



EnFAIT



Date of issue: June 2018

Deliverable ID: D 2.6

ENFAIT ENABLING FUTURE ARRAYS IN TIDAL

Training Materials



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 745862.



Document History

DOCUMENTATION SHEET	
Project Acronym	EnFAIT
Project Title	Enabling Future Arrays in Tidal
Grant Agreement number	745862
Call identifier	H2020-LCE-2016-2017
Topic identifier	LCE-15-2016
Funding Scheme	Research and Innovation Programme
Project duration	60 months (July 2017 – June 2022)
Project Officer	Dana Dutianu (INEA)
Coordinator	Nova Innovation Ltd
Consortium partners	Nova Innovation, ELSA, SKF, University of Edinburgh, Mojo Maritime, Wood Group, HMK, RSK Environnement, ORE Catapult
Website	www.enfait.eu
Deliverable ID	D 2.6
Document title	Training Materials
Document reference	EnFAIT-EU-0032
Description	Launch of materials for use in EnFAIT training workshops.
WP number	WP 2
Related task	T 2.9
Lead Beneficiary	University of Edinburgh
Author(s)	Encarni Medina-Lopez
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Dissemination level	PUBLIC - This document in whole, or in part, may be used in general and public dissemination.
Document status	Final
Document version	1.0

REVISION HISTORY

Version	Status	Date of issue	Comment	Author(s)	Reviewer
0.1	Draft	30/05/2018	Initial draft for review	Encarni Medina-Lopez, Tianna Bloise-Thomaz	Vicky Coy
0.2	Draft	08/06/2018	Version for consortium review	Encarni Medina-Lopez, Tianna Bloise-Thomaz	EnFAIT consortium
1.0	Final	20/06/2018	Version for issue	Encarni Medina-Lopez, Tianna Bloise-Thomaz	EnFAIT consortium

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I The Project

1.1 Introduction

A Funding Grant was awarded from the European Union's Horizon 2020 research and innovation programme in January 2017 to demonstrate a grid-connected tidal energy array at a real-world tidal energy site, propelling tidal energy towards competing on a commercial basis with alternative renewable sources of energy generation – Enabling Future Arrays in Tidal (EnFAIT). This was in response to the call *LCE-15-2016: Scaling up in the ocean energy sector to arrays* to generate significant learning through demonstration of cost-effective tidal arrays.

The purpose of Work Package 2 of the EnFAIT project is to communicate, train and disseminate from the project, maximizing the reach of public deliverables and outputs. The aim of this particular deliverable document is to define a training materials plan for the dissemination activities of the project, targeting different groups and providing a workshop programme to support the EnFAIT dissemination and training. Please note that this document presents the concluded activities during the first year of the project, the ongoing activities, and the plan for future activities.

This report is submitted to satisfy deliverable D2.6 of the EnFAIT project and will be available for public dissemination.

The document is structured as follows:

- Section 1 describes the aim of the EnFAIT project and the objectives of the present work.
- Section 2 defines the training plan, showing the different stakeholders involved in different tasks, target groups, type of activities planned and the timeline.
- Section 3 presents the status of each activity: concluded, ongoing and future. It summarises the reach of past activities, showing what the current activities are and presenting what is being planned for the next activities.
- Appendix 1 presents an overview of the plan for the training materials.

2 Training

2.1 Introduction

The training plan will evolve with the project, showing the path followed. For this, different types of activities are planned for each stage of the project. Initial inputs (from the existing tidal turbine array, goals of the EnFAIT project) will be provided in years 1 and 2 of EnFAIT. The training activities will also focus on the development and partial outputs during the duration of the project. At the end of the project, training will pay attention to final outputs: final array, differences with predictions, and improvements to initial state of the art. The stakeholders involved in different tasks, target groups, and type of activities planned are explained in the following sections.

2.2 Stakeholders

2.2.1 Context

The stakeholders are defined as the bodies involved in the development of the training programme. These should be established at local, national, and international levels, in order to cover the range of the target audience. The following stakeholders are summarized for the purpose of the EnFAIT training programme. This list of stakeholders will be reviewed over the course of the project to best suit the needs of the different EnFAIT work packages.

