



*JA.3. Report on shared knowledge  
platforms for the ocean energy sector*

*February 2018*



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## 1. INTRODUCTION

The Ocean Energy European Research Area Network (OCEANERA-NET) is an EU project funded under the 7th Framework Programme and constitutes a collaboration between 15 national and regional funding organisations from 8 EU countries, coordinated by Scottish Enterprise, the regional Economic Development Agency for Lowlands Scotland.

OCEANERA-NET has been set up to facilitate coordination of research in the ocean energy sector across Europe through delivering a series of collaborative programmes including joint transnational calls and other complementary joint activities.

In the frame of Joint Activity 3 (JA.3), the OCEANERA-NET consortium has been delivering a range of activities aimed at engaging and supporting small and medium-sized enterprises (SMEs) with the primary objective of increased knowledge sharing to the benefit of the entire industry, thus accelerating the sector's pace to industrial roll-out.

This report is pursuant with the overall OCEANERA-NET aim of engaging with SMEs and is delivered in conjunction with the array of joint activities that have been delivered within the project, including, for JA.3, a Supply Chain Report and online business webinars.

An important factor for the development and commercialisation of the ocean energy sector is to identify, share and utilise learning, knowledge and data. Knowledge portals are important facets of this as discussed during the OCEANERA-NET "Ocean Energy: Turning Lessons into Constructive Actions" workshop held at PLOCAN (July 2017) where delegates confirmed that a summary report would be beneficial.

This report provides a high-level review of existing knowledge platforms that can be accessed and used by SMEs operating in the sector to keep up to date with technology / funding / issues and to make connections across this and other sectors. ***A "knowledge portal" is considered to be a web-based, single point of access to relevant knowledge, that integrates sector-specific information, policy, case studies, directories, tools, and other knowledge-based information.***

This report was compiled by the Knowledge Transfer Network Ltd, third party to OCEANERA-NET consortium partner Innovate UK.

## 2. OBJECTIVES

This report is not a complete list of all portals, but a summarised version of information of value to the ocean energy sector, and particularly for those SMEs with which the OCEANERA-NET project has engaged.

Fundamentally, the objective is to better understand what sort of platforms there are for knowledge sharing and how “relevant” they are, particularly for ocean energy SMEs that want to grow their business.

***N.B. the listing of knowledge portals is provided in good faith and is not intended as a recommendation to use the sites, nor as a verification of the information contained therein. Anyone using these links should use their own judgment as to the usefulness and veracity of the knowledge and information provided.***

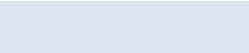
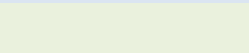


## 3. METHODOLOGY

The information contained within the ‘Knowledge Portal Summary’ section was derived via desk-top searches of keywords as relevant to the ocean energy sector and by collation of portals that were identified and used within the delivery of the project and related reports.

The summary includes independent impartial sources of knowledge and information, rather than those intended for commercial purposes.

Listings include a range of portals, most of which are directly ocean-energy specific, but also includes those that contain information that is ‘indirectly’ useful to business development (i.e. focussed on finance, sustainability).

## 4. KNOWLEDGE PORTAL SUMMARY

	Ocean energy focussed
	Sustainability focussed
	Finance focussed
	Innovation focussed

**Platform: Breakthrough Energy**

**Organisation: Breakthrough Energy Coalition**

**Description:** *“The goal of Breakthrough Energy is to make sure that everyone on the planet can enjoy a good standard of living, including basic electricity, healthy food, comfortable buildings, and convenient transportation, without contributing to climate change. Our strategy links cutting-edge, government-funded research to patient, risk-tolerant capital so that more clean energy innovations get to market faster. The Breakthrough Energy Coalition created Breakthrough Energy Ventures, an investor-led fund, to build the new, cutting-edge companies that will deliver on that promise.*

**SME content:** Opportunities for investment across a range of renewables.

<http://www.b-t.energy/landscape/>

**Platform: California Energy Commission**

**Organisation: (as above)**

**Description:** *“...the California Energy Commission is committed to reducing energy costs and environmental impacts of energy use - such as greenhouse gas emissions - while ensuring a safe, resilient, and reliable supply of energy.”*

**SME content:** Links do not appear to be updated regularly, but may be useful in terms of general issues and links to other organisations.

