

# ReaLCoE

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# Deliverable 8.1 Dissemination Strategy Roadmap

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# List of Abbreviations

LCoE	Levelized Cost of Energy
CDE	Communication, Dissemination and Exploitation
WP	Work Package
WEC	Wind Energy Converter



# 1. Introduction

The ReaLCoE's vision is to enable direct competition of offshore wind energy with conventional energy sources in electricity markets by optimising and innovating in every link of the offshore wind energy value chain to an overall Levelized Cost of Electricity (LCoE).

Project Impact and Objects are shown in figure 1.



Figure 1: ReaLCoE

Fifteen project partners from Europe's key offshore markets join their expertise in ReaLCoE to leverage innovations that fulfil this vision. ReaLCoE actions in communication and dissemination will help strengthen Europe's scientific base, bring additional competition to the European clean tech industry and create a new benchmark for consumers and the environment.

The work plan achieving the overall project aim is separated in nine (9) different work packages (WP). An overview is given in Figure 2. One of these work packages is the WP 8: 'Dissemination and engagement of society', the central toolbox to disseminate project results to wider communities, which is described in the report at hands.





Figure 2: Overall structure of the work plan.

## 1.1. WP8 main objective

The main objective of this WP is to ensure that results on individual technical and logistical concepts are disseminated to the broader market environment, and to become state of the art and to ensure acceptance of the technology at society and professional levels.

- Ensure uptake of the project results in professional and non-professional stakeholder groups.
- Dissemination of project results and technology to the market (incl. facilitation of training) and to the broad society to raise overall acceptance.
- Scientific uptake of the project results.
- Contribute, upon invitation by the CINEA, to common information and dissemination activities to increase the visibility and synergies between H2020 supported actions.

Furthermore, the project partners will leverage on existing resources available to them to disseminate project results.





### 1.1. WP8 main task

The primary aim of this task is coordination of the communication and dissemination of the knowledge, data and project results. This includes two task streams: The setup and implementation of a communication and dissemination strategy of ReaLCoE for commercial utilisation of project results in different stakeholder groups. It will include dissemination activities following the strategy identification of target user groups and definition of partners to implement dissemination through the channels foreseen.

To ensure consistent relevance as well as continuous public appearance and project visibility, the plan will be updated on a regular basis.

Further, the dissemination strategy is the compilation and exploration of best practices on technical, economic and regulatory level to identify relevant factors for the scalability and replicability. This includes:

- Technical analysis by evaluating test results in relevant environment, verifying use of technology to scale-up and replicability in different sites and conditions. Assessment of the conditions under which the technology may be replicable and the extent of the technological benefits to existing WECs.
- Economic analysis using estimated potential and output including various scenarios and assumptions for assessing economies of scale and consideration of adjustment of modular WEC to highly specific sites.
- Regulatory conditions analysis to deploy the developed technologies in the selected countries to investigate to which extent the project is compatible with the regulatory framework.

The results of these analyses will be viewed at and further analysed to elaborate a replication roadmap identifying best practices and proposing replication paths.



# 2. Purpose of this document

This document defines the strategy governing ReaLCoE's communication and dissemination activities.

As simple dissemination of offshore wind use is no longer enough in today's complex and evolving environment, this strategy covers both the communication, engagement and exchange of the project outcomes with its main stakeholders as well as other EU projects and the public to make use of the generated knowledge most effectively and to enable the commercial utilisation of the outputs after the end of the project. The dissemination process will involve all partners as well as the associated partners to ensure a maximum outreach.

The strategy defines the operational framework for ensuring that European offshore wind knowledge is widely accessible to users and well understood by anyone looking for reliable information on Europe's offshore wind development.

# 3. Definitions

In general, it is called CDE Strategy, which means Communication, Dissemination, Exploitation. EU's CDE framework is shown in Figure 3. In the following table, these words are described. We added a fourth pillow, the enhance of knowledge and growth.

The difference of communication and dissemination is shown in Figure 4.

Communication	Communication Measures increase understanding and enthusiasm among general public.
Dissemination	Dissemination Measures draw, store and share lessons for key stakeholders to enhance knowledge and growth for reinforcing European's technological leadership.
Exploitation	Bring results from previous projects efficiently to the project team. Bring project results to the market.
Enhance knowledge and growth	Reinforce European technological leadership.

#### Table 1: Definition of EU's CDE terms

<u>Remark:</u> Due to the negative notation of the word "Exploitation", especially in the US, we avoid using this word and use the word "dissemination" instead for all activities.





#### COMMUNICATION, DISSEMINATION AND EXPLOITATION WHY THEY ALL MATTER AND WHAT IS THE DIFFERENCE?



Figure 3: EU flyer explaining CDE.