2.2.2 ETIP Ocean (European Technology and Innovation Platform for Ocean Energy)

Website: <https://www.etipocean.eu/>

ETIP Ocean is a hub for knowledge sharing and collaboration amongst stakeholders in the ocean energy sector. It is recognised by the European Commission as an advisory body to the Strategic Energy Technology (SET) Plan and is funded through the European Commission's Horizon 2020 research and innovation programme.

ETIP Ocean hosts knowledge exchange events including workshops and expert-led webinars to provide space for a pan-European stakeholder discussion on the key challenges facing the sector. In doing so the project defines research and innovation priorities for the ocean energy sector and builds consensus for these solutions with the industry, and policy makers at EU and national level.

As a conclusion to the project, an integrated strategy for the sector will be published. It will detail a common vision and actions required to accelerated development of ocean energy on the path to commercialisation.

2.2.3 EERA (European Energy Research Alliance)

Website: <https://www.eera-set.eu/>

The European Energy Research Alliance (EERA) is an alliance of European public research centres and universities. It is one of the cornerstones of the European Strategic Energy Technology Plan (SET-Plan).

EERA brings together more than 170 research centres and universities. Actively working together on 17 joint research programmes, they build on national research initiatives. In a Joint Programme a research organisation joins institutions in other European countries to work on shared priorities and research projects. The EERA Joint Programmes are aligned with the priorities for low carbon technologies defined in the SET-Plan.

EERA works together with industry stakeholders to align research and innovation priorities. This collaboration aims to foster world-class technology and innovation in Europe's energy sector, and to reduce the time to market for technologies.

EERA Joint Programmes are important points of contact for collaboration outside Europe. EERA members regularly represent the European scientific community globally, collaborating with international partners worldwide.

EERA has fostered the creation of national energy research alliances in many countries, including the UK, The Netherlands, Spain, and Belgium. These national alliances help coordinating activities at national level and within EERA.

2.2.4 OES (Ocean Energy Systems)

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

The Ocean Energy Systems Technology Collaboration Programme (OES) is an intergovernmental collaboration between countries, which operates under framework established by the International Energy Agency in Paris.

It was launched in 2001. The need for technology cooperation was identified in response to increased activity in the development of ocean wave and tidal current energy in the latter part of the 1990's and the beginning of this decade, primarily in Denmark, Portugal, and the United Kingdom. These three countries were the inaugural signatories to the OES.

The OES 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.

OES consists of 24 member countries (as of 2016). Each country is represented by contracting parties - who nominates participants in the OES Executive Committee. Participants in the OES are specialists from government departments, national energy agencies, research or scientific bodies and academia, nominated by the Contracting Parties.

2.2.5 Apprenticeship and career development programmes

- **At local level: Skills Development Scotland (SDS)**

Website: <http://www.skillsdevelopmentscotland.co.uk/>

In support of youth employment, SDS is one of the delivery partners for the Scottish Government's guaranteed offer of a place in education or training for all 16 to 19-year-olds through Opportunities for All.

They promote the development of work-based learning within a diverse and inclusive environment. They work with a diverse range of partners, both at a local and national scale.

- **At national level: Education & Skills Funding Agency (UK)**

Website: <https://www.gov.uk/government/organisations/education-and-skills-funding-agency>

The Education and Skills Funding Agency (ESFA) brings together the existing responsibilities of the Education Funding Agency (EFA) and Skills Funding Agency (SFA), creating a single funding agency accountable for funding education and training for children, young people and adults.

ESFA is an executive agency, sponsored by the Department for Education of the United Kingdom.

The ESFA is accountable for £61bn of funding for the education and training sector, providing assurance that public funds are properly spent, achieve value for money for the tax payer and deliver the policies and priorities set by the Secretary of State.

It regulates academies, FE Colleges, employers and training providers, intervening where there is risk of failure or where there is evidence of mismanagement of public funds.

It delivers major projects and operates key services in the education and skills sector, such as school capital programmes, the National Careers Service, the digital Apprenticeship Service and National Apprenticeship Service.

- **At European level: European Alliance for Apprenticeships (EAfA)**

Website: <http://ec.europa.eu/apprenticeships-alliance>

The European Alliance for Apprenticeships is a unique platform which brings together governments with other key stakeholders, like businesses, social partners, chambers, vocational education and training providers, regions, youth representatives or think tanks.

The common goal is to strengthen the quality, supply and image of apprenticeships in Europe, and more recently mobility of apprenticeships has also emerged as an important topic. Moreover, the first on-line survey among stakeholders revealed the growing importance of mobility in apprenticeships.

