some differences with other European Member States

- Multiple TSOs and TO involved in transmission planning and delivery
- Delivery options for third party investors

Planning & System Operation

NETSO: focuses on real-time operation and balancing, and has a role in system planning and coordinating grid connection offers.

TOs: devise plans based on user commitment / demand on their system – obliged to cooperate with NETSO in doing this. Some strategic planning possible.

Interconnection: developed by third parties as discrete projects, obliged to cooperate with NETSO around connection.

Q: Why do we do this?
A:User commitment – the users decide ... Drives efficiency, reduces stranding. Optimises network according to need. Multiple inputs guide network build.

Delivery: multiple choices

Onshore – Monopoly regulated TOs – eight-year price control under the RIIO framework, with some flexibility mechanisms (e.g. Strategic Wider Works).

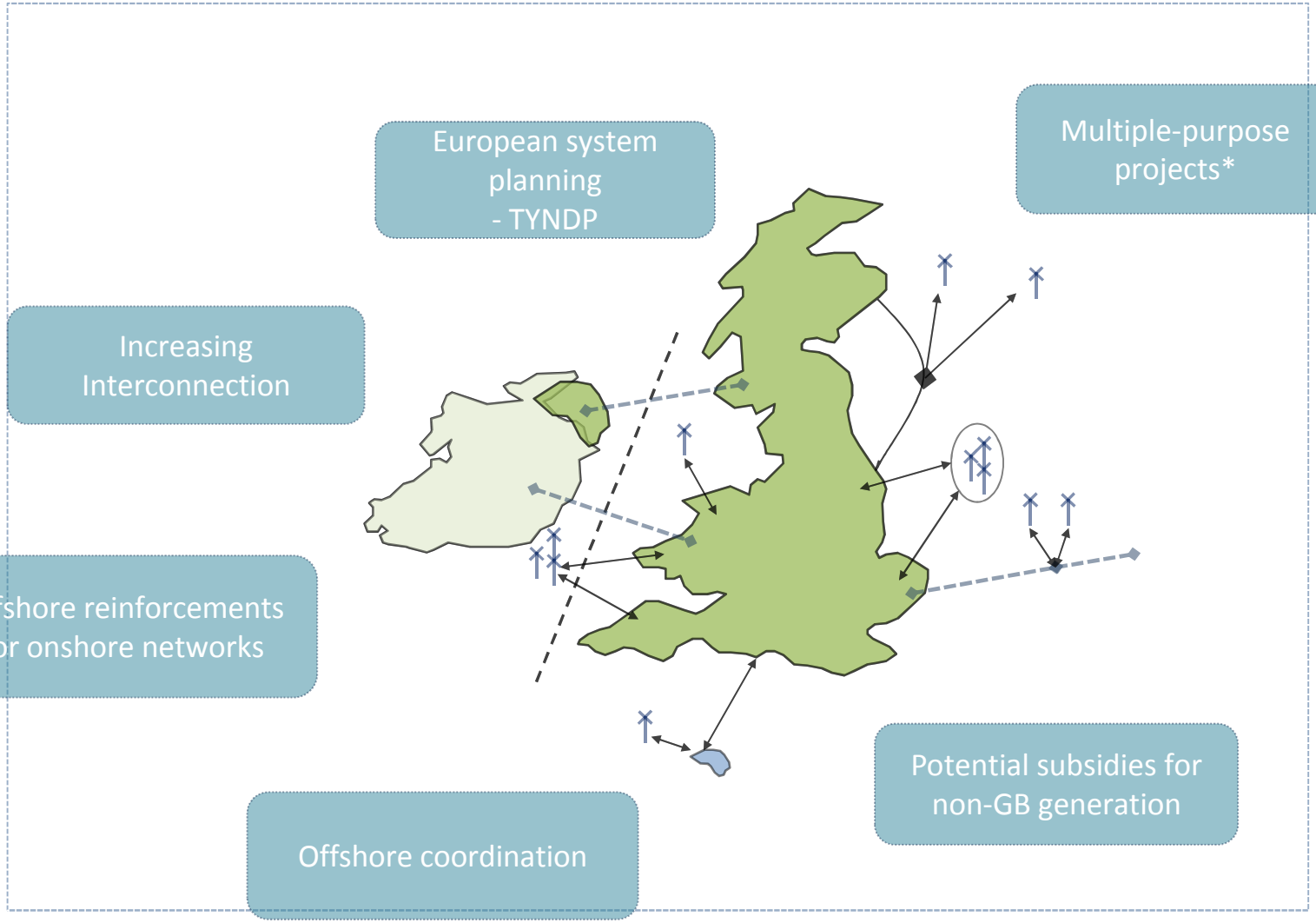
Offshore – Competitive, asset-specific tender for 20 year regulated revenue stream.