COMMUNICATION	DISSEMINATION		
Covers the <b>whole project</b> (including results)	Covers project <b>results only</b>		
Starts at the <b>outset</b> of the project	Happens only once <b>results are</b> available		
Multiple audiences	Specialist audiences		
Beyond the project's own community, including the media and general public. Multiplier effect.	Groups that may use the results in their own work, including peer groups, industry, professional organisations, policymakers		
<b>Informing</b> and <b>engaging with society</b> , to show how it can benefit from research	Enabling the <b>take-up</b> and <b>use</b> of <b>results</b>		
<i>Legal reference</i> Grant Agreement Article <b>38.1</b>	<i>Legal reference</i> Grant Agreement Article <b>29</b>		

Figure 4: H2020 Social Media Guide: Difference between communication and dissemination



# 4. Target Audiences

To leverage on project results, scientific knowledge exchange and education of professionals are ReaLCoE's integral project ambitions. By communicating background information and progress to local communities, e.g. in relation to site selection for the demonstrator, wind power's visibility and technology's comprehensiveness can increase acceptance for renewable energies. Furthermore, cost-efficient virtual trainings will guarantee a safe work environment and endorse EC policies by keeping maintenance jobs in Europe and strengthen the European technology base.

The following target groups shall be reached:

- Industry players and associations (globally)
- Specific audience (Europe incl. some global)
- Public with a special focus on local areas in Europe's key offshore markets.

Further ReaLCoE's partners have developed – and will continue to evolve – for each of defined target group dedicated key messages to support delivery of project results with clear and targeted content. The following provides an overview over dissemination actions, dissemination channels and indicators for the individual target group to maximise impact of dissemination measures.



Figure 5: Dissemination, knowledge and growth and communication.



# 5. Definition of key messages for each target audience group

Referring to the communication activities and public engagement, the dedicated message is:

# Offshore wind energy is clean, cheap and safe!

The project's inherent innovation and communication strategy to the general public and policy makers aims to increase understanding and enthusiasm among these critical audiences. A mix of earned, shared and owned communications channels will be used as part of a pro-active approach to not only inform but also engage with public society.

Communication activities have two major target groups:

<u>1. General Public</u>: might be hesitant to accept larger WEC and policy. Generally, renewable energy has high public acceptance but there are some concerns e.g. visibility and 'NIMBYism'. It is of key importance to take these concerns seriously and address them from the project start. Partners will build strong communications around the following societal benefits of the project:

- 15+MW WEC provide electricity at competitive prices and can contribute to lower consumer energy bills while protecting the planet.
- Larger WEC require less space and dredging, reducing the impact on marine life and the environment.
- ICT and IoT enabled operations reduce emissions from logistics and installation operation.
- European technological leadership in wind energy is a source of growth and jobs.

<u>2. policy makers/regulation bodies:</u> Critical for building consensus, confidence and ensuring future development. These audiences often require tailor made messaging and communications but can also benefit from those targeting the public. In addition, ReaLCoE will also stress that large offshore WEC face less public resistance and can contribute significantly to reach renewable energy and emission targets at low cost. Through the engagement of TSOs, DSOs, certification bodies and the finance sector in the project and the advisory board early adaptation and definition will give further amplification.

Dissemination target group	Partner group disseminating	Target group to be reached	Key message and content to be developed for target group	
Results (industry)	All industry partners and associated partners	Industry players and associations (globally)	Offshore WEC can deliver electricity at competitive cost of €35 - €50/MWh! High performance, robustness and reliability and ability to customize to site and client requirements through low cost +15MW WEC.	
Knowledge and growth (scientific)	DTU, ECN part of TNO, IWES and BIBA	Specific audience (Europe incl. some global)	Demonstrated technology works in real environments! Scientific results that build upon existing projects and new areas or R&D identified resulting from technology use.	
Communication (public engagement and policy)	All partners, coordinator in cooperation with 8.2 and EnBW	Public with a special focus on local areas in Europe's key offshore markets	Offshore wind energy is clean, cheap and safe! Increase public acceptance of clean wind energy and derive policy recommendation	

Table 2: Overview of target groups and key messages



# 6. Tools

Communication and Dissemination Tools can be:

- Organisation of conferences, fairs, workshops
- Participation at conferences, fairs, workshops
- Participation in activities organized by jointly with other H2020 projects.
- Labor-demonstrator at open day, conference, etc.
- Press-release.
- Non-scientific and non-peer reviewed publication (popularized publication)
- Social media can be high-level information or detailed information.
- Project website
- Consortium member website
- Communication campaign (e.g. Radio, TV)
- Video/Film
- Report
- Certificate
- Flyer
- Fact Sheet
- Poster
- Training
- Etc.



Figure 6: Examples of communication and dissemination Tools.

In the next chapter, the measures implementing these tools will be specified.



# 7. Communication Material

Different tools are described in the following subchapters.

### 7.1. Visual identity and branding

The project will bear a clear visual identity that reflects the view of the Commission and the projects main messages. Therefore, a logo and corporate identity were designed. Flyers, leaflets, posters and other publicity material were and will be elaborated, in order to achieve that the impact is maximized, and the acceptance increased. As a target all audiences shall be reached.

