

Integration of renewable energy generation from water in dam structures

Peter Scheijgrond
Secretariat to the Action Group EWW
Makkum, 17th June 2015





to enhance European interest in the innovative crossovers between energy and water



Our Members

European Marine Energy Centre — Province of —
Provinces of South Holland, North Holland, Zeeland —
Council of Orkney — Tidal Testing Centre NL — Arcadis —
Tocardo — WavEC - IMIEU — AnteaGroup — Erasmus
University of Rotterdam — Deltares — PWC — METsupport — Marine Energies France — RED Stack —
Rabobank - IT Power DNV



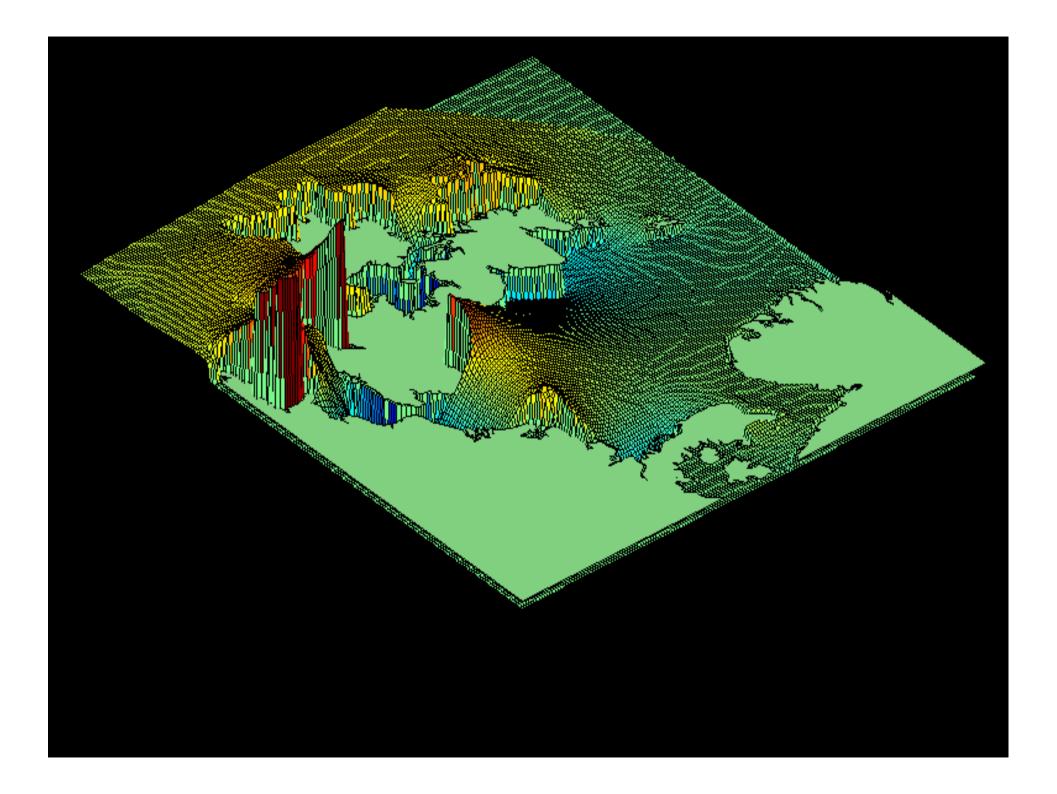
Our Action Group

- Churchill Barriers
- Tidal Lagoons Swansea
- Brouwersdam
- POWER project
- Afsluitdijk
- Wave energy