Cross-border – Third-party led. Merchant-based or cap & floor regime (currently being developed).

Q: Why do we do this?
A: Capitalise on differences in infrastructure profiles. Drive efficiencies by allowing alternatives to financing, construction, ownership and operation

ofgem Making a positive difference for energy consumers

Drivers and challenges for integration across the GB network



*Multi-purpose projects: Integration of GB delivery regimes

ofgem Making a positive difference for energy consumers

Non-GB generation
- Governments' MoU in 2013

"Trading power with Ireland could increase the amount of green power in our energy mix and potentially bring down costs for UK consumers."

"Making the most of the natural renewable resource available around our islands could benefit the economies of both countries."

The **Memorandum of Understanding** marks the continuation of close working between our Governments on the potential for energy trading"

– UK Energy Secretary of State, Mr Davey:

The **MoU** affirms the two States' commitment to:

- maintaining a strong partnership on energy issues;
- achieve closer integration of electricity markets, and
- maximise the sustainable use of low carbon renewable energy resources

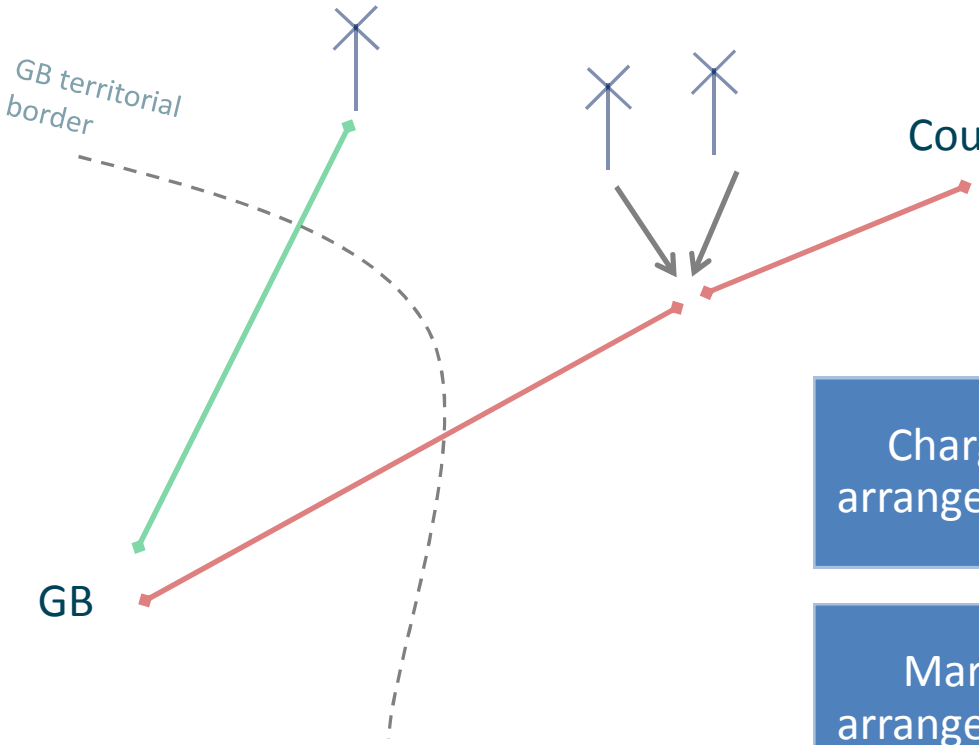
A tight timeline is essential if potential projects, which would be selected through an open competitive process, are to commence exporting wind energy from Ireland to the UK by 2020.

ofgem Making a positive difference for energy consumers

Non-GB generation
connecting to the GB network

- Practical examples have shown that finding solutions to allow renewables trading and integrated networks is not easy...

