



GREENDIVING

# **Action Plan for Greener Maritime VET Centres**

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# Action Plan for Greener Maritime VET Centres.



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More information about the Project at <https://green-diving.eu/>

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## 1 INTRODUCTION

By developing an action plan for greener VET maritime school, Green Diving project will foster a collaborative co-design process which will result in a series of measures aimed at VET maritime schools greening in a holistic and whole approach. Although macro and more general guidelines addressing the greening of educational institutions are in place, this document will produce a more focused action plan which will apply sectorial knowledge (both referring to VET context and maritime context) and a co-design approach in its definition and developed which is informed by end users.

This Action Plan contains the main concepts of the co-design methodology, guides and tips for teachers/trainers, school leaders, staff and students on how to jointly develop an action plan to promote greener practices and teaching in their VET training Centres and some examples of methodology used by centres that have already implemented this green practices.

## 2 PURPOSE OF THE DOCUMENT AND TARGET USERS

The purpose of this document is to support any Maritime VET training Centre in the process of improving educational programs and practices to further take into consideration rational use of natural resources and protection of the environment. It focuses on the integration of awareness raising and teaching activities into the training curricula, to promote green skills across the educational community and beyond.

The main target users of the document are teachers and school leaders willing to undertake such process in their Centres, but students and the industrial stakeholders collaborating with the VET Centres will also benefit from the Action Plan.

## 3 PARTICIPANTS AND ROLES

The present Action Plan follows a co-creation approach, to gather a consistent and holistic implementation. For this purpose, it will be relevant to set-up a working group (WG), in charge of the design, and the monitoring of the action plan. The working group will identify all the supporting participants and support the implementation of the Action Plan, as well as adapt it following the results gathered.

It will be important to consider the main type of participants in the Training Centre community, as well as the contributors from the Industry network in collaboration with the Training Centre.

- Confirm the interest from school leaders
- Identify the teachers interested in further teaching Green skills in their classes
- Include the students in the process
- Establish a communication channel for all participants

Ideally, the following contributors should be involved:

TRAINING CENTRES WORKING GROUP	
CONTRIBUTORS	ROLE
From the Training Centre community: <ul style="list-style-type: none"> <li>- 3 students</li> <li>- 2 teachers</li> <li>- 1 school leader</li> </ul>	Contribute to the design of the Action Plan, by reviewing the Action plan Draft and proposing adaptations (when necessary). Promote the analysis phase and identify further contributors to the Action Plan. Monitor advancements and integrate improvements according to the results of the validation phase and the implementation of the Plan.
From the industry network of the training Centre: <ul style="list-style-type: none"> <li>- At least 1 industry representative</li> </ul>	Review and validate the Action Plan Propose improvements and/or adaptations

More contributors can be involved in the different steps of the process. The collaborators to the Action Plan may just report their activity to the WG, or even integrate the WG extending it.

## 4 PROCEDURE

The development of the Action Plan will includes 3 stages:

### 1 – Planning phase:

- Definition of the main intervention areas and general Action Plan structure.
  - o Who: Core Working Group promoting the Action Plan

Normally this first core group will include teachers and school leaders...but each case can be different, and even a group of students can be the seed for a Green Action Plan at the VET school! Consider to integrate a recognition for the efforts deployed by the contributors to the plan.

Example: the Headmaster and teachers directly or indirectly involved in maritime education will be in charge of carrying out this planning phase

- Identification of main contributors needed in the Training Centre: teachers and students willing to take part in the process.
  - o How: Presentation of the Action Plan to the Training Centre community, inviting the attendees to contribute.

Depending on the composition of the core group promoting the Action Plan, the presentation can take the form of a series of meetings with school leaders and teachers, or a workshop with the participation of students, teachers and even industrials... It is important to pay attention to the students group of age (young people or adults) in order to design the activities and implement the plan.

Presentation in events are normally preferable, but presentations via mails or any other communication means can be used if they better suit your community.

Stablish a communication channel to communicate with the Action Plan WG.

It is important taking into account the stability in the center and the motivation and involvement with green teachings of the teachers that will participate.

- Identification of needs and opportunities at the Training Centre to improve the sustainable use of resources:
  - o Main intervention areas: modules that will integrate new teaching methods/materials, main teachers and students involved...
  - o Needs for Train the trainers and the existing resources to cover them
  - o Existing demand for more sustainable practices from the industry collaborating with the training Centre and/or opportunities that the sustainable practices can provide to the industry.

Identify local and global networks that can support your action (and join them when possible) The Toolkit and the Train the Trainers course developed by the Green Diving project will serve as an inspiration tool in this process.