The Alliance was launched in July 2013 with a joint declaration by the European Social Partners (ETUC, Business Europe, UEAPME and CEEP), the European Commission, and the Presidency of the Council of the EU. This was followed by a Council Declaration by EU countries

Although managed by the European Commission, the success of EAfA lies with the implementation of national commitments and the commitment of partners, notably through pledges by stakeholders.

- **Blueprint project**

The Blueprint project aims to develop the outcomes and policy recommendations from a previous EU-funded project to create a Skills Council for the Maritime Technology Sector.

Based on the trust and improved collaboration among stakeholders created through the Skills Council, and the inclusion in this broader Blueprint Platform of Ocean Energy Europe, Wind Europe and CPMR, representing the Offshore Renewables sector, the European maritime regions and Universities and VET providers, the project will bring forward cooperation and understanding among all sectoral stakeholders: industry, workers, education providers and public authorities in order to find solutions to the current skills mismatches and gaps, ensuring the growth of the sector and the employability in the coming years.

This project will build on the preliminary work carried out by TP Wind in 2013, the European Technology Platform for Wind Energy (Workers wanted: the EU wind energy sector's skills gap) and the KnowRES project (2016) that includes a chapter on ocean energy. We will engage with the successful consortium when the project is awarded.

2.2.6 OEE (Ocean Energy Europe)

Website: <https://www.oceanenergy-europe.eu>

Ocean Energy Europe is the largest network of ocean energy professionals in the world. 115 organisations, including Europe's leading utilities, industrialists and research institutes, trust Ocean Energy Europe to represent the interests of Europe's ocean energy sector.

Ocean Energy Europe's mission is to create a strong environment for the development of ocean energy, improve access to funding and enhance business opportunities for its members. To achieve this, they engage with the European Commission, Council, Parliament, European Investment Bank, and national ministries on all topics affecting the sector, such energy, climate, finance, grids and consenting.

2.2.7 INORE (International Network on Offshore Renewable Energy)

Website: <https://inore.org/>

The International Network on Offshore Renewable Energy (INORE) is an association of postgraduate students, postdoctoral researchers, and other professionals at early stages of their careers, working in the fields of offshore wind, wave, tidal and ocean thermal energy conversion. INORE's organization,

administration, and fundraising is done through the voluntary work of dedicated members of INORE elected by their peers to the steering committee.

INORE was founded by a small group of researchers in 2006 in order to solve problems through interdisciplinary collaboration. Today, INORE has more than 1000 members from over 70 countries, representing a network that spans a multitude of research fields, including technological, social, economic and environmental aspects.

2.2.8 WiTEC (European association for Women in Science, Engineering and Technology)

Website: <http://www.witeceu.com/>

WiTEC was formed as a network in 1988 and after more than ten years of networking and project activities related to women and SET (Science, Engineering and Technology) it established itself as a non-profit European association in May 2001.

WiTEC has the following aims at European level:

- To increase the number of girls and women studying SET subjects and to help in their progress into related careers.
- To develop women's technical and entrepreneurial skills through training initiatives and projects.
- To create information exchanges and networking opportunities for women in SET.
- To promote and support research in areas relating to women in SET.
- To support initiatives to promote the Gender Mainstreaming Policy.
- To promote regional, national and international awareness and interest in this field.

2.2.9 EEN (Enterprise Europe Network)

Website: <https://www.enterprise-europe.co.uk/>

EEN helps ambitious businesses grow in Europe and beyond, providing specialist support through their network. EEN has the following aims:

- Access funding to help businesses make sense of the hundreds of funding and finance opportunities available to them.
- Use their network to access business opportunities right across the globe, connecting businesses with different organizations and organizing meetings.

- Find trusted partners, helping businesses to connect with interested companies and developing fruitful partnerships.
- Innovate to grow, helping businesses launch innovation more effectively in order to rapidly commercialise concepts, scale up business and grow the bottom line.
- Scale up, working with high-growth-potential small and medium-sized enterprises to accelerate their journey.

2.3 Target groups

Target groups are defined as specific sets of people to whom the educational and training material is oriented. For EnFAIT, the proposed target groups are Schools, Universities, Professionals, Supply chain, Regulators and finance community, Utilities and project developers, and Citizens of the European Union.