- Specific challenges have been highlighted through both the NSCOGI high level principles and by considering non-GB generation looking to connect to the GB network



Renewable support schemes	Priority access for RES	
Charging arrangements	Cost allocation	Direct and exclusive connections
Market arrangements	Cross border system balancing	Congestion management

ofgem Making a positive difference for energy consumers

Next steps...

- Develop understanding of challenges presented by non-GB connections based on consultation responses and through engagement with:
  - Stakeholders/project developers on the content of the consultation
  - Government(s) on renewable trading progress
  - NRAs on cross-jurisdictional issues and treatment of assets

- Progress on regulatory treatment is conditional on progress on other aspects of renewable trading. Further clarity to be provided in spring 2014 on this challenging area.

- **Complexity** means intervention has the potential to distort and foreclose markets as much as solve issues as indicated in Cion Nov communication...

- **BUT, other countries are making progress and perhaps we have some answers from the next speaker…**

ofgem Making a positive difference for energy consumers

Questions...

- Are other countries facing similar integrated projects that we are seeing in GB?
- How do we ensure integrated, efficient and coordinated solutions?
- Where is the “missing money” or is it regulatory and legislative uncertainties that prevent these projects being realised when in consumers’ interests?
- Is there a place for third party delivery and finance in delivering savings for consumers?

ofgem Making a positive difference for energy consumers

Ofgem is the Office of Gas and Electricity Markets.

Our priority is to protect and to make a positive difference for all energy consumers. We work to promote value for money, security of supply and sustainability for present and future generations. We do this through the supervision and development of markets, regulation and the delivery of government schemes.

We work effectively with, but independently of, government, the energy industry and other stakeholders. We do so within a legal framework determined by the UK government and the European Union.

www.ofgem.gov.uk

ANNEX

ofgem Making a positive difference for energy consumers

Questions

- Are other Member States facing the same type of integrated projects that we are seeing in GB?

- How does the de-centralised developer led approach to system planning compare to the approach used in other Member States?

- Is there a place for third party delivery and finance in delivering savings for consumers?

ofgem Making a positive difference for energy consumers

Response to challenges: ***Integrated Transmission Planning and Regulation*** **(ITPR) project**

We initiated the ITPR project in March 2012 to consider 2 main elements:

1. The role of the System Operator in system planning – what incentives does it face and are these appropriate for planning an integrated system onshore, offshore and cross-border?

    - "*Planning for an integrated network*"

2. To consider whether the current regulatory regimes for transmission investment can work together effectively to deliver efficient investment for an integrated transmission system?

    - "*Delivering an integrated network*"

- Recognising these features– what is the objective of the ITPR project?

  To consider whether and how the current GB regulatory regimes for electricity transmission facilitate the most efficient and economic investment planning and delivery over the long-term.

- Against a backdrop of...

  Maintaining a stable regulatory framework for existing transmission investment commitments
  And building on momentum already gained for new investments (e.g. offshore and cross-border)

Session 1 – Promoting integration of the IEM

Assessment of the Sweden/Norway renewables support mechanism – Henrik Bjørnebye, Associate Professor, Scandinavian Institute of Maritime Law

