



# Funding innovative low-carbon technologies: the NER 300 programme

NER 300 is one of the world's largest funding programmes for innovative low-carbon energy demonstration projects. Funded through the EU emissions trading system (ETS), it provides €2.1 billion in co-funding to projects demonstrating environmentally safe carbon capture and storage (CCS) and innovative renewable energy (RES) technologies on a commercial-scale within the European Union.

## About NER 300

NER 300 is funded from the sale of 300 million emission allowances from the New Entrants' Reserve (NER) set up for the third phase (2013–2020) of the EU emissions trading system. The revenues from the sales were allocated to projects selected through two calls for proposals awarded in December 2012 and in July 2014.

The cumulative NER 300 funding is €2.1 billion, which will leverage approximately €2.7 billion of private investments.

In total, 39 projects in 20 EU countries had been selected for funding. Almost 80% of the NER 300 grants went to highly innovative or even potentially game changing projects. Should all projects take off, they would increase the EU's annual renewable energy production by some 18 TWh and reduce emissions equivalent to taking 3 million cars off European roads.



## Objective

NER 300 aims to establish a demonstration programme covering the best possible RES and CCS technologies. It thus provides funding to a wide range of RES projects (bioenergy, concentrated solar power, photovoltaics, geothermal, wind, ocean and smart grids) as well as to one CCS project.

By supporting commercial-scale demonstration projects, NER 300 bridges the gap between the end of the research and development phase and the full commercialisation of its results, hence providing low-carbon technologies with financial support in a crucial stage of their development.

The European Commission and Member States are responsible for the overall implementation of the NER 300 programme. It is also supported by the European Investment Bank (EIB). The EIB evaluated project proposals, sold the NER 300 allowances and manages now the revenues, whereas Member States liaise directly with the project sponsors.

## State-of-play

Of the 39 awarded projects, 6 are already operational and delivering green energy in Europe. In 2017 3 wind projects started operation:

- An onshore wind project in Austria - *Windpark Handalm* - consisting of 13 windmills at an average altitude of 1.800 metres, will produce around 76 Megawatt hours of electricity a year, while showcasing a range of innovative technologies designed specifically for the high-altitude location.
- Two offshore wind projects in Germany - *Nordsee and Veja Mate* - both situated in the North Sea with respective capacity of 332 MW and 402 MW. Both wind parks use 6 MW wind turbines on large monopole foundations and have own substations.

## The future

Some projects have been withdrawn due to a range of reasons from unfavourable market conditions to insufficient technology readiness. The related undisbursed revenues, approximately EUR 450 million at the end of 2017, are being reinvested through two loan facilities - InnovFin Energy Demonstration Projects (EDP) and Connecting Europe Facility (CEF) Debt Instrument. InnovFin EDP can finance projects in innovative renewable energy, carbon capture and storage (CCS), smart energy systems whilst CEF Debt will finance innovative projects which enable the use of renewables in the transport. Both facilities are managed by the European Investment Bank. InnovFin EDP Advisory will also be able to provide targeted assistance to project developers to make their projects bankable and improve the quality of their funding applications.

The Commission's proposal for the revision of the EU emissions trading system after 2020 proposes an Innovation Fund to support innovative technologies in carbon capture and storage, renewable energy and energy intensive industry. Endowed with at least 450 million



emission allowances, the Innovation Fund will build on the experience of NER 300 while having more funds and a wider scope. 50 million allowances and unused funds from the NER 300 programme should already be available before 2021.