The ReaLCoE communication team has created a visual identity for the project including a project logo, colour guidelines as well as templates for popular communication formats (downloadable from the ReaLCoE SharePoint). All guidelines relevant for the ReaLCoE's visual identity are documented in a corporate design guidebook.

The key element of ReaLCoE's communication strategy is the project logo. The idea is based on the shape of a great wind turbine with its three rotor blades. Each blade has the shape of a trapeze and consists of small triangular shapes demonstrating the complexity and modularity of the new turbine as well as the underlying network of stakeholders and suppliers. The term 'ReaLCoE' creates a visual link to the project acronym and concludes the design. A guideline for the usage of the logo has been prepared to guarantee a maximal impact of it (Figure 7). The conjunction of logo and verbalization create a light and symmetrical brand that inspires technology and innovation and instantly links communication material to the ReaLCoE project.



Figure 7: ReaLCoE Logo Application Guidelines

Depending on its application and available space, different versions of the logo can be used, whereat two different shape formats with six colour versions are allowed: The standard format shows the verbalization directly below the symbol.



### 7.2. Website

#### Link: Website realcoe.eu

The following key parameters were defined at the start of the project:

Development and launch of the ReaLCoE's project website, including project news and results, information about events, link to project partners, providing access to publicly available deliverables and embedding social media.

Impact to be maximised: Increase acceptance, growth.

Target group: Public, industry and policy

Therefore, in the beginning of the project, the website was carefully designed to address the stakeholders in the most effective way. Based on this website the visibility of the project for the EU as well as target audiences, consortium, stakeholders and the general public is secured. By applying this form of online communication, it is expected that many stakeholders for the LCoE reduction potentials are sensitized and further that the renewables industry across Europe and the networking with other similar projects are increased.

The ReaLCoE's website is designed as an interactive tool for public information and communication among partners and stakeholders. Besides, public documents, materials, and useful information related to the project can be stored and published here. By performing continuously improvements and updates, the results and shares with target audiences will be maximised. The final structure of the website can be modified during the project lifetime securing the inclusion of new needs and express the evolution of the project.

The ReaLCoE's website presents general information about ReaLCoE and furthermore links to social media channels, newsletters and other dissemination activities.

#### Technical background of the Website

The website utilizes as backbone network WordPress. The latter is a free and open-source content management system based on PHP & MySQL, which is a very powerful and easy to learn blogging and website tool. WordPress offers native applications and display functions for mobile devices, such as Android, iOS, Windows Phone or BlackBerry and of course, a host service for desktop browsers.

#### Structure of the Website

The content and structure of the website were collated with the ReaLCoE's consortium members. The presented information was structured in three different types based on the timeline of the information – short / medium / long term. Based on this character the information ranges from - either being updated frequently (short term) or remaining unchanged during the whole project (long term). The website will be regularly updated to provide the latest news, relevant results, and breakthroughs. Therefore, the website can function as an online tool to present and disseminate all the results and events under the framework of the project.





Following the headlines, the following topics with subsections can be chosen:

The "<u>The Project</u>" section includes:

As first point of contact for website visitors, it presents the project at a glance. It describes its functional and technological objectives, shows the latest website posts, and tweets and includes infographics and photos.

- Management Structure: presents a short summary of the administrative perspective (the project management institutions and the partitioning of the work). A list of the work packages including the naming of their titles, leaders and objectives gives a first overview of the integration of each project partner in the project.
- Consortium: short introductions for each participating ReaLCoE project partner

The "<u>News & Events</u>" section includes:

- Press Releases: contains recent posts, tweets and press. Actions, progress, results of the project and the participation in events are given, thus contributing to the scientific dissemination and innovation related to the offshore wind energy sector. Based on the regularly periodic update it is possible to generate contents of interest for the ReaLCoE community and further to share them in the different channels, attracting visits to the web and having a good positioning in the Google web search.
- Events Calendar: dedicated to conferences, symposiums and workshops. For each event, various information about the type, location and dates of the event, the attendances from the consortium members as well as the topic areas and practical information are given.

The "<u>Publications</u>" section includes:

- Communication Kit: provides the opportunity for project partners or interested stakeholders and press to download all available and non-confidential communication materials, including the ReaLCoE brochure, the roll-up poster, the logos and the Logo Guidelines. Therefore, all publicly available data sets are available for direct download and the project can professionally and uniformly be represented.
- Deliverables: lists all publicly available deliverables. Optionally, individual foldout content boxes with brief summaries can provide more information to each deliverable and give the possibility for downloading the deliverable directly from the website.

The "<u>Contact</u>" section includes:

Provision of e-mail to contact the ReaLCoE project, which aims as a meeting point for stakeholders, other projects interested in networking and the general public.

