

North Sea Conference 2015

The New Afsluitdijk:

Example of Energising deltas



North Sea Conference 2015

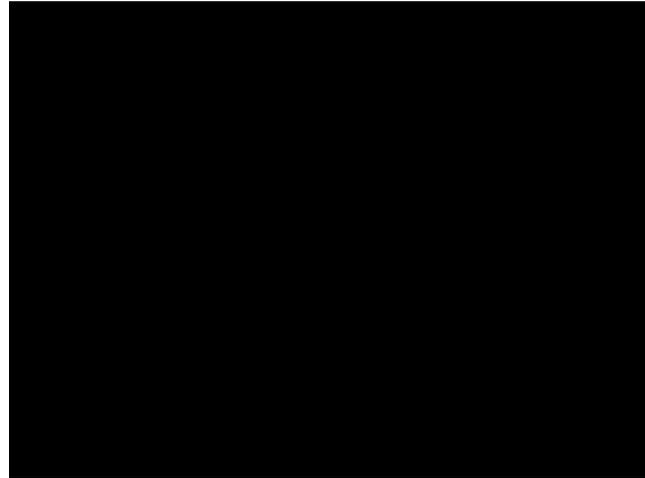


North Sea Conference 2015

- The production and installation of an array with three free flow turbines in a discharge sluice of the Afsluitdijk
- Cooperation of Tidal Testing Centre and Tocardo International