<http://www.energy.ca.gov/oceanenergy/>

**Platform: Marine Data Exchange / Oceanenergy**

**Organisation: Crown Estate**

**Description:** *“This website provides access to survey data and reports collected by our offshore renewable and marine aggregates customers.”*

**SME content:** Data and surveys from the UK.

<http://www.marinedataexchange.co.uk>

<https://www.thecrownestate.co.uk/energy-minerals-and-infrastructure/wave-and-tidal/>

**Platform: Cluster Collaboration Platform**

**Organisation: European Commission**

**Description:** *“The European Cluster Collaboration Platform provides networking and information support for clusters and their members aiming to improve their performance and increase their competitiveness through trans-national and international cooperation.”*

**SME content:** High level links and information re: possible networking opportunities.

<https://www.clustercollaboration.eu>

**Platform: Design and Optimisation Tool for Ocean Arrays**

**Organisation:** DTOcean / SETIS projects

**Description:** *“Optimal Design Tools for Ocean Energy Arrays aims at accelerating the industrial development of ocean energy power generation knowledge”.*

**SME content:** Technical tools

<http://www.dtocean.eu/DTOcean-project>

<https://setis.ec.europa.eu/dt-ocean/>

**Platform: European Marine Energy Centre**

**Organisation:** EMEC

**Description:** *“The European Marine Energy Centre (EMEC) Ltd is the first and only centre of its kind in the world to provide developers of both wave and tidal energy converters – technologies that generate electricity by harnessing the power of waves and tidal streams – with purpose-built, accredited open-sea testing facilities.”*

**SME content:** Links to research, standards, live data.

<http://www.emec.org.uk/research/industry-working-groups/>

**Platform: EMODNet**

**Organisation:** European Marine Observation and Data Network

**Description:** *“The European Marine Observation and Data Network (EMODnet) consists of more than 150 organisations assembling marine data, products and metadata to make these fragmented resources more available to public and private users relying on quality-assured, standardised and harmonised marine data which are interoperable and free of restrictions on use. EMODnet is currently in its second development phase with the target to be fully deployed by 2020.”*

**SME content:** availability of data portals.

<http://www.emodnet.eu/portals>

**Platform: ESMAP**

**Organisation:** Energy Sector Management Assistance Program

**Description:** *“ESMAP is a partnership between the World Bank Group and 17 partners to help low and middle-income countries reduce poverty and boost growth, through environmentally sustainable energy solutions. Situated within the World Bank, ESMAP influences billions in loans for development projects, leverages public and private financing, and shapes global policy.*

**SME content:** some content on financial mechanisms for Clean Energy in Small Island Developing States that may be relevant.

<https://www.esmap.org/node/71186>

**Platform: EU Blue Growth**

**Organisation: European Commission**

**Description:** *Section within EU website on ‘Blue Growth’ including ocean energy. Outlines the sector in Europe, its importance and useful links across all aspects of ‘blue growth’.*

**SME content:** Studies, research, links

[https://ec.europa.eu/blue\\_growth](https://ec.europa.eu/blue_growth)

<https://ec.europa.eu/maritimeaffairs/policy>

**Platform: IRENA**

**Organisation: International Renewable Energies Association.**

**Description:** *“The International Renewable Energy Agency (IRENA) is an intergovernmental organisation that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international cooperation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy in the pursuit of sustainable development, energy access, energy security and low-carbon economic growth and prosperity.”*

**SME content:** Ocean energy section with reports on patents, technologies, deployment.

<http://www.irena.org/aboutirena>

**Platform: ITU**

**Organisation: United Nations**

**Description:** *“ITU is the United Nations specialized agency for information and communication technologies – ICTs. We allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.”*

**SME content:** Includes access to TU MARS - free of charge, online access and retrieval system that allows users to consult the information currently registered in the ITU’s maritime database system.

<https://www.itu.int/en/ITU-R/terrestrial/mars/Pages/default.aspx>

**Platform: National Marine Plan Interactive**

**Organisation: Marine Scotland**

**Description:** *“interactive mapping tool is to assist in the development and implementation of Scotland’s National Marine Plan (NMP) by Marine Scotland”.*

**SME content:**

<https://marinescotland.atkinsgeospatial.com/nmpi>

**Platform: MEDIN**

**Organisation: Marine Environmental Data and Information Network**

**Description:** “MEDIN is a partnership of UK organisations committed to improving access to marine data. Our partners are both public and private sector. “

**SME content:** UK marine data.

<http://www.oceannet.org>

<http://portal.oceannet.org/portal/start.php>

**Platform: Ocean Energy Europe**

**Organisation: Ocean Energy Europe**

**Description:** “Ocean Energy Europe is the largest network of ocean energy professionals in the world. Over 120 organisations, including Europe’s leading utilities, industrialists and research institutes, trust OEE to represent the interests of Europe’s ocean energy sector.”