# 7.3. Brochures

The brochure shows the basic features and its supporting project objectives, expected results and partnerships. The brochure is aimed at the general audience of the project, but in its design and characteristics (specialized publication) have been specially considered stakeholders, with a more technical profile. The brochure is available for each project partner and will be distributed in the events and networking activities in which ReaLCoE will be presented. The ReaLCoE brochure can be downloaded from the SharePoint.



# 7.4. Roll-Up Poster

The latest version of the roll- up poster must be seen as a first serve and will be updated at a later stage of the project when more details and unclassified information on the new turbine and related project results are available. The initial version of the roll-up is derived from the project brochure and provides a general overview of the project. It is intended to support the project communication visually at events. The ReaLCoE poster can be downloaded from the SharePoint.

## 7.5. Social media, News, press releases, interviews and articles

Social media channels (Facebook, twitter, LinkedIn, SlideShare) are essential tools to share news and content and to engage key stakeholder groups and interested citizens. Most partners run their own social media channels. Via Facebook they can reach a total of about 600k, Twitter about 90k and over LinkedIn about 1.3M followers. Furthermore, there may also be the possibility to publish articles and news on the pages of Wind Europe. These pages have a total of about 45k followers and distribution here will replace a static six-monthly newsletter with something far more effective.

The creation of a 'ReaLCoE community' increases the visibility and impact of the results attained in the project. Therefore, viral marketing strategies linked with the website can be implemented based on X (previous Twitter) and LinkedIn social media tools. Additionally, videos and multimedia can be developed and shared in YouTube / Vimeo channels, communicating easily accessible project results for attracting the interest of stakeholders and the public.

## 7.6. Researchgate

Researchgate is the largest social network in terms of active users for scientists and researchers. It can be used in all scientific disciplines to share scientific papers, ask and answer questions and find possible collaborations on specific topics. ReaLCoE has created a ResearchGate project page (<u>https://www.researchgate.net/project/ReaLCoE</u>) for interlinking with interested researchers and centrally interlinking scientific papers, which have been elaborated in the course of the ReaLCoE project

# 7.7. EU media channel platforms

The Project story, research data, project results, best practices shall be presented on the EU platforms (articles for Horizon magazine, research EU magazine, newsletters project story, audio-visuals, open access publishing spaces). The aim is to boost EU knowledge base in the offshore wind sector, to increase awareness as well as to promote European research collaboration.



# 8. Dissemination Activities

The next table presents a structured overview of the different types of dissemination activities that have been agreed within the project consortium.

Dissemination material	Project reports	Communications	News & Events
website	Public deliverables	scientific publications	News and press releases, social media posts
Communication Material (Flyer, Poster, Brochures)	Report on EU knowledge base	Scientific excellence workshops	Participation in Events
Standard project presentation	Best-practice guideline	Component testing and certification workshop	Final Event
Fact sheets	Results from previous projects	Digital twin training	Internal Workshops

The dissemination activities are specified in the following:

#### 8.1. Website

The project website was released in the first phase of the project and updated in the second phase.

After "going public" (see Roadmap in Chapter 9), BIBA will update the website regularly with project news and results.

### 8.2. Communication Material

Internal communication material are templates for creating presentations, meeting minutes, reports and fact sheets. External communication materials are posters, brochures, flyers, etc.

Both internal and external communication materials are created by WP8 team and released on the ReaLCoE project SharePoint so that they are available to all project members.

### 8.3. Internal workshops

In internal workshops, the ReaLCoE project members meet to work on tasks and share results. Normally, the workshops should involve several work packages to share knowledge across the entire project consortium.





# 8.4. Results from Previous Projects

WP8 team exploits result from relevant previous EU research projects and make them available to the consortium (on the SharePoint) that project members can include these results and lessons learned in their work.

WP8 team will create a short report with project overview, main results and lessons learned of the relevant projects.

Relevant EU funded projects are for example:

Project	Scope	Website
<b>INNWIND</b> (2012 – 2017)	High performance innovative design of a beyond-state-of-the-art 10-20MW offshore wind turbine and hardware demonstrators of some of the critical components.	http://www.innwind.eu/
Avatar (AdVanced Aerodynamic Tools for lArge Rotors) (2013 – 2017)	Evaluate, validate and improve aerodynamic and aero-elastic tools to ensure applicability for large wind turbines to make upscaling wind turbine designs towards 10-20 MW feasible.	https://cordis.europa.eu/project/id/6083 96
<b>LEANWIND</b> (2013 – 2017)	Provide cost reductions across the offshore wind farm lifecycle and supply chain through the application of lean principles and the development of state-of-the-art technologies and tools.	https://www.leanwind.eu/
<b>UpWind.EU</b> (2006 – 2011)	Develop and verify substantially improved models of the principal wind turbine components, which the industry needs for the design and manufacture of wind turbines for very large-scale future applications, e.g. offshore wind farms of several hundred MW.	www.upwind.euwebsite is not reachable anymore.Project information can be found here:https://www.ewea.org/our-activities/eu-funded-projects/completed-projects/upwind/Complete report on 20 MW windturbine design limits:https://www.ewea.org/fileadmin/ewea_documents/documents/upwind/21895_UpWind_Report_low_web.pdf
<b>ROMEO</b> (2017 – 2022)	Reducing the cost of offshore wind energy and boosting the renewables industry	ROMEO project   Offshore wind farm optimization in Europe
<b>IRPWIND</b> (2014 – 2018)	Foster better integration of European research activities in the field of wind energy research with the aim of accelerating the transition towards a low-carbon economy and maintain and increase European competitiveness.	https://www.irpwind.eu/

