

PivotBuoy

***An Advanced System for Cost-effective and Reliable Mooring,
Connection, Installation & Operation of Floating Wind***

Call identifier: H2020-LC-SC3-RES-11-2018

D8.4: End of project workshop

Due Date of Deliverable: 31/03/2023

Completion Date of Deliverable: 31/03/2023

Start date of project: 01 April 2019

Duration: 48 months

Lead partner for deliverable: PLOCAN

Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including Commission Services)	
CO	Confidential, only for members of the consortium (including Commission Services)	



Document History

Issue Date	Version	Changes Made / Reason for this Issue
23/03/2023	0.1	Initial table of contents
28/03/2023	0.2	Developed structure and content
30/03/2023	0.3	Full content. Issued for partner's review.
31/03/2023	1.0	Final version for submission

This document only reflects the author's view. The programme authorities are not liable for any use that may be made of the information contained therein.



INDEX

INDEX	3
ACRONYMS	4
EXECUTIVE SUMMARY	5
1 INTRODUCTION	6
1.1 PURPOSE AND SCOPE OF THE DELIVERABLE	6
2 STAKEHOLDER CONSULTATION MEETINGS	7
3 FINAL WORKSHOP	11
4 CONCLUSIONS	16



ACRONYMS

EPCI	Engineering, Procurement, Construction and Installation
FOWT	Floating Offshore Wind Turbine
O&M	Operation & maintenance
OEM	Original equipment manufacturer
PLOCAN	Oceanic Platform of the Canary Islands
R&D	Research & development
SCADA	Supervisory Control and Data Acquisition



EXECUTIVE SUMMARY

The deliverable D8.4, titled "End of Project workshop", has been created as part of the Work Package 8, which focuses specifically on communication within the PivotBuoy project. More specifically, this deliverable is connected to Task 8.4, which involves the participation in the consultation process, workshops, and presentations at key industry conferences and the development of a dedicated end-of-project dissemination event with stakeholders identified as targets in the communication and dissemination plan.

Within this context, PivotBuoy partners have invested significant efforts in showcasing the PivotBuoy project at relevant offshore wind events and conferences, in order to provide comprehensive insights into the project's core objectives, technological innovations, and challenges. To sum up, from M6 up to M36, the consortium made 30 presentations at congresses and events, attended 32 external events, and issued 13 press releases, among other initiatives.

Towards the end of the project, on M36, X1 Wind, PLOCAN, and WAVEC organized the PivotBuoy Workshop Event, which marked the closing of the PivotBuoy project. The workshop objective was to issue the project results in the most effective way to stakeholders. The PivotBuoy Final Workshop counted with the attendance of more than 50 high-level professionals from the offshore wind industry, including end-users, turbine OEMs, EPCI developers and other key suppliers, R&D centers, and also government representatives, all of them identified as targets in the communication and dissemination plan.

It is critical to note that Deliverable D8.4 is an essential component of Work Package 8, which focuses specifically on communication within the PivotBuoy project. As such, this deliverable plays a vital role in disseminating the project's goals, achievements, and outcomes to the target audience. Last but not least, it allows the development of strong relationships with stakeholders such as investors, industry partners, government agencies, and potential customers, which can increase awareness about the project's technology and garner support for its adoption.



1 INTRODUCTION

1.1 PURPOSE AND SCOPE OF THE DELIVERABLE

The main objective of Work Package 8 is to disseminate the knowledge gained from the PivotBuoy project and demonstrate the industry-wide benefits of its outcomes. The detailed objectives of this Work Package include elaborating a communication and dissemination plan to ensure that the potential of the PivotBuoy and single point mooring systems are understood by stakeholders, ensuring public awareness through simplified dissemination via website, dedicated brochures, and audio-visual materials, collecting and structuring all technical and commercial data obtained during the project, and making the wider R&D community aware of the PivotBuoy project by disseminating project results in conferences and scientific articles. By achieving these objectives, this report aims to contribute to the dissemination of innovative and sustainable solutions that can benefit the offshore energy industry.