UiO : Nordisk institutt for sjørett
Det juridiske fakultet

Assessment of the Sweden/Norway renewables support mechanism

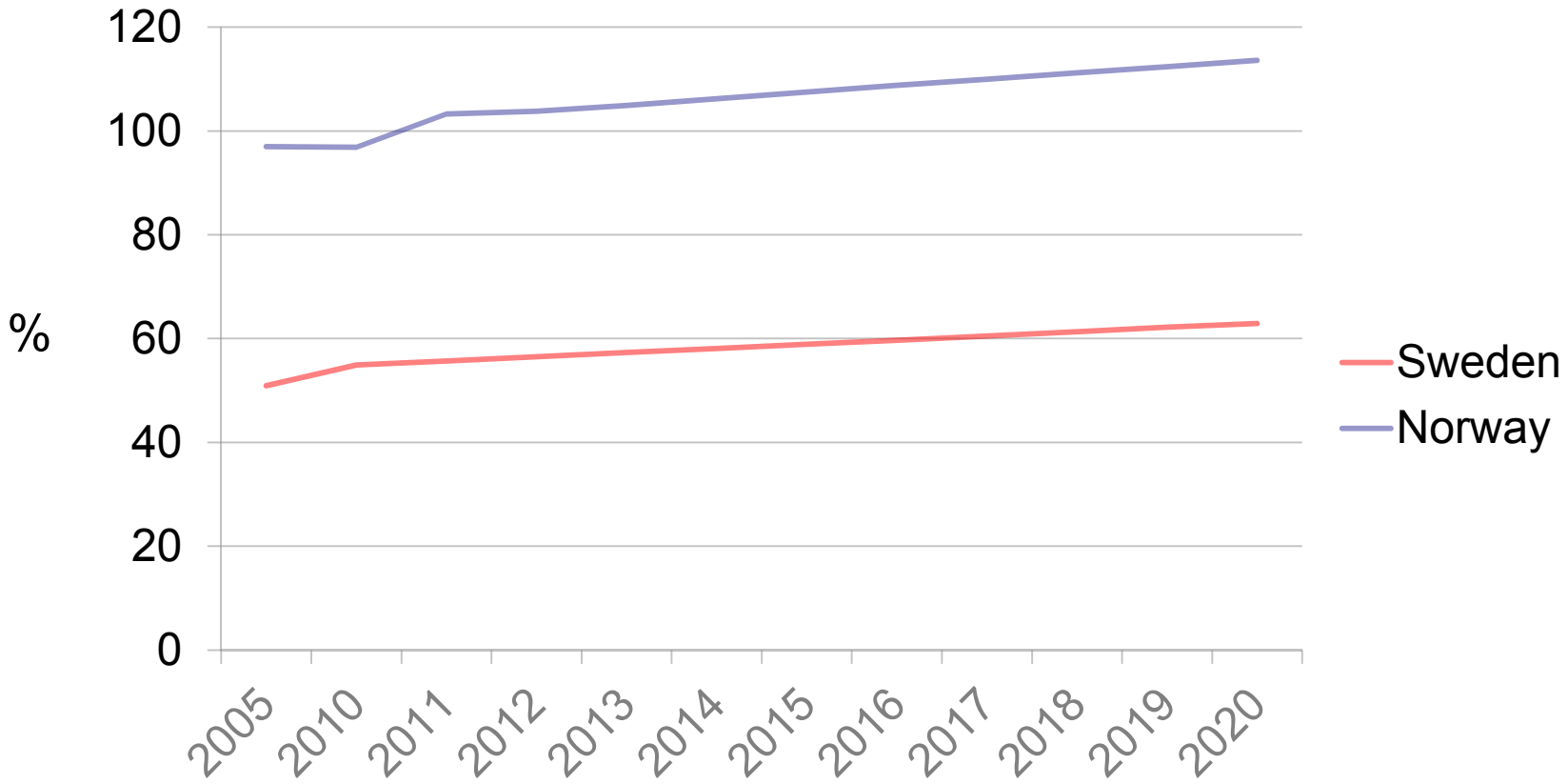
Creating a secure and undistorted European energy market
Bird & Bird Seminar, Brussels, 4 February 2014