#### Table 4: Relevant EU funded research projects



## 8.5. Fact sheets

Fact sheets should be created to summarize the results on LCoE reduction (project objective as specified in the LCoE reduction waterfall diagram) and secondly, to spread innovations and share knowledge across the consortium members and the scientific community:

- WP7 to create 1x fact sheet to show LCoE Reduction (as WP7 is the driving force for LCoE calculations with probabilistic model compared to 6 MW baseline).
- WP2 and WP4 each to create 1x fact sheet to show cost reduction (as transport, installation and maintenance are the main cost drivers for turbine operations).
- WP1, WP2, WP3, WP4, WP5 and WP6 to create one fact sheet per task to show innovations for AEP increase and cost reduction to enhance offshore wind turbine competitiveness.

WP4 and WP6 can combine the cost reduction and innovation in their fact sheets.

The Fact Sheets shall be shared with the team via the SharePoint and shall be distributed at the final event in 2025 or 2026 (see Point 10 final event).

# 8.6. Sector specific PR and social media

After "going public", the beneficiaries will publish press releases with information on their participation in ReaLCoE project on social media channels, company websites and LinkedIn (e.g., post an article on LinkedIn, publish a press release on company website).

After "going public", BIBA will publish project related information and progress on the ReaLCoE website.

Interviews with project team members and articles with project related information might be published in newspapers and magazines.

The press releases / social media posts can be linked to important milestones (e.g. (start of project / "going public", workshops, design finished, end of work package, etc...)

### 8.7. Scientific publications in academic journals

Scientific organizations (DTU, TNO, BIBA, Fraunhofer) will publish scientific papers in appropriate peer-reviewed academic journals with high impact factors.

Academic journals can be for example:

- Energy Policy-Elsevier (IF: 4140),
- Electric Power Systems Research-Elsevier (IF: 2688),
- Utilities Policy-Elsevier, Renewable Energy-Elsevier, IET Generation, and Transmission & Distribution (IF: 2213).



# 8.8. Scientific excellence workshops

#### Refers to Task T8.3

Two scientific workshops should take place. The first one took place 2019 in Corc. The second scientific workshop will take place in 2025 when most of the results are available). TNO will organize the workshop with students (from TNO, DTU, BIBA, Fraunhofer, etc.) for scientific knowledge exchange on innovations and results of ReaLCoE project (e.g. digital twin, site specific data, test results).

### 8.9. Participation in events (fairs, conferences, etc.)

The project members will participate in in common offshore wind industry fairs, conferences, workshops, summits, and trainings to exchange on ReaLCoE related topics and results.

Examples of international events on offshore wind:

#### 2024

- WFO Global Summit, 31.01.-01.02.2024, Barcelona, Spain
- Wind Europe Annual Event, 20.03.-22.03.2024, Bilbao, Spain
- CLEANPOWER 2024, 6.5.-8.5.2024, Salt Lake City, Utah, USA
- Pacific Offshore Wind Summit 2024, 13.05.2024, San Francisco, California, USA
- Wind Finland Offshore, 14.5.2024, Helsinki, Finland
- Saudi Energy Convention, 19.5.-21.5.2024, Riyadh, Saudi Arabia
- TORQUE 2024, Science of Making Torque from Wind Conference, 29.5.-31.6.2024, Florence, Italy
- Wind Europe Technology Workshop, 10.6.-11.6.2024, Dublin, Ireland
- Global Offshore Wind Conference, 18.6.-19.6.2024, Manchester, Great Britain
- Wind Energy Hamburg, 24.09.-27.09.2024, Hamburg, Germany
- Offshore & Floating Wind Europe 2024, 11.11.-12.11.2024, London, Great Britain
- 7th Asian Offshore Wind, Wave and Tidal Energy Conference (AWEC 2024), 20.10.-24.10.2024, Busan, Korea

#### 2025

- Wind Europe Annual Event 2025, 8.4.-10.4.2025, Copenhagen, Denmark
- CLEANPOWER 2025 Conference & Exhibition, 19.5.-22.5.2025, Phoenix, USA
- 25th International Conference on Computational Methods in Marine Engineering (MARINE), 23.6.-25.6.2025, Edinburgh, Scotland
- Wind Energy Science Conference 2025 (WESC 2025), 25.6.-27.6.2025, Nantes, France
- 16th European Wave and Tidal Energy Conference (EWTEC 2025), 6.9.-11.9.2025, Maderia, Portugal
- Husum Wind fair 2025, 16.9.-19.9.2025, Husum, Germany



# 8.10. Final event

Refers to task T8.5

The consortium (lead DTU) will organize a final event in conjunction with a major industry event such as Wind Europe Conference 2025 or 2026. In this event, the consortium will organize and/or participate in presentations, workshops, and discussion forums related to ReaLCoE project.