Deliverable D8.4 of the PivotBuoy project report involved an engagement event with the project's target stakeholders to summarize and profile the project's achievements. This event, called PivotBuoy Final Workshop, was conducted at the end of the project and will be complemented by the final report, which summarizes the outcomes of the stakeholder consultation meetings held during the project.

Task 8.4, directly linked to deliverable D8.4, involved stakeholder engagement and workshops that were conducted by all project partners. The task began in M4 and continued until M36 of the project. The stakeholder consultation process involved workshops and presentations at key industry conferences and included an expert consultation process at the start of the project to gather input on the project's design.

The stakeholder consultation meetings proposed as part of Task 8.4 involved representatives from leading suppliers of moorings, anchors, dynamic cables and connectors, service providers and contractors involved in assembly, installation, operation, and maintenance, integrators, and end-users. Furthermore, X1 Wind, PLOCAN, and WAVEC organized a dedicated end-of-project dissemination event together with the consortium, which counted on the attendance of high-level professionals of the offshore wind industry, together with the European Commission and different governmental organizations, who were able to watch the final results of the PivotBuoy project.



2 STAKEHOLDER CONSULTATION MEETINGS

The PivotBuoy project stakeholder consultation meetings achieved several dissemination and communication objectives by M36, attracting representatives of leading suppliers of moorings, anchors, dynamic cables, and connectors, service providers and contractors for assembly, installation, O&M, integrators, and end-users to the different dissemination channels. The project's website generated 14,090 sessions, with over 10,011 users navigating through the different pages of the site. The bounce rate of 50.93% was actually great, indicating that 5 out of 10 users explored multiple pages of the PivotBuoy website before leaving. The project's social media accounts on Twitter and LinkedIn may not have made a significant impact, but the partner's media accounts showed really high engagements, especially on LinkedIn. Furthermore, the project made 30 presentations at congresses and events, attended 32 external events, and issued 13 press releases. PivotBuoy was featured in 361 articles across various media, including regular and specialized outlets. Furthermore, the project has had media exposure through six TV and radio appearances, the most recent being on Cadena Ser and TV Canarias in 2023.

Table 1. Dissemination results

	Objective Midterm	Result by M36	Comments
Website			
Sessions (Visits)	2000 visits by M36	14090	
Users		10011	
Bounce Rate		50,93%	5 over 10 users use to navigate through the PivotBuoy Website once landed.
Social media			
Twitter	150 followers	119	Low impact on the project's social media accounts but very high project impact on the company's media accounts.
LinkedIn	150 followers	78	
Events			
Presentations at congresses/events	6 presentations by M36	30	-
Attendance external events/fairs/workshops	12 attendances by M36	32	-
Media			
Press releases	6 by M36	13	
Nr. of articles in newspapers	6 by M36	361	Regular news (El Pais, La Vanguardia ...),Specialized media (Recharge, El Periódico de la Energía, Offshore Wind biz...)

Nr. of appearances in TV and radio	3 by M36	6	E.I: Radio: - Cadena Ser - 2023 - Cadenas Ser - 2020 TV: - TV Canarias - 2023 - RTVC - 2022 - RTCV - 2021 - RTVE - 2020
------------------------------------	----------	---	---

Disseminating the project at specific conferences of the offshore industry was essential to reach the project's target audience, including industry professionals, policymakers, and researchers, who could provide valuable feedback and contribute to the project's success.

Presenting the PivotBuoy project at industry conferences helped achieve the objectives of Work Package 8, which aimed to disseminate the project's results and increase the project's visibility to the target audience. Conferences provided an opportunity to network with key stakeholders, share knowledge and insights, and showcase the project's progress and achievements.

The partners' attendance at 32 conferences over the last 4 years, where they presented the PivotBuoy project either in their stands or speaking exhibitions, demonstrated a strong commitment to disseminating the project's outcomes and engaging with the offshore industry. These conferences included events such as WindEurope Conferences, Floating Offshore Wind Turbine (FOWT), Congreso Eólico Marino, WindEnergy in Hamburg, and Floating Wind Solutions editions, among others.

Overall, attending industry conferences was a crucial part of disseminating the PivotBuoy project and achieving its objectives. By presenting the project to the target audience at relevant conferences, the project partners increased awareness of the project, fostered collaboration, and ultimately contributed to the success of the offshore wind energy industry.

