



European Regional Development Fund

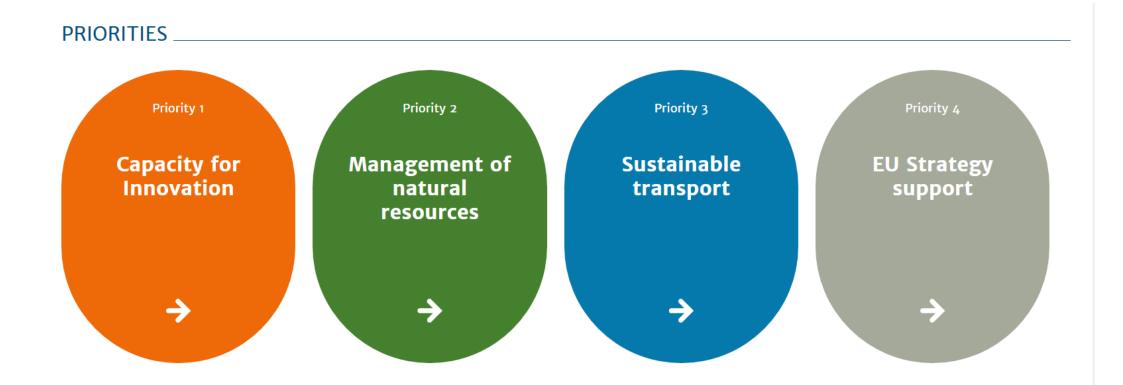
The Baltic InteGrid | Kick-Off Conference

Integrated Baltic offshore wind electricity grid development

March 22 | 14:00 - 18:00 Magazinstraße 15-16 Berlin







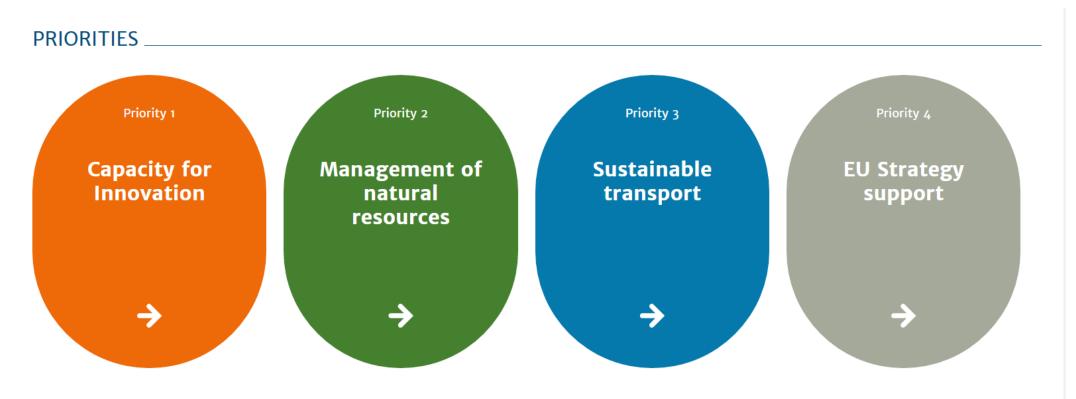


300 concept notes in 2015





300 concept notes in 2015 35 funded



Denmark: Generating140 % of electricity demand with renewable energy



Offshore wind in the Baltic Sea Region

- BASREC estimates offshore wind potential of 130 GW
- 12,2 could be installed by 2030
- 2014: Only 1,1 GW installed
- 12% of OWE in Europe in BSR

Comparatively young OWE market

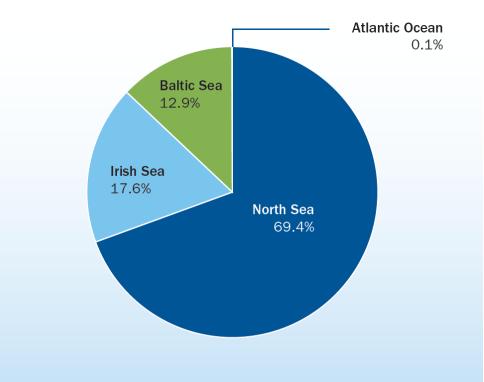


FIG. 14: INSTALLED CAPACITY, CUMULATIVE SHARE BY SEA BASIN

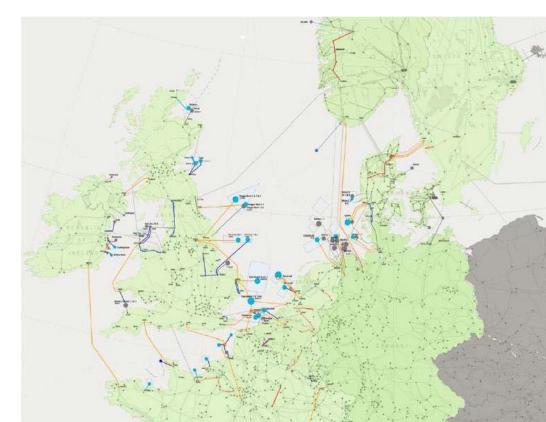


Lessons from the North Sea

• EU funded:

Study of the benefits of a meshed offshore grid in Northern Seas region

- Higher initial costs than radial connections
- Compensated by finance and distribution efficiency gains





Enhanced OWE and grid planning

- *"Electricity Grid Expansion in the Context of Renewables Integration in the BSR " BASREC*
 - Regional electricity grid development to accommodate increasing share of RES
 - Enhanced balancing of grid through grid expansion
 - Need for more interconnectors





The Baltic InteGrid

Research framework conditions for meshed grid in BSR to optimize efficiency and potential of OWE, with a view to:

- Contribute to sustainable indigenous electricity generation
- Further integration of electricity markets
- Enhancing security of supply in the BSR
- Facilitating the development of offshore wind



Project outputs

1. Baltic Offshore Grid Forum	4 Public conferences, 6 country work- shops and 12 disciplinary focus seminars
2. Baltic Grid Concept	Research: Policy & regulation, market and supply, technology and grid, environment and society, spatial planning, cost-benefit
3. Prefeasibility Studies	Two in-depth connection case studies
4. Strategic Recommendations	Recommendations on the road ahead deri- ved from previous outputs



The Consortium

- 1. IKEM | DE
- 2. Foundation for Sustainable Energy | PL
- Rostock Business and Technology
 Development | DE
- 4. Technical University of Denmark
- 5. Energy Agency for Southeast Sweden
- 6. Deutsche WindGuard | DE
- 7. Maritime Institute in Gdansk | PL
- 8. Stiftung OFFSHORE-WINDENERGIE

- 9. Latvian Association of Local and Re-
- 10. Aalto University | Fl

- 11. University of Tartu | EE
- 12. Klaipeda University Coastal Research and Planning Institute | Ll
- 13. Lund University | SE
- 14. Aarhus University | DK



The Consortium

Germany

- Siemens AG
- BMUB (Ministry for the Environment, Nature Conservation, Building and Nuclear Safety of Germany)
- Ministry of Energy, Infrastructure and State
 Development of Mecklenburg- Vorpommern
- 50Hertz Transmission GmbH
- Ecologic Institute
- Kisters AG
- Becker Büttner Held

Denmark

- Danish Energy Association
- Energinet.dk
- Danish Wind Industry Association

Latvia

• Ministry of Economics

Finland

• Finnish Wind Power Association

Estonia

• Elering-generating opportunities

Lithuania

- The Ministry of Energy
- Litgrid AB

Poland

- Inwestycje Infrastrukturalne Sp. Z O.O
- Maritime Office in Gdynia
- PGE Energia Odnawialna S.A.
- Polish Offshore Industry Association
- PSE S.A. Polskie Sieci Elektroenergetyczne
- Baltex Energia i Górnictwo Morskie SA SKA



14:00 Introduction to the Baltic InteGrid Simon Schäfer-Stradowsky | Managing Director Anika Nicolaas Ponder | Project Coordinator IKEM | Institute for Climate protection, Energy and Mobility

Grid Infrastructure in Lithuania: Outlook on Offshore and Renewables Andrius Šimkevicius *Litgrid AB*

The Challenges of Offshore Wind: A Grid Operator's Perspective Nadja Ballauf *50Hertz*

15:30 Coffee break

Renewable Energy and Offshore Wind Development in Poland: The Potential of Regional Cooperation Dr. Maciej M. Sokołowski Foundation for Sustainable Energy, Poland

Sweden's Renewable Energy Plans and the Future for Offshore Pierre Ståhl Energikontor Sydost AB (Energy Agency for Southeast Sweden)

Finnish Framework for Wind and Offshore Energy: State and Outlook Prof. Ari Ekroos University of Aalto, Finland

Public Participation in Wind Energy and Infrastructure Projects: The Danish experience Prof. Birgitte Egelund Olsen University of Aarhus, Denmark