Qualification of innovative floating substructures for 10MW wind turbines and water depths greater than 50m.

Fact Sheet

Project Information

LIFES 50plus

Grant agreement ID: 640741

Project website

Funded under
H2020-EU.3.3.2.4.
H2020-EU.3.3.2.2.
H2020-EU.3.3.2.1.

Start date
End date
1 June 2015
30 April 2019

Overall budget
€ 7 274 837,50

EU contribution
€ 7 274 837,50

Coordinated by
SINTEF OCEAN AS
Norway

Objective

The focus of the project will be on floating wind turbines installed at water depths from 50m to about 200m. The consortium partners have chosen to focus on large wind turbines (in the region of 10MW), which are seen as the most effective way of reducing the Levelized Cost of Energy (LCOE). The objective of the proposed project is two-fold: 1. Optimize and qualify, to a TRL5 level, two (2) substructure concepts for 10MW turbines. The chosen concepts will be taken from an existing list of four (4) TRL>4 candidates currently supporting turbines in the region of 5MW. The selection of the two concepts will be made based on technical, economical, and industrial criteria. An existing reference 10MW wind turbine design will be used throughout the project. 2. More generally, develop a streamlined and KPI-based methodology for the design and qualification process, focusing on technical, economical, and industrial aspects. This methodology will be supported by existing numerical tools, and...
aspects. This methodology will be supported by existing numerical tools, and targeted development and experimental work. It is expected that resulting guidelines/recommended practices will facilitate innovation and competition in the industry, reduce risks, and indirectly this time, contribute to a lower LCOE. End users for the project deliverables will be developers, designers and manufacturers, but also decision makers who need to evaluate a concept based on given constraints. The proposed project is expected to have a broad impact since it is not led by single group of existing business partners, focusing on one concept only. On the contrary, it will involve a strong consortium reflecting the value chain for offshore wind turbines: researchers, designers, classification societies, manufacturers, utilities. This will ensure that the project’s outcomes suit the concrete requirements imposed by end-users.

Programme(s)

Topic(s)

Call for proposal

H2020-LCE-2014-1

Funding Scheme

RIA - Research and Innovation action

Coordinator

SINTEF OCEAN AS

Address

Otto Nielsens Veg 10
7052 Trondheim
Norway

Activity type

Other

EU contribution

€ 1 529 594,14

Website

Contact the organisation

Participants (13)

DANMARKS TEKNISKE UNIVERSITET

Denmark

EU contribution
<table>
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<th>Organisation</th>
<th>Country</th>
<th>EU Contribution</th>
<th>Address</th>
<th>Activity type</th>
<th>Website</th>
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<td>OFFSHORE RENEWABLE ENERGY CATAPULT</td>
<td>United Kingdom</td>
<td>€ 416 549,28</td>
<td>Offshore House Albert Street, NE24 1LZ Blyth, Northumberland</td>
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<td>POLITECNICO DI MILANO</td>
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<td>€ 423 621,23</td>
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<td>FUNDACION TECNALIA RESEARCH &amp; INNOVATION</td>
<td>Spain</td>
<td>€ 539 511,57</td>
<td>Parque Cientifico Y Tecnologico De Gipuzkoa, Paseo Mikeletegi 2, 20009 Donostia/san Sebastian (Gipuzkoa)</td>
<td>Research Organisations</td>
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Spain
EU contribution
€ 315 135.35
Address
C/ Jardins De Les Dones De Negre 1
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Activity type
Research Organisations
Website
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UNIVERSITAET STUTTGART
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IBERDROLA INGENIERIA Y CONSTRUCCION SAU
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RAMBOLL MANAGEMENT CONSULTING GMBH
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€ 0
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Website
Contact the organisation

GERMANISCHER LLOYD INDUSTRIAL SERVICES GMBH
Germany
EU contribution
€ 226 689,95
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Website
Contact the organisation

IDEOL
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EU contribution
€ 480 000
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Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

RAMBOLL DEUTSCHLAND GMBH
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Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
NAUTILUS FLOATING SOLUTIONS SOCIEDAD LIMITADA

Spain
EU contribution
€ 28 702,91

Address
Cl Bizkaiko Teknologi
Elkartegia 700
48160 Derio Bizkaia

Activity type
Private for-profit entities
(excluding Higher or
Secondary Education
Establishments)

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