The table below shows the complete list of all conferences attended since the beginning of the project:

Table 2. Attended events

Events attended	Comments	Date
WindEurope Conference & exhibition	Poster	2/04/2019
FOWT 2019	Presented	24/04/2019
ENERMAR19	Presented	19/06/2019
TBB Paris 2019	Presented	3/10/2019
Jornada de eólica marina, punta de lanza del desarrollo tecnológico	Presented	6/11/2019
Floating Wind Europe 2019	Presented	11/11/2019
WindEurope Offshore 2019	Presented	26/11/2019
US Offshore Wind virtual conference	Attended	18/6/2020
FOWT 2020	Presented	8/09/2020



La energía flotante a prueba en Canarias	Webinar	24/09/2020
TBB 2020	Presented	4/11/2020
Japan Wind Energy 2021	Presented	13//10/2021
Reuters Offshore & Floating Wind Europe	Presented	14/10/2021
The Business Booster - Berlin	Presented	03/11/2021
FOWT 2021 - Brittany region, France	Presented	16/11/2021
WindEurope Electric City - Copenhagen	Presented	23/11/2021
Floating Wind Solutions '22	Presented	1/03/2022
Pacific Offshore Wind Summit	Presented	28/03/2022
Norwegian Annual offshore wind cluster meeting	Presented	28/03/2022
WindEurope Annual Event	Presented	5/04/2022
Jornada Eólica Marina en Canarias	Presented	22/04/2022
Climate Action Sevilla Summit Green & Blue Economy	Presented	29/04/2022
FOWT 2022	Presented	16/05/2022
Floating Wind 2022	Presented	8/06/2022
WindEnergy Hamburg	Presented	27/09/2022
TBB 2022	Presented	28/09/-2022
Floating Offshore Wind 2022	Presented	12/10/2022
12as Jornadas Técnicas ENERMAR	Presented	10/11/2022
WavEC Annual Seminar - SESSION II – Technology Innovation and Research	Presented	10/11/2022
I Congreso eólico marino	Presented	22/11/2022
NOW Cluster meeting 2023	Presented	24/01/2023
Floating Wind Solutions 2023	Presented	30/01/2023



Figure 1. Attended events

One of the key objectives of the project was to disseminate information about its progress and achievements to a wide audience. Press releases were an effective means of achieving this objective, as they could be used to communicate news and updates to both general and specialized audiences.

By disseminating press releases through general and specialized offshore wind media outlets, the PivotBuoy project was able to reach its target audience of industry professionals, policymakers, researchers, and other stakeholders interested in offshore wind technology. This helped to build awareness of the project's goals, achievements, and potential impact, as well as foster collaborations and partnerships with other organizations in the field.

Over the past four years, the PivotBuoy partners produced 13 press releases to disseminate the different milestones of the project. These press releases resulted in 361 news articles in general and specialized offshore media outlets, as well as four appearances on TV and two appearances on radio. These metrics suggest that the project was successful in reaching its target audience through press releases and other forms of media outreach.

In conclusion, press releases were an important tool for disseminating information about the PivotBuoy project and its achievements to a wide audience. The project's success in generating media coverage through its press releases demonstrated the value of this approach for achieving the objectives of Work Package 8 and advancing the state of the art in offshore wind technology.

The table below shows the complete list of all Press Releases produced since the beginning of the project:

Table 3. Press releases

Press releases	Date
PivotBuoy project receives €4m to unlock cost competitive floating wind	28/03/2019
PivotBuoy kick-off meeting and project website launch	26/06/2019
PivotBuoy preliminary design review milestone completed	17/07/2019
PivotBuoy detailed design unveiled	12/03/2020
PivotBuoy and X1 Wind floating platform under construction	30/07/2020
The floating platform has been assembled onshore on HIDRAMAR's dockyard	27/01/2021
X1 Wind prepares PivotBuoy floating wind platform for Canaries deployment	04/05/2021
X1 Wind has completed the rotor assembly for its pioneering floating wind platform	12/10/2021
PivotBuoy floating offshore wind turbine prototype, to be tested at PLOCAN, is unveiled in the port of Las Palmas	24/11/2021
X1 Wind ready for PivotBuoy installation after dynamic cable deployment	02/08/2022
X1 Wind successfully installs floating wind platform in Spain	28/10/2022
X1 Wind's X30 floating wind prototype delivers first kWh	07/03/2023
PivotBuoy Final Workshop: Successful Floating Platform Results	27/03/2023