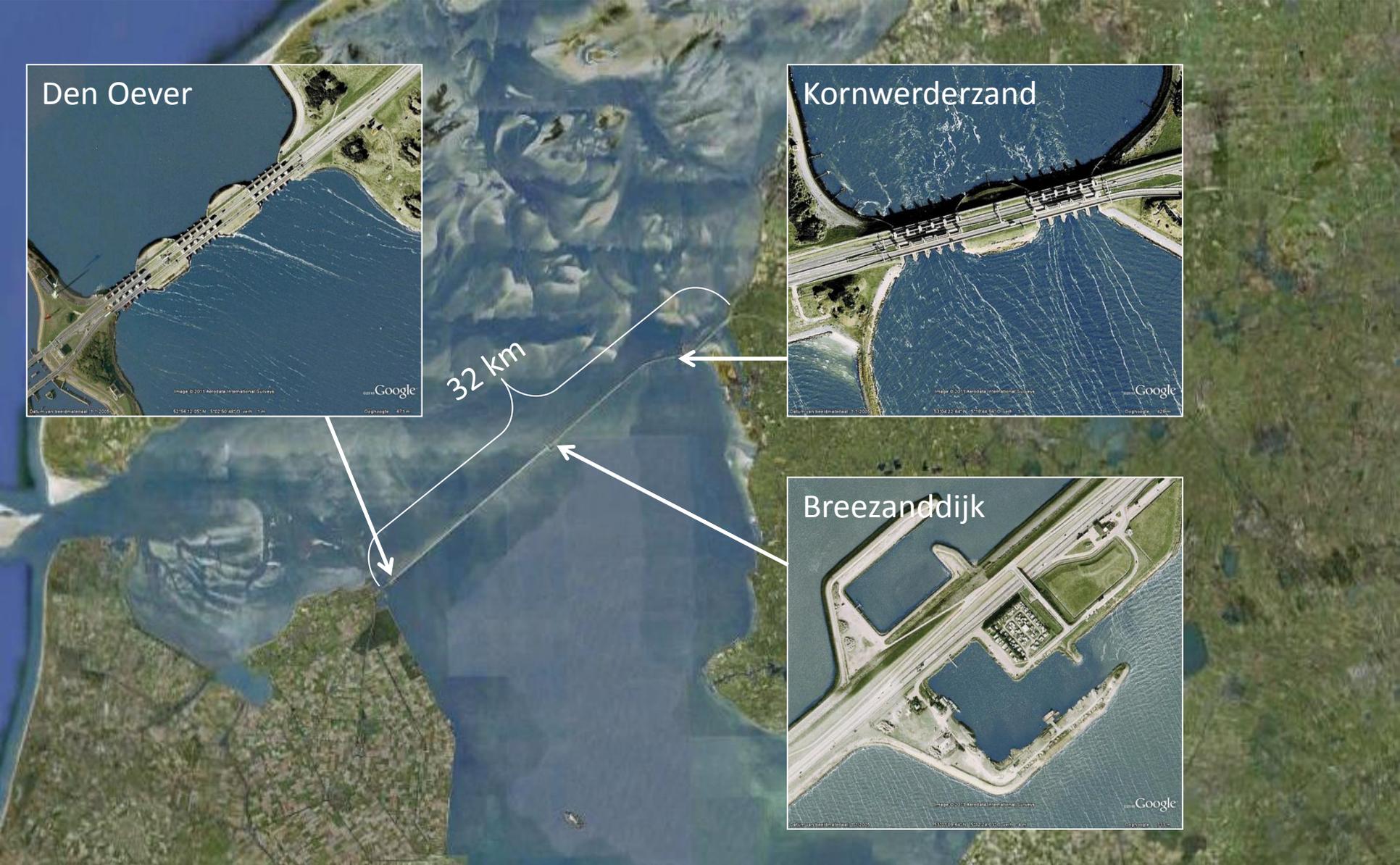
North Sea Conference 2015



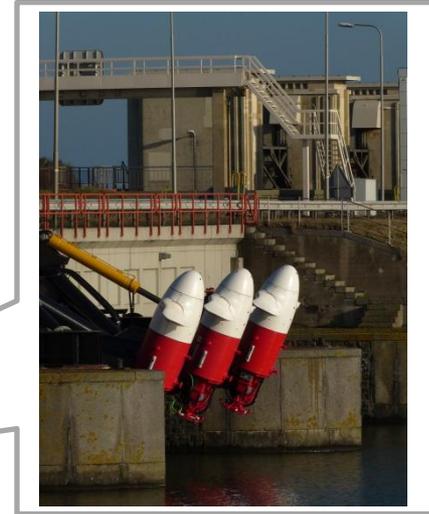
Locations for renewable energy production



32 km



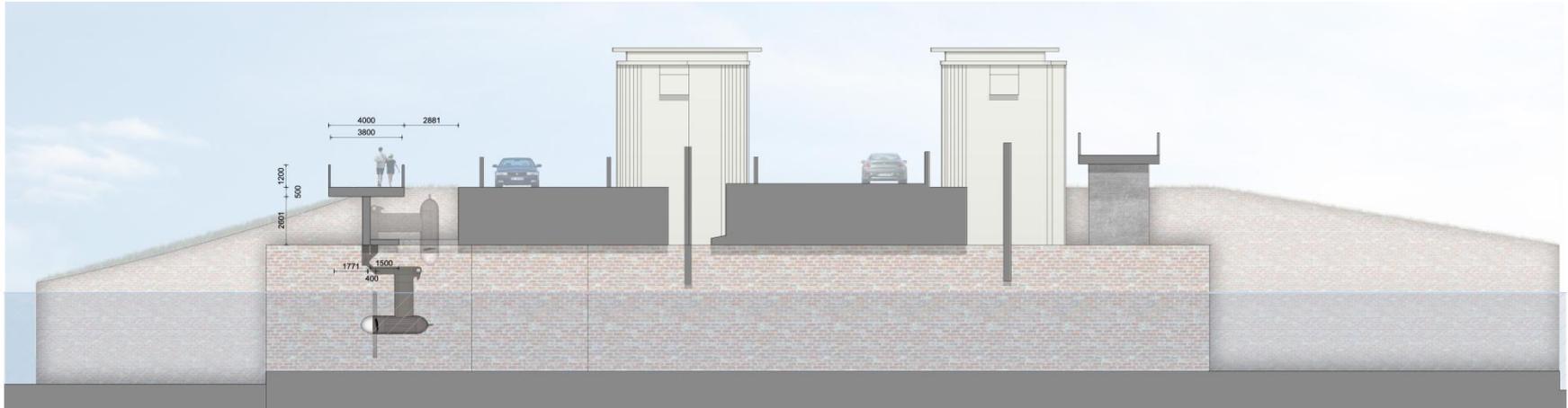
TTC (Tidal Testing Centre)