The different target groups will take part in measuring the Key Performance Indicators (KPIs), as summarised in Appendix 1 . The KPI will measure the impact and reach of each activity. The following sections describe the potential training activities in relation to the target groups.

2.3.1 Schools

The main premise is to have continuity in the chosen groups for the duration of the EnFAIT project, as well as some interaction with groups closer to higher education. Development of knowledge about tidal energy is key at this step. Experimental activities to show the students the basis of tidal energy and the benefits of it should be developed. Visits to laboratories at research centres, or industrial workshops where scholars can see how tidal energy is being developed is recommended.

2.3.2 Universities

Based on “Learning by doing”, a set of activities could be planned within the Renewable Energy-related modules of different degrees to present the EnFAIT goals and methodologies. Interactive events are a good way to present this to university level, such as group activities led by a representative of the different modules of the project to show students how the development of a real tidal energy project is undertaken.

2.3.3 Professionals

This section focuses on professionals already working in the tidal or ocean energy sector. A set of webinars is a good way to reach a broader public. These could address specific topics such as goals of the EnFAIT project, design constraints, activities developed for the expansion of the tidal array, approaches followed for technical challenges found in different stages of development, or improvements made to the ocean energy sector led by EnFAIT. Open, free-attendance sessions promoting discussion in different stages of the project could be useful to attract attention to EnFAIT, and to obtain good feedback from experienced stakeholders working in the sector. These could be located at strategic locations, such as conferences in the UK and around Europe. Services from key stakeholders (such as training campaigns from WITEC, or INORE) could be used as promotion for these programmes too.

2.3.4 Supply chain

Manufacturers and suppliers from industry are a relevant group to focus training on. It could be beneficial to attract potential suppliers to the tidal energy sector from the general industry. From the point of view of generating training material for the suppliers on the ocean energy sector specifically, it is a good opportunity to gain their understanding and confidence in the project by providing up-to-date information and knowledge on the activities of developers. Workshops and discussion sessions are proposed in later sections to attract this group’s attention to the EnFAIT project.

2.3.5 Regulators and finance community

The regulation bodies from the European Union, as well as the public and private finance community are key target groups that should be included in the training programme of EnFAIT. A more focused training scheme linked to a dissemination plan could potentially be a source of confidence for future investment in tidal arrays.

2.3.6 Utilities and project developers

Key information could be provided to utilities companies to help them understand the benefits of tidal energy, and the opportunities and options for the sector in the future. Other ocean energy developers could be a very important target, as dialogue could be established for improvements in sector and knowledge sharing.

2.3.7 Citizens of the European Union, wider public

The last group for the proposed training programme is reaching the wider community, in general terms. Several community centres and universities develop training programmes for adults (i.e. permanent, lifelong, or open learning). Talks and activities could be linked to these programmes to improve the knowledge and understanding in the wider community about tidal energy and the EnFAIT project.

This training plan is to reach the wider EU public. All activities have been planned to be recorded and distributed to different groups around Europe, and potentially internationally. Moreover, special attention should be paid to the Shetland community, focusing activities in the area, as the impacts of EnFAIT will primarily involve that area.

2.4 Activities

2.4.1 Introduction

The activities being developed for the EnFAIT training programme aim to cover the seven target groups described previously using the expertise and tools from the key stakeholders summarised in previous sections. These activities will be led by University of Edinburgh and will be developed with EnFAIT partners over the course of the project.

2.4.2 Scope of training

The scope of training activities will depend on the level of target groups:

Tidal energy in general: Level 1. This will be orientated to schools, for children of ages 12-15. The general description of tidal energy within renewables, benefits of tidal, educational tool, etc.

Tidal energy in general: Level 2. This scope will be more specific, but still within the general concepts of tidal energy. It will be oriented to ages 16-18. The goal is to gain the students interest about tidal energy and promote the inclusion of ocean renewable energy in future career paths. This level could also be applied to community centres and apprenticeship programmes.

Tidal energy in general: Level 3. This will be focused on the wider public. The general description of tidal, its benefits and goals will be presented aiming to improve the knowledge and acceptance in the community.

Tidal energy, specific contents 1. A more specific set of contents is oriented to university students and the research community, as well as regulators and supply chain.