3 FINAL WORKSHOP

On March 14th, 2023, X1 Wind, PLOCAN and WAVEC organized the PivotBuoy Workshop Event , where high-level professionals from the offshore wind industry gathered at PLOCAN onshore facilities to watch the project final results. This event marked the closing of the PivotBuoy project, and showcased positive results to key stakeholders regarding the X30 scale-prototype platform performance.

The PivotBuoy Final Workshop counted with the attendance of more than 50 high-level professionals from the offshore wind industry, including end-users, turbine OEMs, EPCI developers and other key suppliers, R&D centers, and also government representatives, all of them identified as targets in the communication and dissemination plan.


This event ensured that the project results were issued in the most effective way. Firstly, the key stakeholders were able to watch and listen to each Work Package leader showcasing their job in the project and the results. This allowed the stakeholders to gain a comprehensive understanding of the project and its outcomes. It also provided them with an opportunity to ask questions and clarify any doubts that they may have had.


Secondly, the key stakeholders had the opportunity to observe the X30 prototype performance on-live through a SCADA interactive session. This allowed the stakeholders to witness the functioning of the prototype in real-time and understand its capabilities.

Lastly, the attendees of the event were able to visit the prototype in its offshore location, enabling them to observe the platform's behavior and stability in operation. This provided a firsthand experience of the prototype and its performance.

Overall, the PivotBuoy Final Workshop ensured that the project results were disseminated in the most effective way possible by providing stakeholders with a comprehensive understanding of the project and its outcomes through various means such as presentations, live demonstrations, and onsite visits.

PivotBuoy Final Workshop Event – Program





PIVOTBUOY FINAL WORKSHOP - PROGRAM.

Organizer: PivotBuoy Consortium - Wavec (WP 8 Leader), X1 Wind, PLOCAN.
Location: Canary Islands - PLOCAN Onshore facilities - ([Maps](#)) - Carretera de Taliarte, s/n, 35214 Telde, Las Palmas)
Date: 14/03/2023
Time: 11h30 - 17h10

Tuesday 14th Mar

9h30 - 10:15 Partners Arrival

- Reception: breakfast catering.

10h15-11h30 PivotBuoy Closing (INTERNAL EVENT - ONLY PARTNERS)
PivotBuoy Partners - Presentation of Final Results and Details - Closing the project
Moderator: Alex Raventos

Attendants: X1 Wind, Wavec, Intecsa, DTU, PLOCAN, ESM, EDP, DNV, European Commission, DEGIMA
Content: Project Management - State of the project and upcoming features (final technical and financial report)

Remote Access

Join Zoom meeting
<https://us02web.zoom.us/j/86779891221?pwd=TDI3SkJKd1RsZVVsamJGajhraIVGZz09>

ID meeting: 867 7989 1221
 Access code: 137507

Speakers:

1. **X1 Wind** - Alex Raventos, Coordinator (15 mins) / Albert Cortes, Project Manager (15 mins) (30 mins total)
2. **European Commission** - Mauricio Richter Rios, Project Adviser (15 mins)
3. **Q&A** (30 mins)

11h30 - 12:00 Key stakeholder's arrival

- Catering - snacks & coffee

12h00-14h30 The PivotBuoy Project Final Results
Moderator: Alex Raventos

Content: PivotBuoy Project Final Results - Partners Exposition
Speakers: Total time: 150 mins. (In order)

