This project is supported by the European Commission through the Seventh Framework Programme.

Working together to create a secure, sustainable energy future.
The European North Sea Energy Alliance (ENSEA) is a partnership of four regions situated around the North Sea which aims to develop and share knowledge on the transition to a sustainable and secure energy network. The regions, all of which bring their own expertise, are as follows:

- Northern Netherlands (The Netherlands)
- Scotland (United Kingdom)
- Wachstumsregion Ems-Achse e.V. (Germany)
- Rogaland (Norway)

By creating this strategic network through analysis the regions will bring together energy know-how and align various research programmes. The network focuses on integrating sustainable, renewable energy into existing energy systems.

Energy transition and balance

To reach the ‘20-20-20’ climate goals, Europe is increasingly generating renewable energy through technologies such as solar panels and wind turbines. Renewable resources are, however, dependent on weather patterns and therefore generate variable amounts of power over time. In order to provide secure energy systems which deliver energy when we need it, renewables have to be used in conjunction with ‘back-up’ power sources, which can ramp up generation quickly to meet peak demands, while managing demand by using smart grids and by hydro-based balancing services.

Since energy is a cross-border issue, countries and regions have to cooperate. To create an integrated system, research is vital. Many research institutes focus on the subject of energy transition. Therefore ENSEA decided to bundle their expertise and initiate additional integrated research across cross-border issues such as balancing energy, energy infrastructure, technology and innovation and employment.

Goals

The ENSEA project goals include:
- Identifying the strengths and weaknesses in each of the regions in relation to research and innovation, driven by industrial demand, in energy system integration and demand management.
- Identifying opportunities for strengthening the relationships within and between the regions through a Joint Action Plan supported by the regional stakeholders.
- Developing joint demand-driven research proposals within regional, national and European (e.g. Horizon 2020) Research and Technical Development funding programmes.

European programme

The ENSEA is part of the European PPI programme, the seventh framework programme for research and technological development. The European Union supports the project with a funding of nearly three million euros under the “Regions of Knowledge” programme. The main strands within this project are to promote cooperation between public, private and academic sectors and to facilitate the development of knowledge on energy system integration and demand management.

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Visit www.ensea.biz for more information on ENSEA.
For questions please contact the Project Manager Ingrid Klinge at klinge@energyvalley.nl.

Partners

Energy Valley, The Netherlands
- Energy Valley Foundation - a network organisation working together with public and private partners in the northern part of The Netherlands to explore growth opportunities in the energy sector. It focuses on energy innovations and the transition to a sustainable energy economy which link up directly with national and international energy ambitions and regional strengths.

Wachstumregion Ems-Achse e.V., Germany
- Wachstumregion Ems-Achse e.V. - an association of companies, local authorities, academic institutions and chambers which aims to expand the Ems-Achse as an independent economic region, coordinating projects on economic infrastructure, network development and promotion of R&D activities.

Rogaland, Norway
- Rogaland Fylkeskommune - Rogaland County Council’s economic development unit has competencies within energy and R&D.
- Lyse - an energy and telecommunications company owned by 16 municipalities in the Rogaland County.

Scotland, United Kingdom
- Scottish Enterprise - Scotland’s main economic development agency seeking to attract investors to Scotland and supporting Scottish companies to be more globally competitive.
- Energy Technology Partnership - an alliance of 12 independent Scottish universities engaged in world class energy research, development and demonstration.
- Scottish Renewables - the representative body of the renewable energy industry in Scotland with more than 330 member organisations.