Tidal energy, specific contents 2. This will be linked to lessons learnt. The most specific set of tools, relevant to utilities and project developers. Professionals from the sector could benefit from this approach too. A progressive approach to the steps followed during the project could be inserted in the training materials.

2.4.3 Type of activity

A diverse range of activities is proposed to carry out the training plan for EnFAIT. The University of Edinburgh will liaise with the project partners as this plan develops to determine what contributions can be made to the following:

- Talks
- Webinars
- Workshops
- Information packs

- Interactive tools
- Visits to facilities
- Private briefings (e.g. confidential materials shared with regulators)
- Reports from workshops to distribute among people involved in workshops. A more general version of these could be distributed to general public.
- Recordings for dissemination of talk, webinars, and workshops, if possible.

2.4.4 Channels

The proposed channels for knowledge transfer are:

- Online videos
- Interactive
- Paper based

2.4.5 Fitting with centres curriculum

An initial research of the proposed centres curriculum needs to be undertaken in order to make sure that the materials developed fit within their goals and activities.

2.5 Timeline

The proposed timeline for the activities of the training scheme will be developed and led by the University of Edinburgh during the five years of the EnFAIT project, evolving with its different stages.

- A total of 8 activities are proposed, at least one per target group defined previously. A six person-month preparation period should be established to develop the academic and training materials needed. A two person-month preparation period for each activity is expected.
- Then, a shortlist of proposed centres to develop the training programme should be drawn up. Partners will be encouraged to propose centres for this purpose. Schools, universities, and career and community centre coordinators should be contacted to arrange the training programme, and make sure our activities are appropriate for the curriculum. Moreover, the proposed timeline for training should be distributed to them for agreement. A final list of centres that the training will be directed to should be distributed to partners.

In general terms, the activities developed during the five years of the EnFAIT project will be phased as follows:

- Year 1: introduction and inputs from target groups.
- Year 2: application of lessons learnt from activities in year 1, and improvement for year 2 actions.
- Year 3: comparison between years 1 and 2 related to inputs and objectives achieved in terms of training purposes and community vision.
- Year 4: Innovation activities linked to finalisation of activities from project.
- Year 5: closing remarks. Objectives achieved. New information we have for tidal energy from EnFAIT.

The KPI for each activity has been estimated in Appendix 1 . It is forecast that a total of 1060 people will be directly reached through the training activities.

3 Activities Status

3.1 Introduction

This section presents the activities planned for the training materials showing status, objectives and target groups. The activities are classified as: concluded, ongoing and future.

3.2 Concluded Activities

3.2.1 Introduction

During the first year of the project, 4 training activities were held. They are presented in more detail below.

3.2.2 Webinar ETIP Ocean

A webinar about the Optimization Design Tools was held in Month 7 of the EnFAIT project (January 2018), aiming to give professionals in the ocean energy sector an overview about the progress of the project.

The objectives of the optimization tool, DTOcean, were explained, and improvements for the sector were highlighted. General information about the EnFAIT project was presented, such as partners and countries involved, structure of the consortium, duration of the project, etc. The DTOcean working principles, data requirements, and interface and expected outputs were outlined. The overall goals of EnFAIT and the relationship with the array optimization tool were also shared.



Figure 1 – Webinar ETIP Ocean

The video recording and presentation file are available here:

- <https://www.etipocean.eu/events/webinar-developing-and-implementing-optimisation-tools/>

Information about the reach of this activity is reported below:

- Registered attendees: 67
- Final attendees: 64

- Views/Downloads: 82 (by May 2018)

Note that the views/downloads number is not a fixed value and will increase with time.

3.2.3 University visit to Nova Innovation

A group of students from the University of Edinburgh went on a series of visits to Nova Innovation's headquarters in Edinburgh. The visits were held in Month 8 and Month 9 of the EnFAIT project (February and March 2018). The aim was to demonstrate to the students the aims of the EnFAIT project and how tidal energy companies operate.

The visit started with a presentation, followed by seeing the company manufacturing facility. The presentation gave students an overview of the history of the company and Nova's technology development. Nova shared details about the goals for tidal energy and its differences and similarities with other energy technologies, and the remarkable work that it is being done in Scotland in this area linked to the European efforts to build a strong marine energy sector.

The students then visited the Nova manufacturing facility where the activities currently in progress were described, including the work being done for the forensic analysis of one of the Nova tidal turbines within the EnFAIT project. The students were able to look at a full size tidal turbine and were given explanations of the current upgrade works being implemented. Figure 2 shows a picture of the students visit to Nova Innovation headquarters.