DTU will present the ReaLCoE project at the DTU stand and if feasible organize speaking slots presenting ReaLCoE results.

### 8.11. Standardization and Certification committees

Consortium members are active in several standardization committees and will spread ReaLCoE results within these committees to include them into new standards and regulations.

Standardization committees are for example:

- IEC / TC 88, "Wind energy generation systems"  $\rightarrow$  IEC Regulations
- MeasNet (TNO is one of the founding members)
- EERA JP Wind
- ETIPWIND
- Wind Europe
- IEA  $\rightarrow$  IEA
- DIN Committees such as "DIN 18088" → DIN ISO Technical Standards
- FGW → TR's
- BWE (e.g. Technischer Sachverständigenbeirat) → BWE-Guidelines
- FEE (French Wind Association)

## 8.12. Component testing and certification workshop

Fraunhofer and GE will organize a workshop with several certification body representatives to present the modular component testing of offshore WECs components including floating designs.

Modular testing and certification concepts can save significant cost. The modular certification approaches can be elaborated together with the certification bodies. GE can use the workshop results to request their sub-suppliers to improve subcomponents on request for single components and reduce times to market.



# 8.13. Digital twin training

Refers to task T8.4

GE will develop a Virtual Reality (VR) Software for training purposes. This software can be used to train service technicians on installation, operation and maintenance. Further, this software can be used to transfer general wind turbine knowledge to stakeholders that participate in turbine development.

During sales activities, GE can use this software to train and inform investors and insurance companies during technical due diligence of future turbines. The digital twin can assist GE's sales activities substantially in risk management through better transparency to investors and insurance companies.

The acceptance of these stakeholders for offshore wind technology will be increased. Additionally, BIBA and DTU will gain further practical experience in digital twin design to become field experts with strong credentials.

### 8.14. Report on EU knowledge base

#### Refers to task T8.3

TNO will create a report on the knowledge base of EU offshore wind industry.

Basis of the report will be the results of the 2<sup>nd</sup> scientific excellence workshop that will take place at the end of the project, and the results of the dissemination activity "Results from Previous Projects".

### 8.15. Best-practice guidelines

ReaLCoE's outcomes and results will be reviewed at by all partners. The main aspects will be presented at the final workshop in 2025 or 2026 with best practice guidelines for future offshore turbine development for offshore wind turbine competitiveness.

WP8 team will create three reports with lessons learnt / best practices on:

- a) Design and technical results.
- b) Managing confidentiality in complex EU funded projects
- c) Steering communication in complex projects

The reports will be published on the ReaLCoE Website.



# 8.16. Public Deliverables

Deliverables can be public or confidential. In this case public means, that the deliverable can be shared with the offshore wind community, that it will be published on the ReaLCoE Website, and that it will be available on the EU website.

Public deliverables are as following:

Deliverable Number	Deliverable Title	WP	Lead beneficiary	Туре	Due Date (in months)
D1.3	Reports opt. fixed/ floating substructures	WP1	JBO	Report	70 (Feb 24)
D2.4	Released Report on handling and installation	WP2	JAN DE NUL NV	Report	73 (May 24)
D3.2	VVT and Certification Plan	WP3	Fraunhofer	Demonstrator	52 (Aug 22)
D4.3	Corrective maintenance manual	WP4	TNO	Report	66 (Oct. 23)
D5.1	Test site chosen	WP5	DTU	Demonstrator	67 (Nov 23)
D5.2	WEC Prototype commissioned	WP5	GE	Demonstrator	72 (Apr 24)
D5.3	WEC Prototype installed and operational	WP5	GE	Demonstrator	76 (Aug 24)
D6.4	IoT and data-based risk assessment model	WP6	GE	Report	90 (Okta 25)
D7.5	Report about market changes and mechanisms for improving European electricity market	WP7	TNO	Report	86 (Jun 25)
D7.6	Report on new grid concepts	WP7	TNO	Report	86 (Jun 25)
D8.1	Dissemination / exploitation strategy roadmap	WP8	8.2	Demonstrator	86 (Jun 25)
D8.2	First communication material developed	WP8	BIBA	Report	12 (Apr 19)
D8.3	Report EU knowledge base offshore wind	WP8	TNO	Report	91 (Nov 25)
D8.4	Virtual reality software developed	WP8	GE	Report	91 (Nov 25)
D8.5	15 open days held env. assessment report	WP8	BIBA	Websites, patents, filing, etc.	92 (Dez 25)
D9.3	Risk mitigation plan	WP9	DTU	Other	44 (Dez 21)
D9.7	Report on cumulative expenditure incurred	WP9	DTU	Report	47 (Mar 22)