Henrik Bjørnebye
Associate Professor
Henrik.bjornebye@jus.uio.no

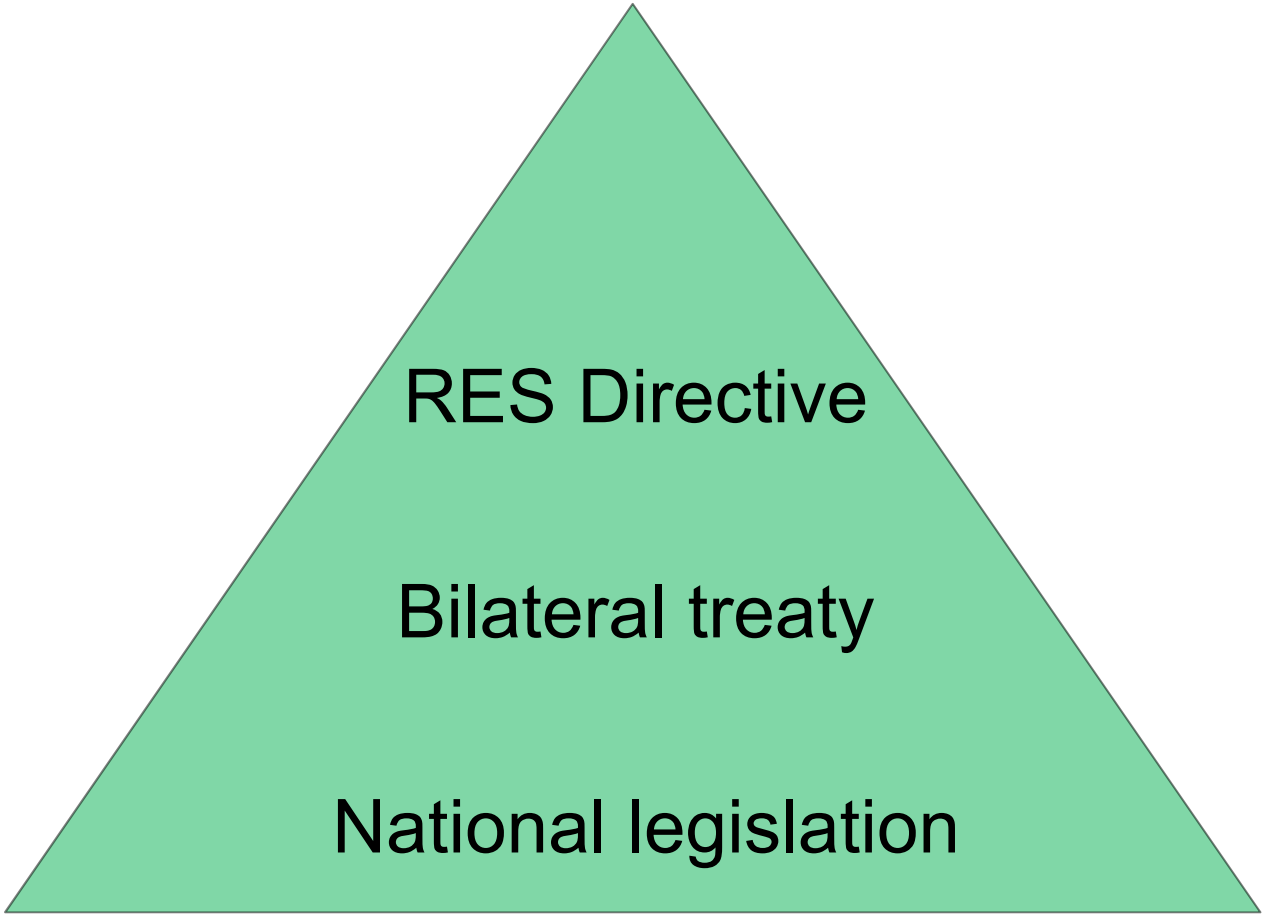
Background

- RES Directive 2009/28/EC
  - 2020 targets
    - Sweden: 49 % (from 39.8 % in 2005)
    - Norway: 67.5 % (from 60.1 % in 2005)
  - Joint support scheme under Article 11
- Electricity certificate market in Sweden from 2003
- Joint Swedish/Norwegian market from 1 January 2012

National estimated trajectories for RES-E (from NAPs)