Figure 2 – Students visit to Nova Innovation headquarters.

More information of the visit can be found on the EnFAIT blog:

- <https://www.enfait.eu/blog/edinburgh-students-visit-nova-innovations-manufacturing-facility/>

A total of two visits were held, and information about the reach of this activity is reported below:

- Students registered: 40 (21 + 19)
- Attended: 39 (20 + 19)
- Views/clicks (LinkedIn): 33 (by May 2018)

Note that the views/clicks number is not a fixed value and will increase with time.

3.2.4 Seminar to the CDT PhD students at Strathclyde University

On May 2018, Nova Innovation gave a seminar to the Centre for Doctoral Training (CDT) PhD students at Strathclyde University (Glasgow). There were about 20 PhD students and 4 research staff in attendance. The EnFAIT dissemination material was presented, and the project and current areas of research for tidal energy were discussed. This had previously been presented to the Industrial Advisory Board of the Centre for Doctoral Training on December 2017.

3.2.5 ICOE presentation

A presentation about the application of DTOcean tool to the EnFAIT project was held in Month 12 of the EnFAIT project (June 2018), aiming to give professionals in the ocean energy sector an overview of the progress of Work Package 10 of EnFAIT, including a comparison of DTOcean initial outputs against the existing tidal turbine array in the Bluemull Sound, Shetland.

The presentation was given at the International Conference on Ocean Energy (ICOE), in Cherbourg, France. This assisted with the dissemination of the results contained in EnFAIT deliverable D10.3, presenting the capabilities of the array optimization tool.

The presentation comprised of a summary of the EnFAIT project, followed by an explanation of the DTOcean tool. The working scenario for EnFAIT was defined and a comparison of DTOcean outputs against the existing tidal array choices for each module of the tool was completed. For this exercise, hydrodynamic, electrical and foundation modules were accessed, as well as economic metric outcomes. During the presentation, a reference to EnFAIT deliverable D10.3 was highlighted and a path to access the report was presented. Figure 3 shows D10.3 and the ICOE presentation used to disseminate this task.

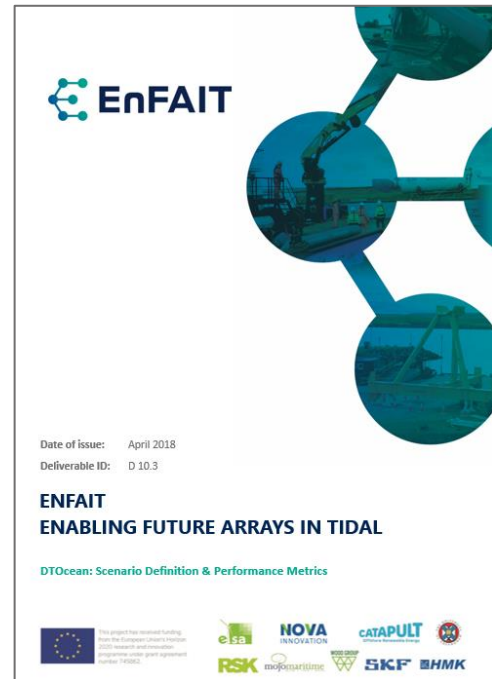


Figure 3 – ICOE presentation and D10.3.

As explained during the ICOE presentation, the results of the DTOcean capabilities provided in EnFAIT deliverable D10.3, can be found on the EnFAIT website and available for download.

Information about the reach of this activity is reported below:

- Attendees at the presentation in ICOE: 50 (estimated)

3.3 Ongoing Activities

3.3.1 Introduction

Two activities are planned for the second year of the EnFAIT project: a school visit and a talk to the wider public. The talk to the general public is planned to be held in Spring 2019 while the school visit is planned to be held later in 2018. The material for the school visit consists of an educational tool for students to show them the basics of tidal energy. This will be an ongoing activity and more details about the tool is presented in the following section.

3.3.2 Educational Tool

The educational tool is part of the ETIP Ocean project in collaboration with EnFAIT and Marinet2. This education series within ETIP Ocean will assemble educational materials for professors and teachers. The materials produced are based around an educational game and background information in the form of a microsite. The aim is to make students aware of ocean energy as a form of renewable energy. The interactive aspect is to be used to get them engaged and involved. It is intended to be for late elementary/early high school students (age 11-16) as well as the general public.