#### Table 5: Public Deliverables

The deliverables in the time frame of the project are shown in the following figure:



Project Month	12	44	- 45	46 4	17 48	3 49	- 50	51	52	53	54 5		5 57	-58			61 6	52 63	64	65	66	67 6		0 /0			73	74 i			- 78	79	80	81	82	83 1	34 1	35 8			89	90			93
Year	2019	2021					2	022										2023										2024	L I										2025					1	2026
Month	12	12	01	02 0	3 04	05	06	07	08	09	10 1	1 1	2 01	02	03	04	05 (	06 07	08	09	10	11 '	2 01	02	03	04	05	06 0	07 0	8 09	10	11	12	01	02	03 (	04 (	05 0	60	7 08	09	10	11 1	2	01
WP1				D1.1																D1.2				D1.3	3																				
																								D1.4																					
WP2					D2	.1				0	02.2								D2.3								D2.4																	Т	
WP3					D3.	.1			D3.2																1	D3.3																	D3	3.4	
WP4												D4	.1							1	D4.2		D4.	4																					
																					D4.3																								
WP5		1																			C	05.1				D5.2			D	5.3													DS	5.4	
WP6		1								D6.1										1	D6.2				D6.3							D6.5	5									D6.4	DE	6.7	
																																										D6.6			
WP7		1			D7.	2																		D7.3	3						D7.4	4						D7	.5			0	07.1		
																																						D7	.6						
WP8	D8.2																																					D8	.1			E	8.3 D8	8.5	
																																										E	08.4		
WP9		D9.3		D	9.4																																								_

Public deliverables marked in blue.

Figure 8: Public deliverables plan.



# 9. Road Map

## 9.1. Phases

The communication and dissemination measures are split in three phases:

In the first phase of the project, "development and deployment", the information and results will only be shared with the project members, but not outside the project, due to confidentiality issues claimed by GE and the SME's. During this phase, the dissemination activities are planned, the communication material basis is established, including setting up the website, providing communication materials and defining the rules and standards for dissemination activities that are planned for the next phases.

The second phase will start when GE's communication team approves to "go public". Then, all planned dissemination actions will be executed and monitored. The phase "demonstration" is output-driven, disseminating on project progress and results, providing data to the scientific community and creating understanding and enthusiasm among citizens.

The third phase intends to use the newly created transparency to enable new partnerships, uptake ReaLCoE's results by markets and policies and creating an environment for wind energy to grow.

The phase model of communication and dissemination measures and gather of project results is shown in the following figure. It summarises the key measures and activities to maximise ReaLCoE impact.



"Going public"

Figure 9: Communication and dissemination framework.



# 9.2. Activities

The communication and dissemination measures, presented above in the Chapter 7, need to be linked to the phases. The verifiable actions, timeline, and impacts of the measures are shown in the following table.

Measure	Activity KPI	Timeline / Deadline	Foreseen Impact
Website	Website updated	mid of 2024	Stakeholders in offshore wind industry and beyond are informed about the project. Providing information and results will increase acceptance and growth of offshore wind industry.
Communication Material: internal	CI templates: presentation, meeting minutes, fact sheet	Q1/2023 (done already)	ReaLCoE project members receive information in a structured and clear way.
Communication Material: external	1x Poster 1x Flyer 1x Brochure 1x ppt template with 2 slides ReaLCoE project overview	Q1/2024* *Depending on going public date	Non-scientific and scientific shareholders of renewables industry acknowledge the project.
Internal workshops	10x workshops held	Min. 6x per year 2024 and 4x per year 2025	Knowledge is spread on and innovation in offshore wind industry across European project members
Results from Previous Projects	1x report	06/2024	ReaLCoE project members are informed and educated of lessons learnt and technical results from offshore wind projects.
Fact sheets	<ul> <li>≥10x fact sheets to be created, one fact sheet each:</li> <li>1. WP7: LCoE Reduction</li> <li>2. WP7: Market Trends influencing LCoE estimation</li> <li>3. WP2, WP4: cost optimizations on logistics and testing</li> <li>410. WP1-WP6: Innovations for LCoE reduction.</li> <li>200 fact sheets distributed to policy makers, scientists and industrial stakeholders (downloads on web page or printed version distributed at events).</li> </ul>	End of WP: WP1: M70 (Feb 24) WP2: M73 (May 24) WP3: M92 (Dez 25) WP4: M69 (Jan 24) WP5: M92 (Dez 25) WP6: M92 (Dez 25) WP7: M86 (Jun 25)	Create an interoperable and high- quality database. All stakeholders can discover, understand and adopt ReaLCoE results. Scientific partners can identify new fields of research and contribute to optimisation of the tools and services. The data that is generated during the project and described in fact sheets is a basis for follow-up cooperations. Much quicker times to market for future offshore wind turbine development (if fact sheets can be elaborated by certification bodies and GE can use the certificates to request their sub- suppliers to improve subcomponents on request for single components)