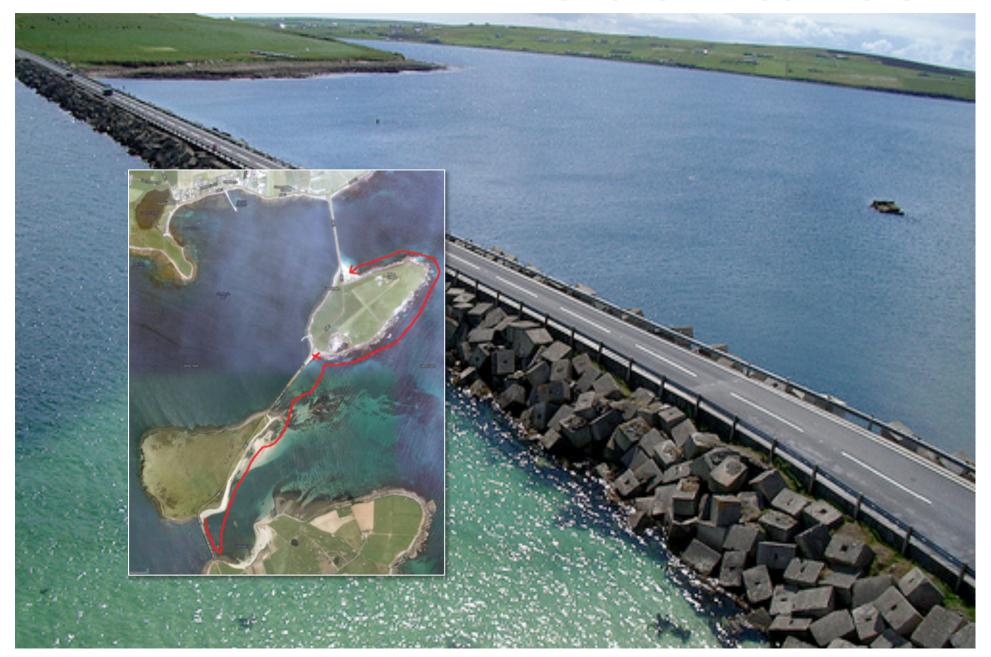
Our Challenge







Churchill barriers





Afsluitdijk





Salinity Gradient







Wave Energy @ Break water barriers

CAPTURE CHAMBER

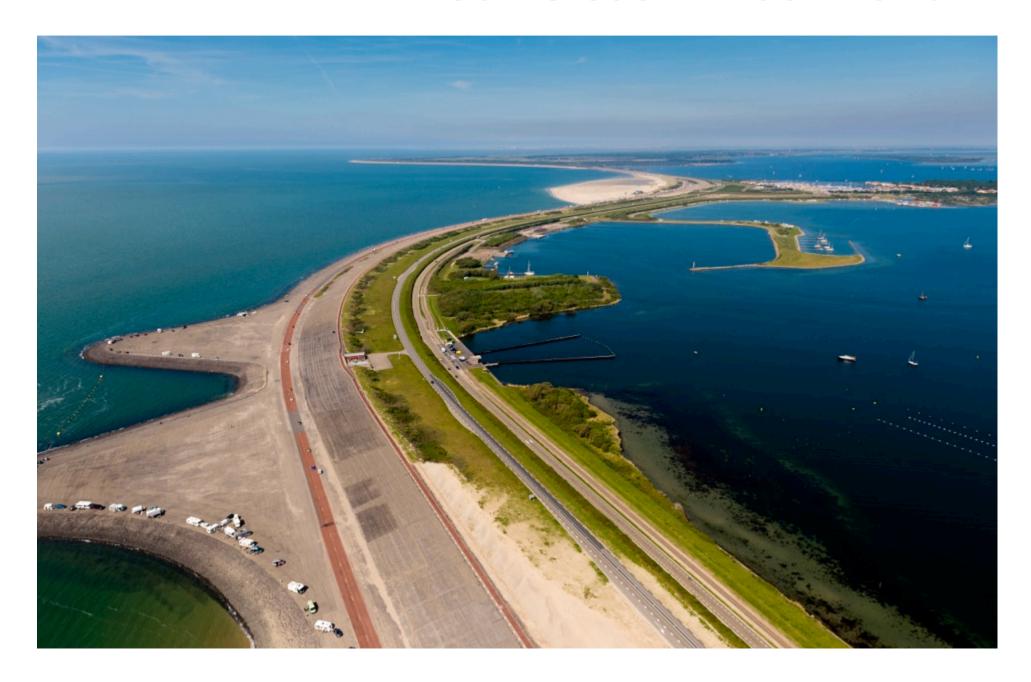
> AIR IS COMPRESSED INSIDE CHAMBER

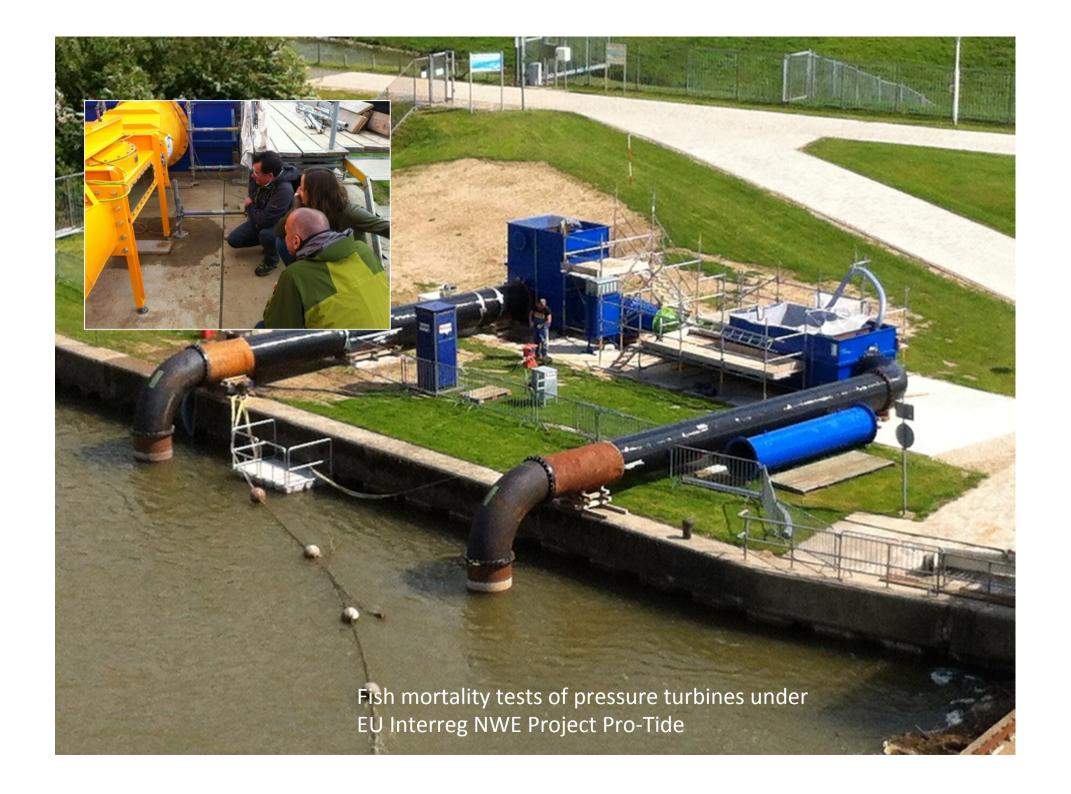


WAVES