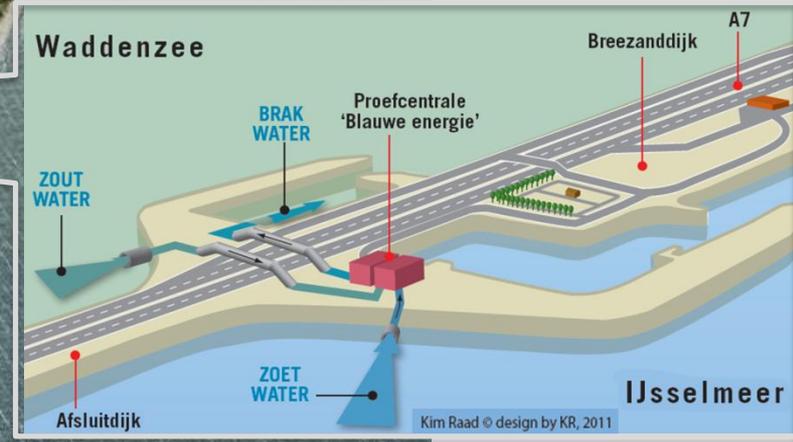
Testing in discharge sluices



Tidal energy plant 3 MW



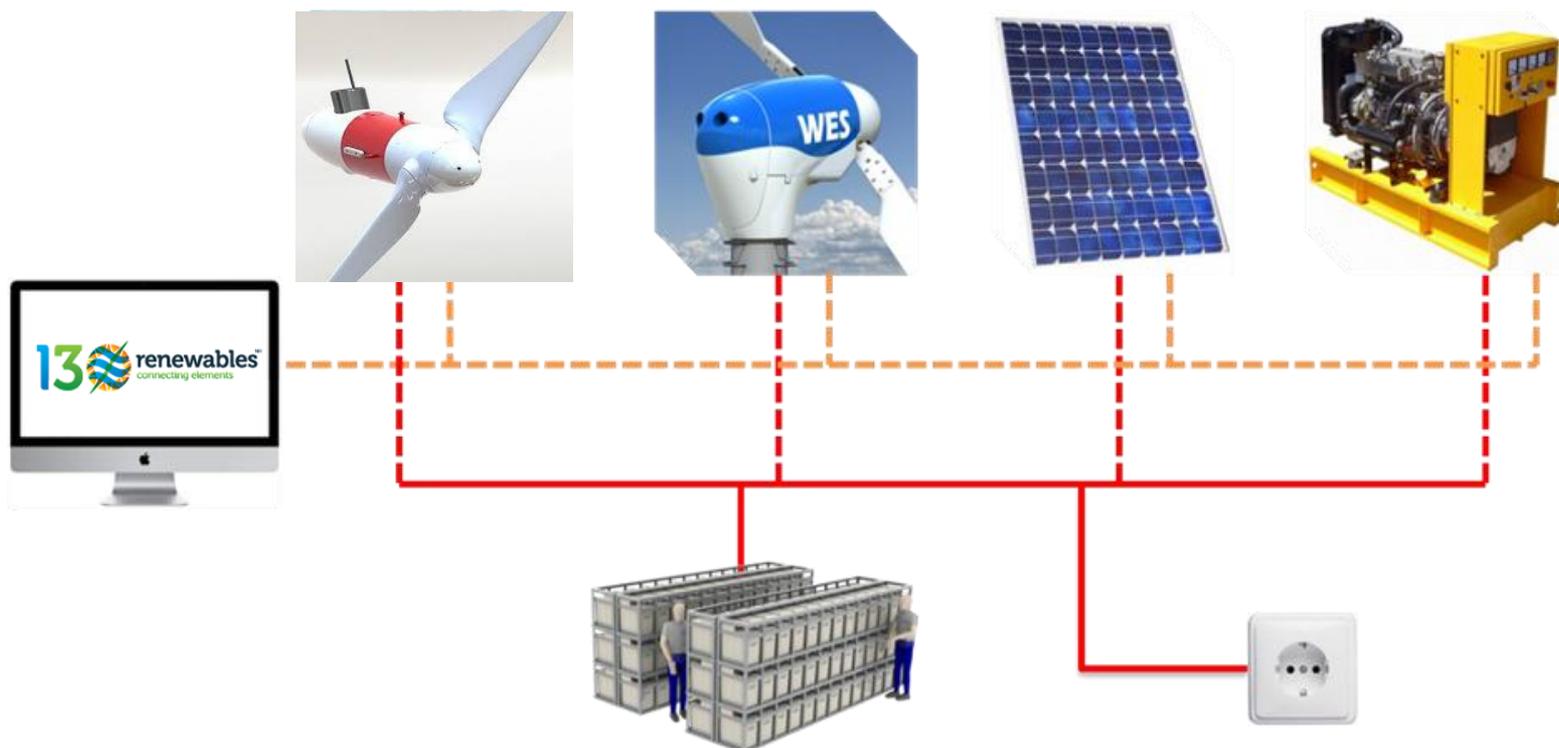
Blue energy pilot at Breezanddijk



Location Off Grid Test Centre