A list of supporting resources completes these materials.

All of them are available at <https://green-diving.eu/achievements-results/>

Create interactive virtual tools to facilitate students' approach to environmental awareness.

Work actively in enhancing the interrelationship between trainers of the school and the companies collaborating in the implementation of the students' internships to put into play common strategies to develop sustainable practices in companies.

Example: The intervention areas for the project primarily focus on enhancing environmental awareness through collaborative and participative teaching methods to captivate student interest. Teacher involvement will be led by those specializing in education and new technologies.

The key training demand centers on digital accreditation, with the task force spearheading strategies involving virtual classrooms, H5P, Moodle, Genially, 360 cameras for virtual tours, and tools such as virtual reality glasses and Kahoot for gamification. The overall goal is to improve digital skills and environmental awareness in the teaching-learning process.

## 2 – Implementation phase:

- Training the trainers and /or facilitating supporting materials to trainers

Materials that allow their adaptation to the specific context of the training Centre are generally better accepted.

Support to teachers in the adaptation of training materials as much as possible

Regular meetings of the WG will ensure the proper monitoring of the implementation phase

Example: The project emphasizes two key points:

- Implementation of teaching-learning activities through virtual tools, involving training workshops led by ICT teachers for all maritime education teachers. The workshops will cover generic use of virtual tools, followed by practical application using examples from the "Green Diving" Project, such as virtual tours with 360 cameras tailored to specific cases.
- Contrast of environmental teachings between teaching staff and collaborating entrepreneurs, involving periodic meetings to share information on how green education is approached by both organizations. The aim is to identify common ground and develop coordinated strategies to achieve the sustainability and environmental awareness objectives outlined in the project.

- Testing the new teachings, procedures and/or materials once ready.

A step by step roll out of the Plan will facilitate the acceptance and the integration of the new teaching and resources. (It can be easier to start with a few classes /teachers and then extend the Action Plan)

Remember to **evaluate the performance** of the new trainings/materials implemented (by teachers and students).

Keep record of the activities and their results

Example: After completing the process, rehearsals will be conducted with students using the virtual tools created to identify potential weaknesses in the system. Additionally, efforts will be made to implement new sustainable practices emerging from meetings and collaborations with entrepreneurs associated with the educational center.

### 3 – Validation phase:

- Presentation of the previous phases' results to the Training Centre community to gather feedback for validation and improvement.

Involve the Training Centre community as a whole, including teachers, school leader and students, but also the collaborating industrial stakeholders when possible.

Design and conduct surveys to see opportunities for improvement.

- Update the Action Plan with the community inputs

Do not forget to update the supporting resources with new materials generated but also reviewing new issues from other networks

### 3 – Consolidation phase:

- The previous phases can be deployed in a circular way to identify further actions that can be addressed by the Action Plan and extend the number of Green teaching activities and actions.

Consider the involvement of more external contributors from the industry and the Education community.

Integrate the local and global networks promoting the sustainable uses of marine resources, and the sustainable development goals.

Collaborate with local centres to consolidate the project but also with the European partners participating in the Green Diving project, to create and keep relationships between centres with the same interests and to encourage the exchange of ideas and future joint work.

## 5 SUPPORTING MATERIALS

### Digital Toolkit for Green Skills.

**Green diving Train the Trainers course** “TRANSITION TO GREEN SCHOOLS: ENVIRONMENTAL AWARENESS AND SUSTAINABILITY”

Green Diving Repository of supporting materials

All of them are results of the Green Diving project, available at ([Green Diving – Green Diving \(green-diving.eu\)](http://green-diving.eu))

## 6 TEMPLATES

1 – Training Centres Working Group Report structure including the following sections:

- List of the participants in the Working Group, indicating their name, organization and role.
- Picture of the working group
- Agenda and Signature sheet of the meeting held
- Main conclusions of the working group

2 – Agenda and signature sheet template (to be used for all meetings of the training centres WG, the final sharing session and the Validation session).

3 - Co-design process Report structure (document merging all Training centres working group reports)



## 7 COMPREHENSIVE PLANNING

The following table recaps the proposed steps to develop the action Plan, indicating the main features for each one of them. The time dedication is calculated as a minimum. Time dedicated may vary depending on the availability of the Working Group team.

**What:** Pinpoint the resource targeted for implementation. (Digital Toolkit resources, materials, and tools (R1) - Green Skills Course for VET Teachers Professional Development (R2) ...)