Support mechanism – legal structure



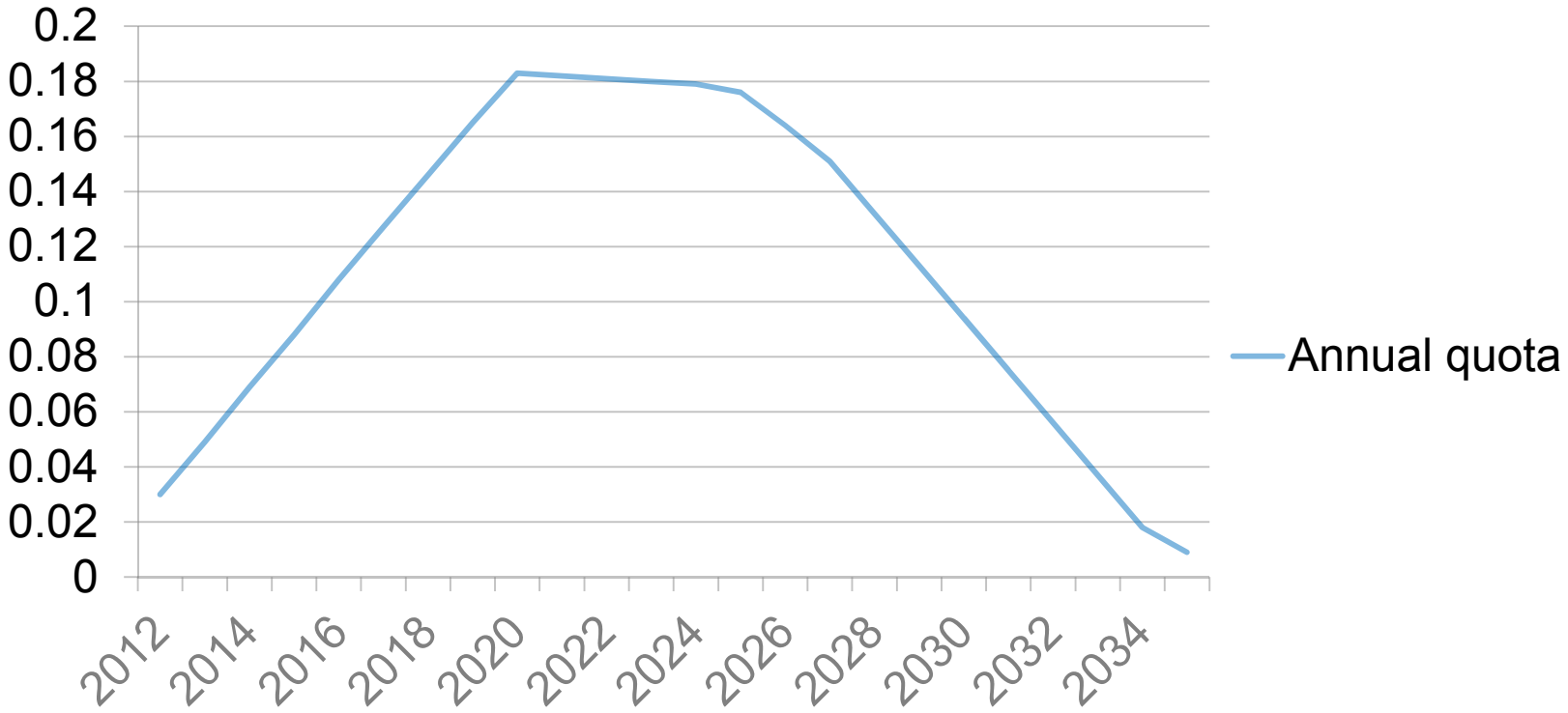
Market functioning (1)

- Purpose
  - 26.4 TWh new RES-E in Norway/Sweden by 2020
- What is an electricity certificate?
- TSOs designated as issuing bodies
  - Sweden: Svenska Kraftnät
    - Registry: Cesar (http://certifikat.svk.se/default.aspx)
  - Norway: Statnett
    - Registry: The Norwegian Energy Certificates System (NECS) (http://necs.statnett.no/default.aspx)

Market functioning (2)

- Supply-side: certificates issued to eligible RES-E producers
  - Technology neutrality
  - Joint Norwegian/Swedish scheme
  - Time period
- Demand-side
  - Certificate-obliged actors
  - Quota obligation
  - Annulment of certificates

Annual quotas – Norway



Some challenges

- Market imbalances
- Where will investments be carried out?
- National regulatory differences
- Joint support schemes and public opinion

Session 1 – Promoting integration of the IEM

5 views on European renewables integration – Stefan-Jörg Göbel, Managing Director, Statkraft Markets