Off Grid Test Centre Den Oever



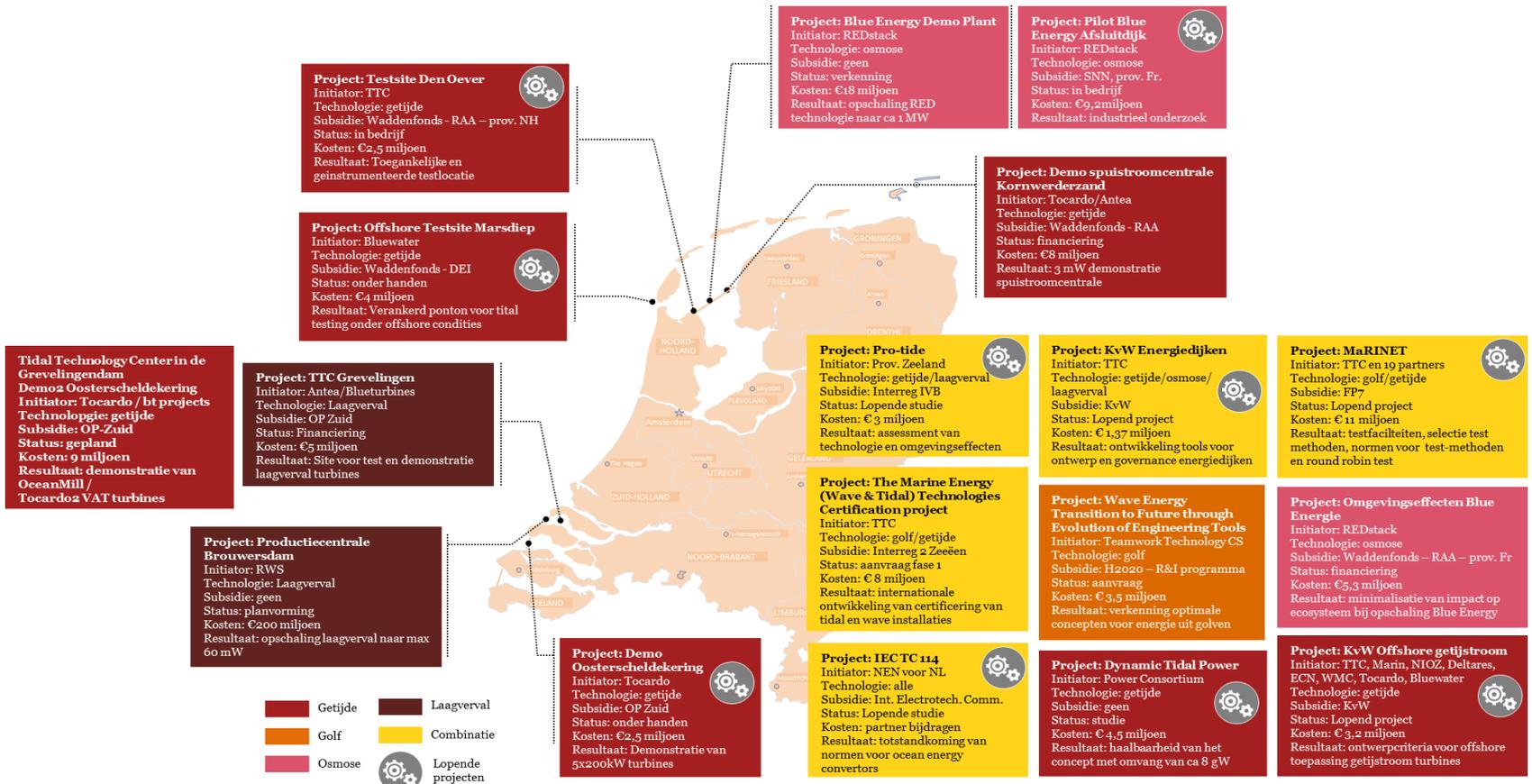
DMEC
Dutch Marine Energy Centre



Background and goal of DMEC project

Current situation in NL: a lot of different projects, studies and other initiatives