Game

The game concept embraces topics like: Why renewables? What is ocean energy? Why ocean energy? The aim is to show the pros and cons of marine energy, considering energy generation, environmental impact, social impact, and giving the users an understanding of these overarching questions.

An engineer will introduce the game and will invite the users to help her to save the Saltwater Isles, by replacing their polluting diesel energy generation with renewable energy generation using their plentiful ocean resources, see Figure 4.

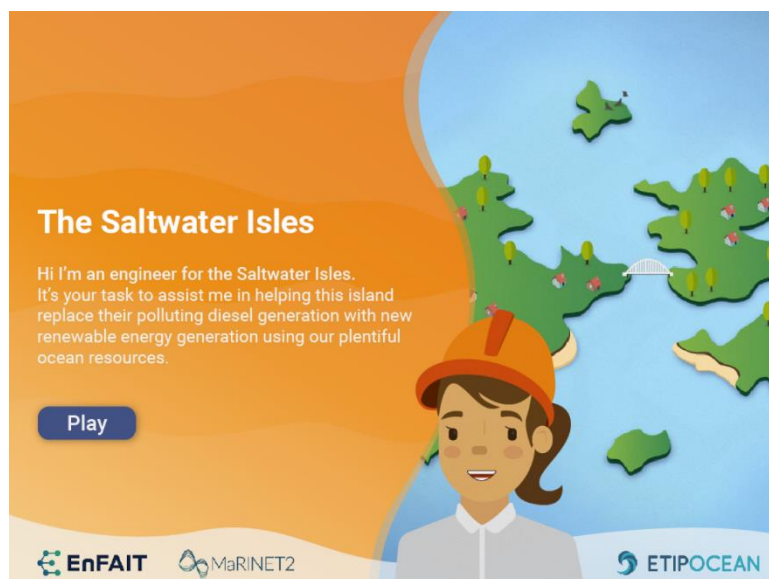


Figure 4 – Game introduction (draft).

The microsite material will support users to make choices about the type and location of energy devices to create a viable energy mix. The game will provide the kWh generated/houses powered, CO₂ saved and acceptability as outputs.

Figure 5 shows an example of the Saltwater Isle and the technology options for energy mix.



Figure 5 – The Saltwater Isle and options for energy mix (draft).

The Nova Innovation tidal turbine will be given as an example of one of the renewable technologies that may help the user to save the Saltwater Isles. It will be represented in the game as an unbranded representation of the device (see Figure 5) but with a little information symbol which pops up with an example picture and text content describing the Nova Innovation device.

The following information will be considered for a horizontal axis tidal turbine.

- Two bladed tidal turbine, generates electricity due to tidal stream moving the blades;
- Low social impact (not seen from shore).

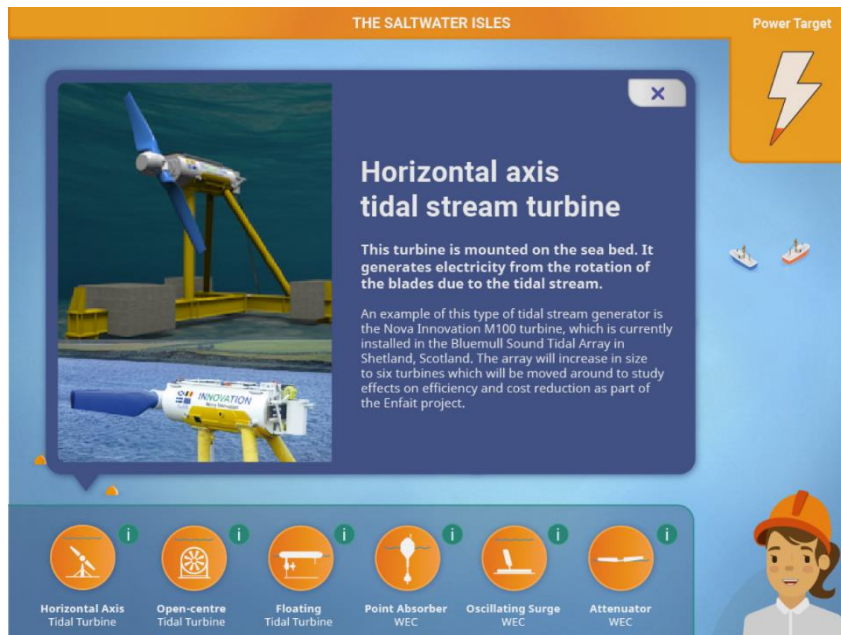


Figure 6 – Specific information on the EnFAIT project (draft).