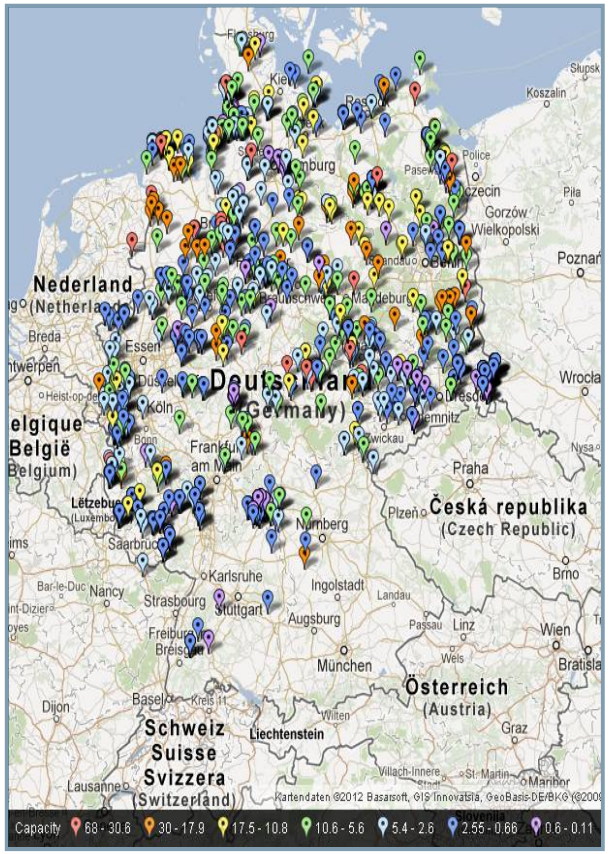
5 VIEWS ON EUROPEAN RENEWABLES INTEGRATION

Brussels, 4 February 2014

Stefan-Jörg Göbel

Statkraft

Our two quite opposite experiences



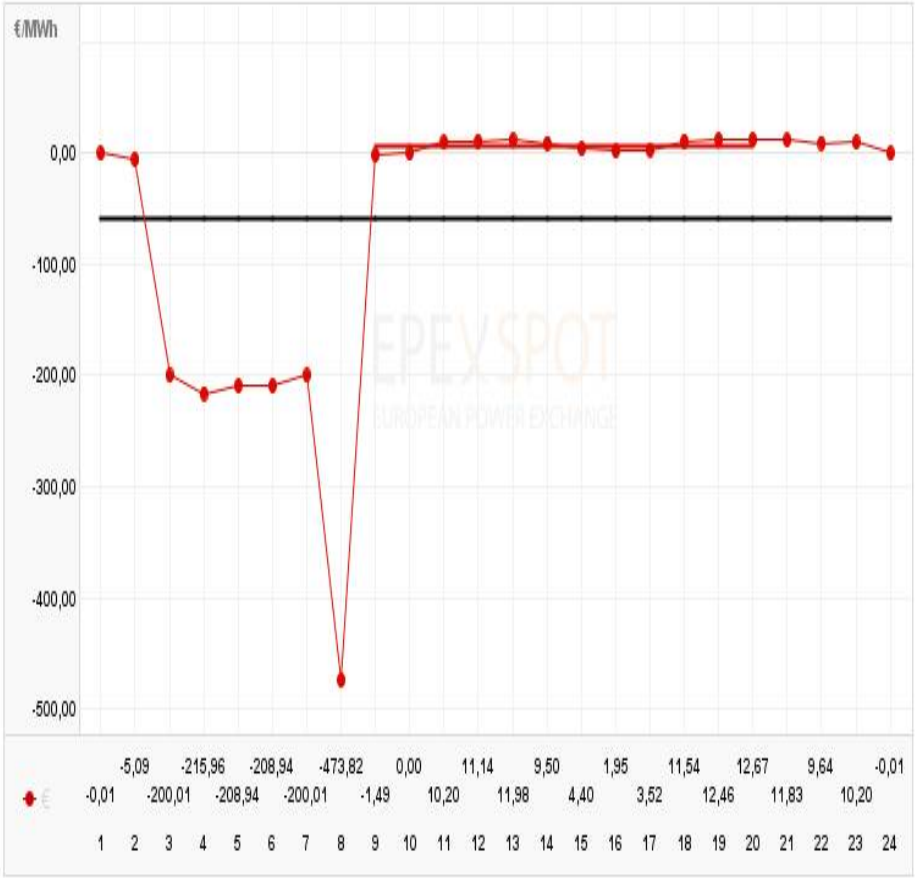
- Positive: More than 10000 MW of third party RES under management!

- Negative: 3 digit million EUR write-offs in German CCGTs!

Statkraft

1 – There is no magic bullet neither technically nor financially

- Beyond 20-30% intermittent renewables in the energy mix there is no affordable and technically available solution to absorb all renewable energy.
- For example: Intermittent generation will have to be curtailed regularly to achieve total system balance and due local grid constraints.