Brouwersdam Tidal Plant







Tidal Stream Turbines







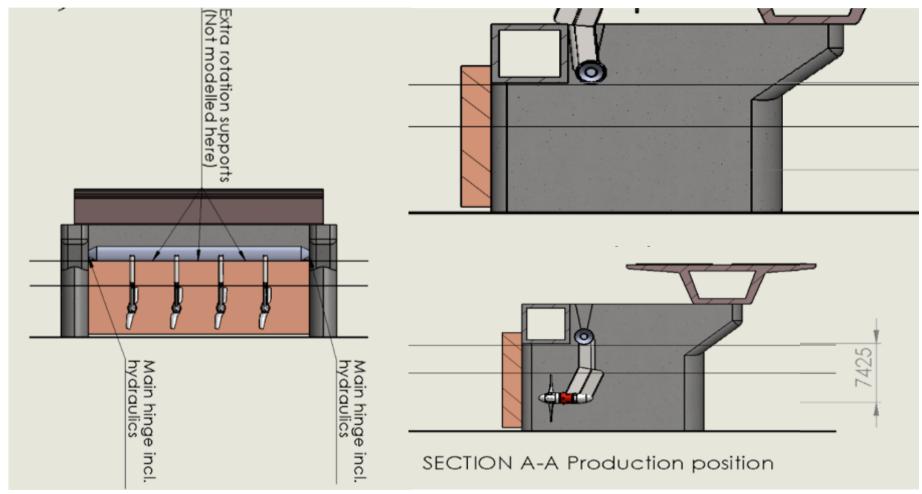




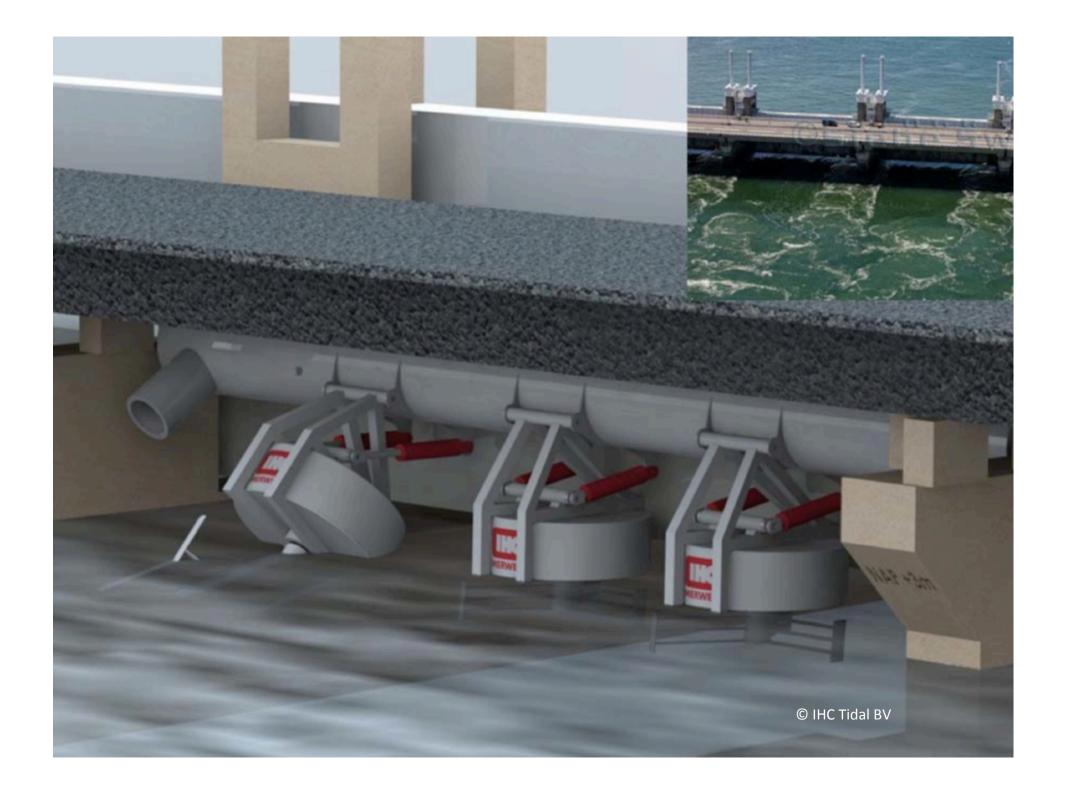
Motors for tilting (3)

Chain for vertical motion



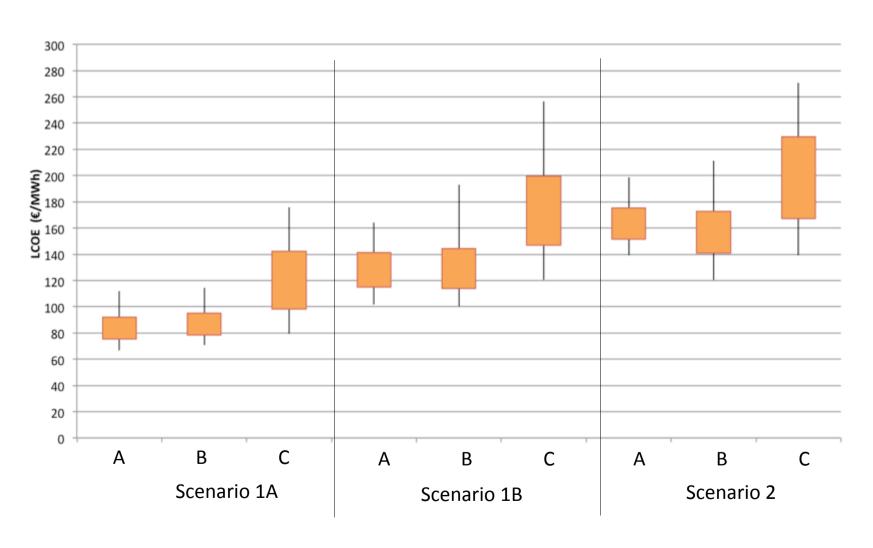


© Tocardo International BV





Cost of Energy





Actions 2014/2015

- Market place www.eip-water.eu/eww
- H2020 recommendations on Energy work programme for Ocean Energy
- Lighthouse Project ideas for "Climate action, environment, resource efficiency"
- Regulatory Barriers & Challenges
- Financing of large energy & water projects
- INTERREG 2SEAS proposal on Certification of Marine Energy Technologies