Microsite

The purpose of the microsite is to disseminate educational materials on ocean energy. Aimed at a high school level and suitable for both school students and the general public.

The microsite will complement the game, providing all the information necessary so that the concepts explored in the game can be understood further. The microsite will explore energy generation, ocean energy, tidal energy and wave energy concepts.

Plan

The educational tool is planned to be delivered in August 2018, in time for the next school academic year so that teachers are able to include it in their lesson plans. The microsite will sit on the ETIP Ocean website and the current timeline is for it to be available online for July 2018.

Website: <https://www.etipocean.eu/>

3.4 Future Activities

The future activities are planned for 2019 onwards. A list of them is presented below. For more details, see Appendix 1 .

- General public talk and workshop;
- Supply chain workshop;
- Utilities & project developers Q&A Session;
- Regulators & Finance workshop.

Appendix I Overview of Training Materials Plan

	Action	Target	Proposed activity	Objective	Estimated date	Stakeholder involved	Attendees	Status
YEAR 1								
Professionals + Regulators & Finance	Webinar	Professionals of the ocean energy sector	Specific webinar about a particular aspect of the array expansion	Give professionals in the sector an overview about the progress of the EnFAIT project	Jan. 2018	OEE + ETIP	64 attendees (67 registered)	Complete
	Recording of activity and distribution as webinar						82 views (by May 2018)	
University	Talk and visit	Different universities	Introduction to project EnFAIT, visit to laboratories, workshops, or similar	Show them the goal of the EnFAIT project. Within a module of Renewable Energy ideally	Feb., Mar. and May 2018	EERA, INORE + ETIP	64 attendees	Complete
	Recording of activity and distribution to other universities around Europe						50 views (estimated)	
Professionals	Presentation	Professionals of the ocean energy sector	Present results of EnFAIT deliverable D10.3	Share with professionals of the sector the knowledge gain with DTOcean tool validation against real tidal array	Jun. 2018	OES (ICOE)	50 attendees	Complete
	Recording of activity and distribution						100 downloads (estimated)	
YEAR 2								
Schools	Talk + visit + educational tool	A series of schools	Introduction to ocean energy, and visit to laboratories, workshops, or similar	Introduce students to the reality of tidal energy	Dec. 2018	EERA + ETIP	3 x 30 attendees	Ongoing

	Action	Target	Proposed activity	Objective	Estimated date	Stakeholder involved	Attendees	Status
	Recording of activity and distribution to other schools around Europe						50 downloads	
Wide public	Talk and workshop + information pack	Community centres	Introduction to tidal energy, and workshop about benefits and goals. Brainstorming session	Educate public about general aspects of tidal. Obtain good acceptance and recognition of tidal energy	Spring 2019	SDS, ESFA, EAFA, Blueprint, WiTEC + ETIP	3 x 40 attendees	Future
	Recording of activity and distribution to other centres around Europe						100 downloads	
YEAR 3								
Supply chain	Workshop	Professionals related to the supply chain for ocean energy	Progression of project, goals for next years. Specifications for supply chain	Present the project to suppliers	Sept. 2019	EAFA + ETIP	30 attendees	Future
	Recording of activity and distribution as webinar						100 downloads	
YEAR 4								
Utilities & project developers	Q&A Session	Utilities and project developers from ocean energy sector	Open session for consultation and discussion	Knowledge sharing about progress of project and activities undertaken.	Feb. 2021	EAFA + ETIP	30 attendees	Future
	Recording of activity and distribution to wider public						50 downloads	
YEAR 5								
Regulators & Finance	Workshop	Regulator bodies of ocean energy and finance sector	Workshop to discuss characteristics and benefits of project to future investors	Knowledge sharing about progress of project and activities undertaken. Attract future investment.	May 2022	OES + ETIP	30 attendees	Future
	Private briefing + distribution materials with general extension of topics discussed for wider public						50 downloads	
TOTAL REACH							1060 people	

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 745862.

