



energising
deltas



Investing in your future. Energising deltas is partly financed by the European Regional Development Fund of the European Union.

Factsheet: Energising deltas

The project 'Energising deltas' takes advantage of the important international status of the Netherlands in exporting technology and knowledge in the fields of water safety and management. Innovative and sustainable water defences strengthen and extend its strong, Dutch market position. At several locations in the provinces of Zeeland, Noord-Holland and Zuid-Holland, projects for energising deltas are being developed. Significant contributions to sustainable energy production can be achieved by constructing tidal energy and blue energy plants in existing or new water defences. However, the technical, ecological and organisational knowledge that is required for successful implementation needs improving. Energising deltas aims to reinforce, assemble and disseminate that knowledge to take advantage of existing opportunities for exporting the concept of energising deltas.

Intended goals

1. Development of tools to accomplish and market energising deltas, consisting of:
 - an impact assessment tool for optimising environmental impact and energy production in water defences;
 - a business model for governing energising deltas that is applicable in different locations and circumstances;
2. Stimulating collaboration between delta-technological parties, producers of energy-from-water applications, energy companies and governments responsible for water safety.

Partners

- Tocado, REDstack and Strukton:
defining research questions and reviewing results;
- Erasmus University Rotterdam, Deltares and ECN:
research and development based on the research questions;
- Energy Valley:
stimulating a structural collaboration between stakeholders;
- Tidal Testing Centre:
overall coordination and project management;

Project funding

The project is funded by the European Regional Development Fund (ERDF), Opportunities for West. Furthermore, the Province of Noord-Holland is co-financing Energising deltas.

Project period

The project started in February 2013 and will end in June 2015.

Market potential

- Blue energy (REDstack) and tidal energy (Tocado) can contribute at least 7% to the global energy demand;
- Scope of Dutch market: 1000 MW and 2 billion euro investments;
- Scope of world market: 2000 GW and 4000 billion euro investments.

Summary

- New, Dutch innovative product;
- Water safety and management combined with sustainable energy production:
 - tidal energy: energy from tidal flows with water turbines;
 - blue energy: energy from fresh and salt water;
- No fossil fuels, no CO₂ emissions thus supporting the EU 20-20-20 targets;
- Contributing to the Dutch renewable energy target of a 14% share of renewable energy by 2020;
- Afsluitdijk: Dutch showcase for testing and demonstrations;
- Oosterscheldekering and Brouwersdam: Dutch showcases for full-scale technological roll outs;
- Strong potential export product for other delta areas, relevant to the Horizon 2020 focal areas: blue energy growth, competitive low-carbon energy, energy efficiency and water innovation.