

Annual Meeting Ocean Energy Platform TU Delft

Prof. Dr. Henk Polinder

Associate Professor Electric Drive Systems

Chair Ocean Energy Platform TU Delft

Introduction

- Welcome
- Objectives:
 - Update Ocean Energy Platform
 - WECANet Initiative
 - Opportunities DMEC
 - PhD/PostDoc research @ TUDelft
 - To make significant research impact, OEP TUDelft needs industry

Agenda

- ❑ **15.15** Henk Polinder: update Ocean Energy Platform
- ❑ **15.30** Vicky Stratigaki: WECANet
- ❑ **15.45** Peter Scheijgrond: Update EU projects by DMEC
- ❑ **16.00** PhD / PostDoc research at TUDelft:
 - Faisal Wani: Generator systems for Tidal Energy
 - Merel Verbeek: Tidal turbines in a storm surge barrier
 - Xuan Tao: Heat exchangers in OTEC
 - Mamin Masturi: Gyroscopic-pendulum wave energy converter
 - George Lavidas: WAVE Resource for Electrical Production
- ❑ **16.45** Jan Schiereck: Funding opportunities
- ❑ **16.50** Discussion and conclusion
- ❑ **17.00** Drinks

TU Delft in a glance

- ✓ TU Delft is renowned in Water and Offshore Energy research (2nd position globally in Offshore Wind).
- ✓ TU Delft builds on an extensive network of partners in the Water and Offshore field.



Ocean Energy Platform TU Delft

- ✓ Interdisciplinary Ocean Energy research by researchers from different Faculties.
- ✓ Collaboration of research, education and industrial projects.
- ✓ April 2015: Kick-off meeting presenting Ocean Energy Platform.
- ✓ March 2017: Annual Update with industrial pitches from external partners.

Ocean Energy Platform Board



Prof. Dr. Henk Polinder
Wave energy
Chairman



Prof. Dr. Kornelis Blok
Ocean energies



Prof. Dr. Axelle Vire
Floating Wind



Dr. George Lavidas
Wave energy



Dr. Antonio Jarquin Laguna
Tidal energy



Dr. Adam Candy
Fluid mechanics



Mr. Berend Jan Kleute
Thermal gradient (OTEC)



Ms. Saraf Nawar
Energy Club Board



Mrs. Lily Li
Senior Project Manager (DEI)

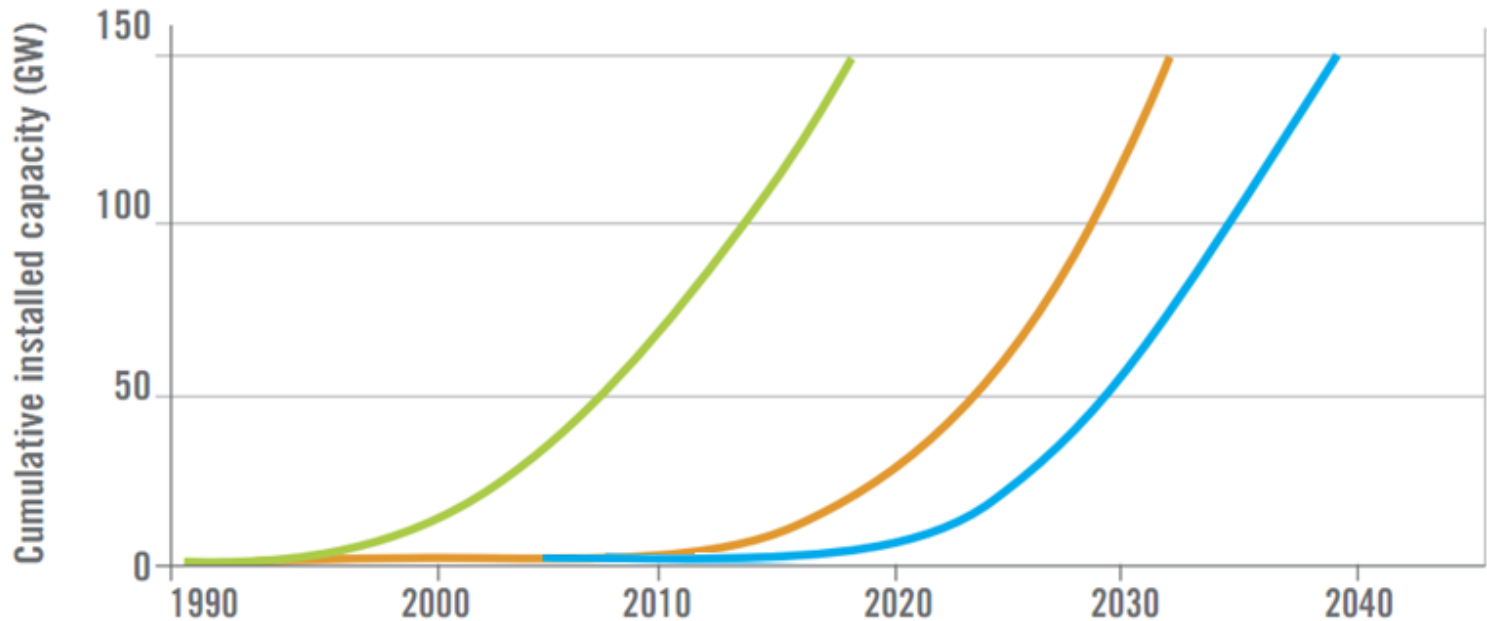


Mrs. Monique Gazendam
Secretariat

Ocean Energy projected growth

- Offshore wind 2016: 0.055 €/kWh

— Onshore wind
— Offshore wind
— Ocean energy



* Source: European Ocean Energy Association

Vision and mission

- Increase awareness of the untapped potential from ocean energies.
- Develop ocean energy research @TU Delft.
- Enhance ocean energy education with MSc & PhD programmes.
- International collaboration on education, research and valorization.
- **Become a world leading institute in ocean energy research and education.**
- Participation in projects, with our interdisciplinary expertise.
- Provide tangible research solutions with industrial applicability.
- Support innovation of interested industry partners in ocean energies.

Activities

>25 TU Delft lunch lectures up to now:

- On average +60 people attend
- +200 online views via colleggerama
- Speakers are researchers and industry experts, e.g. Tocado, NIOZ, SBM Offshore, Marin and Deltares

Presentations at Offshore Energy events like:

- Offshore Energy Conference
- Wuhan University of Technology
- PhD@Sea symposium in Delft



Course Ocean Energy Technologies

- Gives an overview of the different technologies and the status of current development

