WavEC Annual Seminar 2013

POWERING THE FUTURE

Portugal and Holland join forces in Offshore Renewables
25th November 2013
Electricity Museum - Lisbon

OTEO Project: Offshore Renewable Energy competitiveness and entrepreneurship

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AGENDA

1. OTEO Project
2. Working Group – Overview
3. Brief Conclusions for Competitiveness and Entrepreneurship
01.

OTEIO PROJECT
The OTEO project - “Offshore Energy Technology Observatory” establishes as a strategy the Portuguese and the international knowledge of offshore energy technologies as well as enabling technologies in order to increase the competitiveness and the entrepreneurship in this sector.

AIMS

• Create a network of Portuguese and international experienced experts in offshore energy projects by monitoring the activity carried out in the main – European Research Centres;

• Identify opportunities and threats, strengths and weaknesses of offshore energy technologies from concept to deployment;

• Analyze offshore energy technologies investment projects.

“This project aims to help Portugal to become a country that Knows how to use the energetic potential of its coast and into a relevant manufacturer and exporter of core and support technologies”.
MAIN OBJECTIVES

- Directory of National Entities (Base) with identifying competencies for the development of offshore energy recovery projects.

- Technological "Roadmap" that identifies actions, their schedules and costs, to develop a national offshore renewable energy sector that maximizes the national value chain.

- Events organization and an international conference on the theme: “OFFSHORE RENEWABLE ENERGY: What solutions to develop in Portugal?”

- Book Publication on Offshore Energy Conversion Technologies to disclose internationally.
02.

WORKING GROUP - OVERVIEW
EVENTS

• 2012

  • INTERNATIONAL CONFERENCE “OFFSHORE RENEWABLE ENERGY: What solutions to develop in Portugal?” (Oporto, 10th of May)
  • FÓRUM DO MAR 2012 – EXPONOR
  • Ocean Energy Conference 2012 in Brussels
  • Wavec Seminar 2012: Blue Economy—Offshore Platforms and Opportunities

• 2013

  • Workshop O&M of Offshore Energy Parks in Portugal
  • Workshop OTEO – Offshore Renewable Energy
Main European projects of investment in the offshore renewable energy,
- EMEC (European Marine Energy Centre),
- Narec (National Renewable Energy Centre)
- DanWEC (Danish Wave Energy Centre)
- Aalborg University (Hanstholm).
SURVEYS

- 67 companies involved
- > 300 invitations to participate in the project

Geographic Distribution Companies involved (NUTS II)

Type of companies participating in OTEO Project

- Tecnólogo
- Promotor de Projetos Tecnológicos
- Outro (Entidades Reguladoras, Consultores Ambientais, Escolas de Formação, etc.)
- Centro de I&D
- Construção e Reparação Naval
- Proprietários de Embarcações e Transporte Marítimo
- Portos
- Fabricação/Distribuição de Equipamento Eléctrico, Informático e Electrónico
- Fabricação de Cordoaria
- Indústria Metalúrgica/Fabricação de produtos Metálicos, Máquinas e Equipamentos N.E.
- Fabricação de Cabos Eléctricos para Transporte de Electricidade
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REPORTS

• State-of-the-art of offshore energies
• Technological Report (Under review)
• Market Study (Under review)
• Technological Roadmap (Under review)
BOOK

Future Perspectives for Portugal”

- Preface
- Introduction
- Offshore Renewable Energy
- State-of-the-art of the renewable energy technologies
- Enabling technologies for offshore renewable energy
- Market development
- Offshore Renewable Energy Supply Chain
- Portuguese productive capacity: Current Situation and Prospects
- Road Map
- Conclusions

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03.

BRIEF CONCLUSIONS FOR COMPETITIVENESS AND ENTREPRENEURSHIP
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EMAM – Estrutura de Missão para a Extensão da Plataforma Continental

EEZ Exclusive Economic Zone
Portugal Continental
Portugal (327,667 Km2)
Azores (953,633 km2)
Madeira (446,108 km2)

Present = 1,727,408 Km2
Future = 3,877,408 Km2
Areas with significant opportunities for the technologies and support services:

- Monitoring;
- Characterization of the energy resource;
- Selection and characterization of sites for installation of marine energy parks;
- Support for Operation and Maintenance of marine parks, including:
  - Maritime Security;
  - Systems and methods for inspection;
  - Corrosion, cathodic protection;
  - Electrical Interconnection;
  - Integrated systems to support O & M
- Numerical and experimental simulation;
- Control devices and parks in view of the efficiency and network stability, including storage systems.
OPPORTUNITIES AND CHALLENGES

Generic Challenges:

• Strengthen cooperation between R&D centres, creating dimension to be relevant at the level of the European Commission and major European companies;

• Strengthen mechanisms and innovation logic within corporate R & D, for example, granting these institutions people with training in innovation management;

• Strengthen mechanisms for "marketing" and "marketing" activities in R & D.

• Strengthen mechanisms for mutual consultation between R & D organizations and companies to improve communication and awareness between both;

Specific Challenges:

• Ensure an adequate level of funding for activities at sea and the corresponding infrastructure support.
How to Promote International investment in Portugal for offshore renewable energy sector from utilities, developers, operators and investors?

- Simplified licensing in particularly for Demonstration projects;
- Stability of Public Policy;
- Valuing our natural conditions (Resource, Ports and Electrical Grid, Proximity to the coast);
- Ensuring data confidentiality;
- Create incentives for R&D;
- Reinforce Infrastructures;
- Clear definition for tariffs and time horizon;
- Leverage existing know-how in various sectors of national value chain, providing developers an integrated solution, thus promoting the development of a national cluster (Eg. onshore wind sector is acquired know-how that can be transferred to the offshore sector).
THANK YOU

Website:
http://oteo.inegi.up.pt/

Help us to promote and disclose your company in offshore renewable energy sector