**SME content:** Industry news, events, policy, newsletter.

<https://www.oceanenergy-europe.eu/policy-topics/>

**Platform: Ireland Ocean Energy Expertise / Ireland's Marine Renewable Energy Atlas**

**Organisation: Sustainable Energy Authority Ireland**

**Description:** “Your guide to marine renewable energy development in Ireland.”

**SME content:** Searchable information across all ocean energy / marine related sectors in Ireland.

<http://www.oceanenergyireland.com>

<http://atlas.marine.ie/OceanEnergy.html#!?c=53.9043:-15.9192:6>

**Platform: OES**

**Organisation: Ocean Energy Systems**

**Description:** “....brings together countries to advance research, development and demonstration of conversion technologies to harness energy from all forms of ocean renewable resources, such as tides, waves, currents, temperature gradient (ocean thermal energy conversion and submarine geothermal energy) and salinity gradient for electricity generation, as well as for other uses, such as desalination, through international cooperation and information exchange.

**SME content:** International information and perspectives on the sector within 25 countries worldwide.

<https://www.ocean-energy-systems.org>



**Platform: OPENiSME**

**Organisation:** EC funded project

**Description:** *“OPENISME is a project co-funded by the CIP Programme of the European Union (Grant Agreement no. 621121), designed to help unlock the innovation capacity for smaller firms that aspire to grow, through the facilitation of new “Open Innovation” partnerships. OPENISME will primarily focus on partnerships between SMEs and research institutions which are able to contribute novel resources, expertise or insights, as this represents a massive yet underexploited opportunity.”*

**SME content:** Open innovation platform.

<http://www.openisme.eu>

**Platform: Wave & Tidal Knowledge Network**

**Organisation:** ORE Catapult

**Description:** *“The Wave & Tidal Knowledge Network facilitates the exchange of data and knowledge across the wave and tidal energy technologies industry, supporting researchers and developers from around the world.”*

**SME content:** Provides information and reports on technology, project development, data-sets, etc.

<http://www.waveandtidalknowledgenetwork.com>

**Platform: OTEC News**

**Organisation:** OTEC Foundation

**Description:** *“Otecnews.org brings the latest news, project developments, and events around Ocean Thermal Energy Conversion (OTEC) and related subjects, such as ocean engineering, mariculture, power infrastructure, environmental impact and global climate change. The purpose of the OTEC foundation with the OTEC news website is to centralize and organize the current scattered information on OTEC, educate the public and raise global awareness by providing factual OTEC information and news, and to make sure that OTEC development is accelerated by bringing all the different parties together. Building a support base among politicians, government administrators, media pundits and industry experts is crucial for OTEC to cross the gap to full commercial deployment.*

**SME content:** News and events about all things OTEC-related.

<http://www.otecnews.org/about/>

**Platform: SOWFIA**

**Organisation: SOWFIA Consortium**

**Description:** *“The SOWFIA project aims to achieve the sharing and consolidation of pan-European experience of consenting processes and environmental and socio-economic impact assessment (IA) best practices for offshore wave energy conversion developments.”*

**SME content:** Need to register to access information. Data maps on test site etc, including Galway Bay, Wave Hub, Lysekil.

<http://sowfia.hidromod.com/PivotMapView/>

**Platform: TU Delft Ocean Energy Platform**

**Organisation: TU Delft**

**Description:** *“The aim of the platform is to stimulate research and education in ocean energy application at Delft University of Technology. The steering group develops a joint research agenda, actively pursues funding opportunities, stimulates internal knowledge exchange, and takes care of external communication about ocean energy at Delft University.”*

**SME content:** Research on tidal, wave, OTEC and aquatic biomass.

<https://www.tudelft.nl/ocean-energy/>

**Platform: World Ocean Review**

**Organisation: Maribus**

**Description:** *“The "World Ocean Review" is a unique compilation presenting the state of our oceans and encapsulating cutting-edge science.”*

**SME content:** In-depth overviews of all ocean related themes (renewable, issues, pollution, fisheries, etc.).

<http://worldoceanreview.com/en/wor-1/energy/renewable-energies/>