1



Remote Access

Join Zoom meeting

<https://us02web.zoom.us/j/82497081203?pwd=ZX8ML0hhZFJwMGt0RU9FUGdybGtGdDZ09>

ID meeting: 824 9708 1203

Access code: 935016

- **Introduction - 12:00 to 12:15 (15 mins)**
 - **Speakers**
 - José Joaquín Hernández Brito, CEO of PLOCAN
 - Welcoming
 - Enrico Degiorgis, EU Policy Officer, European Commission
 - Alex Raventos, Coordinator PivotBuoy Project & CEO X1 Wind
 - Intro to the PivotBuoy Project
 - Video of Technology.
- **PivotBuoy Subsystems Design 12:15 to 12:35 (20 mins) - Incl. Q&A**
 - **Speakers:**
 - Carlos Casanovas, CTO X1 Wind
- **Subsystems Manufacturing, Assembly, and Acceptance Testing 12:35 to 12:55 (20 mins) Incl. Q&A**
 - **Speaker:**
 - Xavier Mediavilla, DEGIMA
 - Ruth Lamas, Operations Engineer, X1 Wind
- **Installation, Testing & Monitoring in Relevant Environment 12:55 to 13:15 (20 mins) Incl. Q&A**
 - **Speaker:**
 - Adriana García Mendoza, Project Manager, PLOCAN
 - Guillermo García, Operations Engineer, X1 Wind
- **Numerical Modelling & Performance Assessment 13:15 to 13:30 (15 mins) Incl. Q&A**
 - **Speakers:**
 - Jenni Rinker, Associate Professor, DTU
 - Carlos Casanovas, CTO, X1 Wind
- **Risk Assessment including Reliability, Environment, Health & Safety 13:30 to 13:45 (15 mins) Incl. Q&A**
 - **Speaker:**
 - Timmermans, Jeroen, Intecsa
- **LCOE Assessment, Socio-Economic Impact & Exploitation Plan 13:45 to 14:00 (15 mins) Incl. Q&A**
 - **Speakers:**
 - Bárbara Rodríguez, Research And Development Engineer, EDP
 - Miguel Vicente, Project Manager, WavEC
- **Communication & Dissemination of Results 14:00 to 14:15 (15 mins) Incl. Q&A**
 - **Speakers:**
 - Miguel Vicente, Project Manager, WavEC
 - Filipa Madureira, Communication Assistant, WavEC
- **ESM Elastomer Coupling 14:15 to 14:25 (10 mins) Incl. Q&A**
 - **Speaker:**



- Krull, Frank, Director Sales and Business Development, ESM

Final Q&A and Closing 14:25 to 14:30 (5 Mins)

14h30-15h30 Networking Lunch

- Catering

15h15-15h30 Media Reception – Press Conference

- Press Conference with Alex Raventos, Coordinator of PivotBuoy Project & CEO of X1 Wind

15h30-17h10 Boat visit to the prototypes in the Canary Islands

Attendants: X1 Wind, Wavec, Intecsa, DTU, PLOCAN, ESM, EDP, DNV, European Commission, DEGIMA + Key stakeholders + Media

1. 15:30-15:40h walking to the boat.
2. 15:40-15:45h boat departure to PLOCAN/PivotBuoy/Elisa/W2Power
3. 16:00 Arrive to the prototypes
4. 17:10h return to the port.

20h00-22h00 Networking Cocktail

Location: Club Náutico, C. León y Castillo, 308

Dresscode: Casual

- Drinks & Catering

PivotBuoy Final Workshop Event – Images



4 CONCLUSIONS

In conclusion, the PivotBuoy project Deliverable 8.4 achieved its dissemination and communication objectives by effectively engaging with stakeholders and disseminating project information through the development of the PivotBuoy Final Workshop event and the stakeholder consultation meetings, which included the project website, social media accounts, congresses, events, and press releases. On the one hand, the project's media exposure was extensive, with the project being featured in numerous articles and making several TV and radio appearances. Besides, despite the fact that the PivotBuoy's project social media accounts may not have made a significant impact, this was highly complemented by the partner's media accounts, which showed really high engagement, especially on LinkedIn.

On the other hand, The PivotBuoy Final Workshop marked the closing of the project and was a successful event that showcased positive results regarding the X30 scale-prototype platform performance. The workshop ensured that project results were disseminated in the most effective way possible by providing stakeholders with a comprehensive understanding of the project and its outcomes through presentations, live demonstrations, and onsite visits.

Overall, the PivotBuoy project's dissemination and communication efforts through deliverable 8.4 were highly successful in reaching and engaging key stakeholders and effectively disseminating project information.