Problem: no coordination, no overall business case



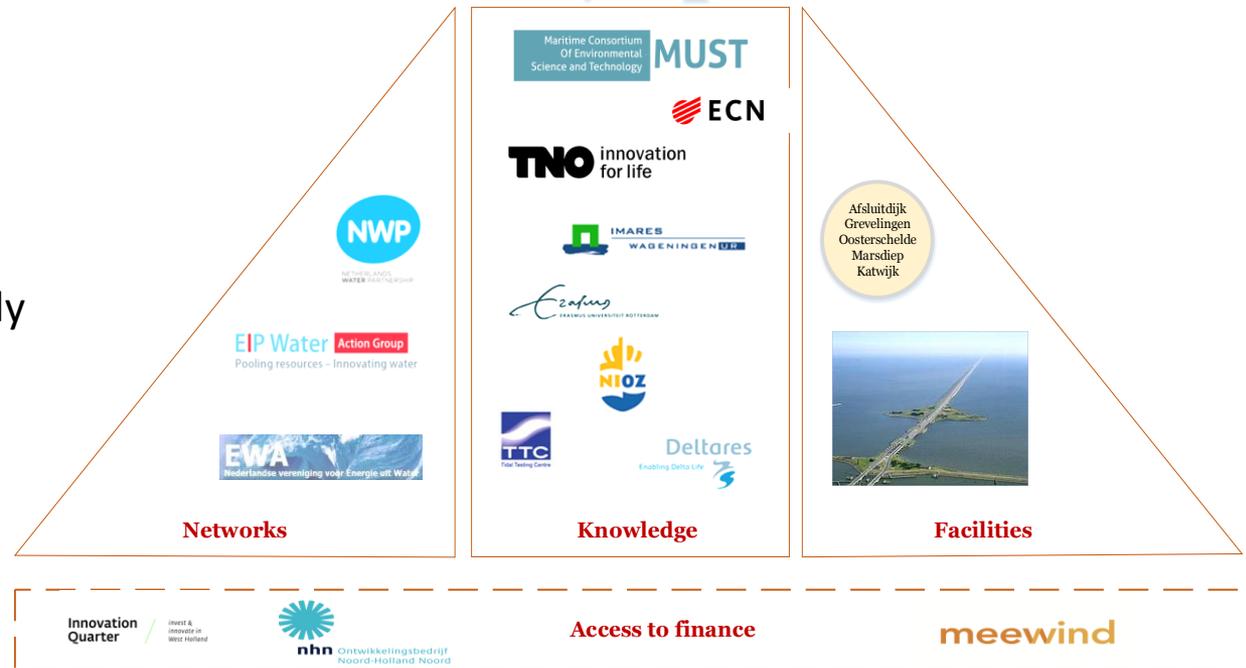
Goal DMEC

- From collaboration on project basis to structural collaboration
- From multiple points of access to one point of access (virtual organisation)
- From diffused focus to collaborative business case

Activity 1: Create a platform to facilitate structural collaboration

One point of access for:

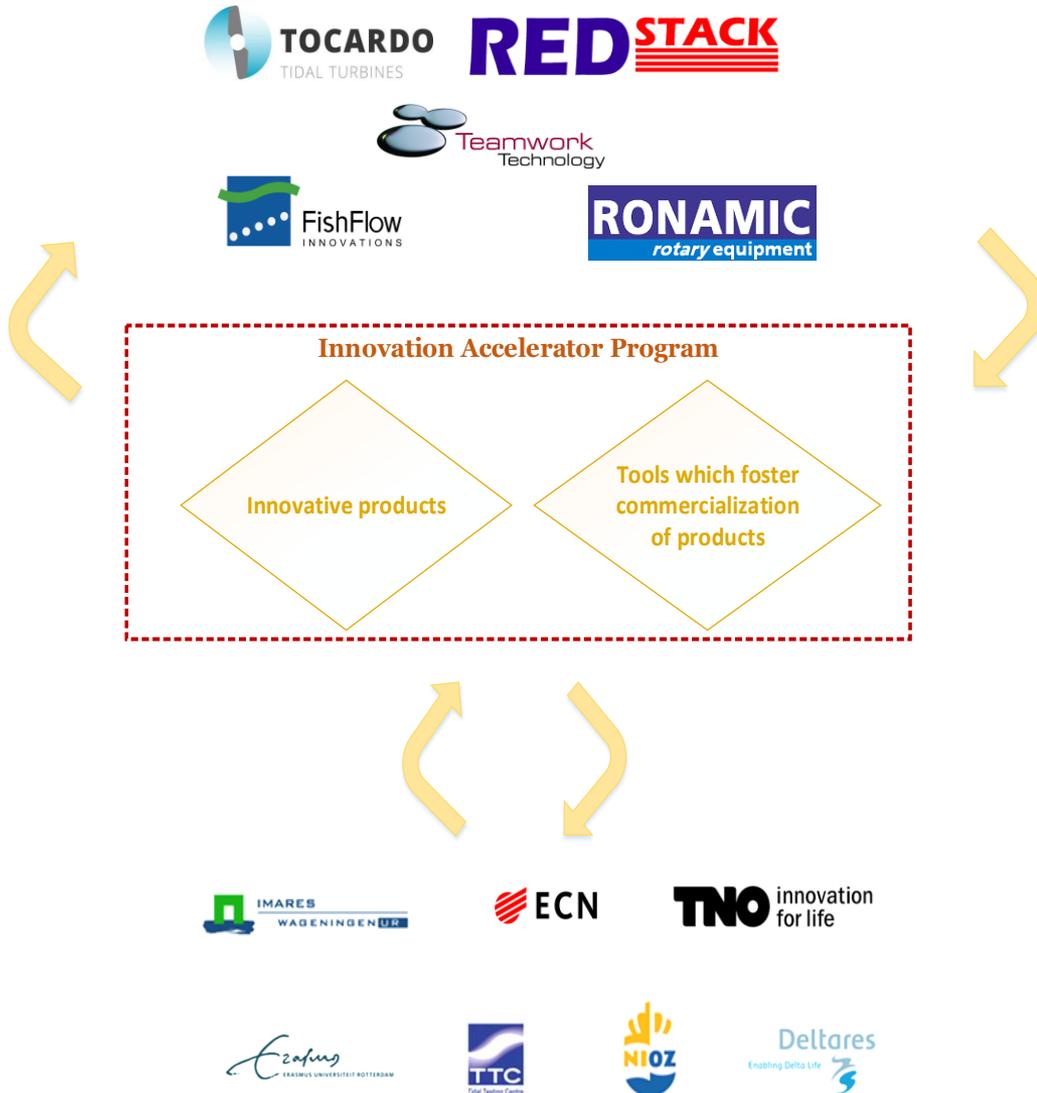
- Available networks
- Available knowledge supply
- Available NL test facilities
- New sources of finance



Results:

- Increased number of **international valuable connections** to improve knowledge exchange and facilitate market entries
- **Improved connection** between demands from companies and available **knowledge** within research institutes
- **More pilot projects** for SME's through better access to test facilities and public funds for EuW innovations
- Blueprint and plan of action for an **Ocean Energy innovation fund**

Activity 2: Execute “Innovation Accelerator Program” for product- and service development



Dutch **SMEs work together with knowledge institutes** within a demand driven development program focused on commercialization of new products and services

Results Activity 2:

6 products to be commercialised:

- Hydro-elastic turbine blades
- Filtration system blue energy
- New anti-biofouling materials
- Hydrostatic low head turbine
- Wave Energy Converter
- Fish- free flow turbine

4 tools accelerating commercialization of products:

- Hydrodynamic tools assessing near- and far field effects
- Generic operation & maintenance tool for tidal turbines
- Environment impact assessment tool
- Business model for governance Energising Delta's

Opportunity to internationalise the concept of DMEC within the North Sea Region?

1. Who are the key players in the field of ocean energy within other NSR countries?
 - **Public organisations:** knowledge institutes / research centres / universities in the ocean energy field
 - **Governmental organisations:** regions/ provinces/ municipalities
 - **Testing centers** for innovative ocean energy solutions
 - **Private organisations:** big companies / SMEs / startups with ocean energy products
2. Is there already a coordinating structure/organisation for ocean energy activities within your region/country?
3. Would you be interested in participating in a project that will develop a NSR interregional “innovation accelerator program”?
 - If yes, what would be your role?

If you are interested to collaborate with DMEC, please contact:

Paulien Kooistra: kooistra@energyvalley.nl or

Pieter Bergmeijer: pb@tidaltesting.nl