**Why:** Explain the rationale behind selecting this resource. Highlight existing experience and its implications for future implementation.

**Where:** Specify the location or setting for implementing this action.

**Who:** Identify the involved actors or participants in this implementation.

**When:** Detail not just the timeframe but the suitable period for implementation within school conditions.

**How:** Describe the methodology for successful implementation, from operational to executive levels.

**How Much:** Outline the impact on activities, including financial and human resources.

The table below serves as a structure that can be employed to adapt the Action plan to your VET Training Centre purposes

WHAT?	WHY?	WHERE?	WHO?	WHEN?	HOW?	HOW MUCH?
Definition of the main intervention areas and general Action Plan structure	Clearly identify the goal of the Action Plan and the main interests of the Training Centre community	VET Training Centre	Core Working Group promoting the Action Plan for Greener Maritime VET Centres	First step of the Action Plan	Coordinating meeting/s + mail exchanges	At least <del>two</del> <sup>10</sup> coordinating meetings. 1 month
Identification of main contributors needed in the Training Centre	Identify the adopters of the Action Plan in an early phase for their information and involvement: teachers and students willing to take part in the process, or involved in the teachings and processes that will be addressed.	VET Training Centre		Second step of the Action Plan	Presentation of the Action Plan to the Training Centre community, inviting the attendees to contribute.	At least one event for presentation 1 month
Identification of needs and opportunities at the Training Centre to improve the sustainable use of resources	<p>Definition of the main intervention areas: modules that will integrate new teaching methods/materials, main teachers and students involved...</p> <p>Identification of any training need for the trainers and the existing resources to cover them</p> <p>Confirmation of any demand for more sustainable practices from the industry collaborating with the training Centre and/or opportunities that the sustainable practices can provide to the industry.</p>	VET Training Centre and local and global networks for sustainability	Working Group promoting the Action Plan for Greener Maritime VET Centres	Third step of the Action Plan	Coordinating meeting/s + mail exchanges	2 months

<p>Training the trainers and /or facilitating supporting materials to trainers</p>	<p>Preparing the trainers to be better equipped for their activity will ease the implementation.</p> <p>Supporting them in the adaptation of training materials and the identification of resources will improve their efficiency</p>	<p>VET Training Centre/on-line</p>	<p>Teachers and school leaders involved in the deployment of the Action Plan</p>	<p>As soon as possible when the training needs are identified</p>	<p>The "Digital Toolkit resources, materials and tools (R1)" and the train the trainers course" "transition to green schools: environmental awareness and sustainability" (R2) can support this action</p>	<p>2 months</p>
<p>Testing the new teachings, procedures and/or materials once ready.</p>	<p>A step by step roll out of the Plan will facilitate the acceptance and the integration of the new teaching and resources. The evaluation of the performance of the new trainings/materials implemented (by teachers and students) will allow to improve the action.</p>	<p>Classes/ classroom</p>	<p>Teachers and students</p>	<p>The materials will be implemented during the period of classes with students and possibly can be an extra activity for a curriculum</p>	<p>Once approved by the administration, every teacher needs to structure their classes to allocate teaching time.</p>	<p>Internal management including the school community – teachers, school leaders, class council, etc</p>

<p>Presentation of the previous phases' results to the Training Centre community to gather feedback for validation and improvement.</p>	<p>At least one meeting of the whole WG will be held to discuss their views on the Action plan</p>	<p>Classes/ classroom</p>	<p>VET Training Centre community: School leaders, Teachers and Students. Involve collaborating industrial stakeholders when possible.</p>	<p>The materials will be implemented during the period of classes with students and possibly can be an extra activity for a curriculum</p>	<p>A validation workshop to allocate teaching time and utilize toolkit resources to address specific content themes.</p>	<p>Internal management including the school community – teachers, school leaders, class council, etc</p>
<p>Integrate the new inputs to the Action Plan</p>	<p>Update the Action Plan and improvement with the users' comments and proposals.</p>	<p>Desk-top</p>	<p>Working Group promoting the Action Plan for Greener Maritime VET Centres</p>	<p>End of the course</p>	<p>Revision of the Action plan.</p>	<p>1 week</p>
<p>Consolidation of the Action Plan</p>	<p>Extend the number of Green teaching activities and actions.  Integrate local and global networks to support the Action Plan activities</p>	<p>VET Training Centre/on-line</p>	<p>Working Group promoting the Action Plan for Greener Maritime VET Centres</p>	<p>Future courses</p>	<p>New iteration of the Action Plan phases</p>	<p>1 scholar year and more</p>

## CONSORTIUM



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