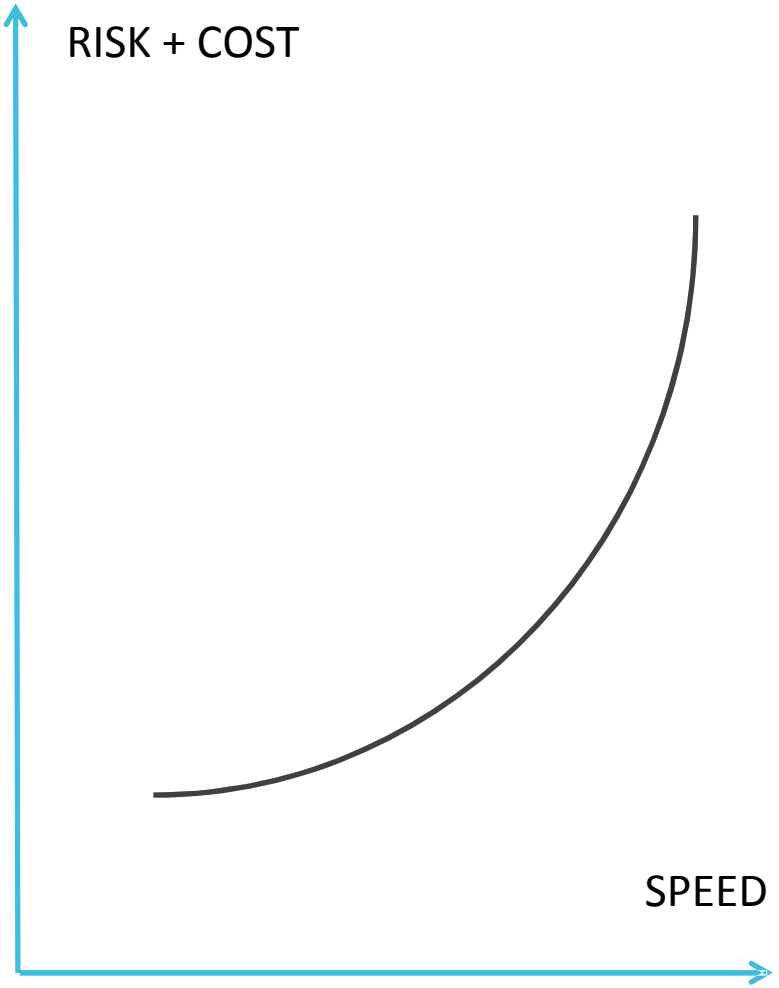


- 25 Dec 2012: Oversupply in Germany

Statkraft

2 – Risk of transition is a function of speed

- Risk in security of supply and affordability.
- Everything is feasible but at which price?
- Finding the low-risk, low-cost path to a renewable dominated world will require time.



Statkraft

3 - As good as it gets: Conventional back-up, grid extension, functioning markets

- Goal: Keep security of supply at acceptable costs.
- Conventional back-up and grid extension are two safe bets. Should be supported by functioning markets but what does that mean?
  - Energy only markets can deliver security of supply implicitely and will show extremely high prices in times of scarcity.
  - Capacity mechanisms deliver security of supply explicitely and will avoid extremely high prices but carry a permanent premium instead.
- Everything else, e.g. new forms of electricity storage, will have to make a quantum leap in its development…

4 – Convergence in European policy is not a goal as such …

- … but is triggered by creation of the internal electricity market
- Some convergence needed, but how likely are a EU wide RES support scheme and capacity mechanism?
- EU energy policy was massively successful in unleashing the power of competition from late 90s to today.
- Focus on maximising competition and minimising barriers to entry in energy volume markets, RES support and potential capacity mechanisms!

5 – RES support must follow political targets not the other way around

- Existing RES support schemes do obviously often not match political targets: That‘s an expensive way not to reach targets.
- Important elements to be included into any RES support scheme (if matching political goals):
  - Volume and capacity trajectory
  - Budget constraints
  - System responsibility vs. „produce and forget“
  - Least cost technology, timing, projects
- Industry norms and standards
- Consistency with energy volume markets and potential capacity mechanisms

Stefan-Jörg Göbel
+49 211 60244-124
stefan.goebel@statkraft.de

Statkraft Markets GmbH
Niederkasseler Lohweg 175
40547 Düsseldorf

Statkraft
PURE ENERGY

www.statkraft.com

Thank you & Bird & Bird