Table 6: Dissemination activities roadmap	
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Measure	Activity KPI	Timeline / Deadline	Foreseen Impact
Sector specific PR and social media	min. 2 per beneficiary 28x press releases in total (currently 14 active beneficiaries)	End of 2024	Public understanding and enthusiasm of offshore wind.
scientific publications	>10x publications in total. Each scientific organisation (DTU, TNO, BIBA, Fraunhofer) aiming for at least 3x publications.	2024 / 2025	Providing overview of latest research results and innovations for offshore wind LCoE reduction to researchers, PhD students and industry representatives from R&D departments.
Scientific excellence workshops	2x workshops held. 200 PhD students engaged.	1 <sup>st</sup> took place in cork in 2019, 2 <sup>nd</sup> to take place in 2025	Innovation capacity will be enhanced. Scientific knowledge exchange on innovations and results (e.g. digital twin, site specific data, test results) to leverage on them and including the latest scientific knowledge as well as identifying the need and fields for further research. In addition, the workshops strengthen and extend the network of the scientific researchers and turn them into drivers for low cost and faster ramp up wind energy.
Participation in events (e.g. fairs and conferences)	<ul> <li>20x project members participated in a conference or fair each year.</li> <li>4x presentations with ReaLCoE linkage were held on fairs and conferences.</li> </ul>	2024 and 2025	The interest in the technology and by this the acceptance will be increased for all stakeholders. Furthermore, the attractiveness of jobs in the wind energy industry will be increased.
Final event	ReaLCoE stand at main international offshore wind fair (e.g. Wind Europe 2025 or 2026), including presentations, workshops and hand- outs with information on project results.	2025 or 2026	Policy makers, scientists and industrial stakeholders will broaden visibility of the project and its results as well as receive new insights on offshore wind development.
Standardization and Certification committee	2x project members participated in 2 sessions of committee	2024 / 2025	Contribute to the process of certification and setting new standards with regards to ReaLCoE's concepts.
Component testing and certification workshop	1x workshops held.	2024 / 2025	Certification bodies will be informed about offshore wind for better technology acceptance and quicker time to market on future development and certification projects.



Measure	Activity KPI	Timeline / Deadline	Foreseen Impact
Digital twin training	At least 2 VR assisted trainings carried out. 30 participants at trainings.	2025	Enables GE Service technicians and third parties for off-site, on- demand training opportunity for O&M staff and increase their operational efficiency by this. Reduce time needed for installation, operation and maintenance, keep maintenance jobs in Europe and guarantee safe work environment.
Report on EU knowledge base offshore wind	1x report	2025	Enables all partners to reach out to network partners and further exploit project results to increase innovation capacity.
Best-practice guideline	3x reports: a) technical results b) managing confidentiality in complex EU funded projects c) steering communication in complex projects	Sep. 2025	Effectively disseminate the project and its findings to all stakeholders in offshore wind industry and future EU funded research projects.
Public Deliverables	All public deliverables are accessible on the project website	Dez. 2025	Future offshore wind turbine development projects can use the results as input and make use of the results and lessons learnt from the ReaLCoE project.



# 10. Monitoring of dissemination activities

The measures will be tracked, monitored and improved for impact using KPIs established in the full communication and dissemination plan and specified in the previous chapter.

For each work package, various deliverables are defined in Chapter 8.

The work package leaders are responsible to communicate planned and completed dissemination activities to WP8 team regularly. The WP leader will also be responsible for the technical planning and monitoring of technical progress against milestones and deliverables.

WP8 team will set up a monitoring system to put in place the necessary management structure for the projects dissemination activities implementation. This monitoring is put in place to support better performance and greater accountability as well as to ensure clear and accurate reporting on the results achieved and the progress made.

Quality control measures will be implemented to ensure high quality and results that are in line with the Horizon 2020 guidelines for producing project deliverables and output, for conducting the internal reviews of these outputs as well as approval procedures for the formal deliverables and review meetings:

- a) Grant Agreement Article 28 "Exploitation of results"
- b) Grant Agreement Article 29 "Dissemination of results open access visibility of EU funding"
- c) Grant Agreement Article 31 "Access rights to results".
- d) Consortium Agreement Section 8 "Results"
- e) H2020 Programme Guidance: Social media guide for EU funded R&I projects
- f) H2020 Managing projects Fact Sheet No. 10 Disseminating Project Results
- g) EU Commission practical information Dissemination and Exploitation of results

# 11. Reporting

Status and progress of dissemination activities can be presented and discussed in the executive board meetings. The Executive Board (ExBo) is responsible for the overall quality and monitoring of the project on a strategic level and will, in cooperation with the Project Management Office (PMO), develop quality control measures and consult the General Assembly (GA) for approval in case of deviation from the project planning.

WP8 will summarize and deliver relevant information on dissemination activities and WP8 work package progress for periodic and final reporting.