

GUIDE FOR EDUCATORS

https://areen-divina.eu



Enhancing green skills, sustainability and attractiveness of Maritime VET.

PREFACE

This guide is crafted to offer educators in the Vocational Education and Training (VET) sector valuable insights and resources on incorporating the Green Skills Course into their professional development activities. Commencing with a brief introduction to Green Skills, the guide then delves into a comprehensive overview of the course, its modules, and objectives. It further outlines the versatile applications of the course across various educational subjects and emphasizes its role as a supplementary educational tool within specific domains of VET education.

Originating from the "Green Diving" project, a strategic partnership co-funded by the European Union through the Erasmus+ program, this guide is a tangible outcome of collaborative efforts. INOVA+ took the lead in developing the content, with active and dedicated contributions from project partners. Special appreciation is extended to the partners and their teams for their invaluable input, including suggestions for implementation in school subjects and the sharing of best practices.

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

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The project "Green Diving" was implemented by the partnership:















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ABOUT THE GUIDE

This guide serves as your compass throughout the Green Skills Course into Professional Development, offering insights, instructions, and resources to maximize your learning experience. Whether you're a seasoned professional seeking to integrate sustainability into your current role or a newcomer eager to embark on a career path aligned with environmental values, this guide is designed to support your journey every step of the way.

Here's what you can expect from this comprehensive resource:

- Course Overview: Gain a clear understanding of the course structure, objectives, learning outcomes and how they contribute to your professional development journey.
- What are Green Skills?: Explore the concept of green skills and their relevance in today's professional landscape. Learn about the diverse range of skills encompassed within the realm of sustainability and how they can empower individuals to drive positive environmental change.
- Reflection and Application: Reflect on your learning journey and identify practical ways to apply green skills in your professional context. Develop action plans and strategies to integrate sustainability principles into your work, fostering tangible impact within your organization and beyond.
- Inspiration from Best Practices: Gain inspiration from real-world examples of organizations and professionals leading the way in sustainable practices. Discover innovative initiatives, successful case studies, and best practices that demonstrate the transformative potential of integrating green skills into professional development.



WHAT ARE GREEN SKILLS?

Green skills refer to the competencies and knowledge individuals must operate in environmentally sustainable ways. They include abilities related to renewable energy, energy efficiency, waste management, sustainable agriculture, water management, environmental conservation, green building, environmental policy, sustainable business practices, and environmental education. These skills are crucial for addressing environmental challenges and are increasingly valued across various sectors and industries.

In the Green Diving project, two European frameworks have been instrumental in addressing

GreenComp: Developed by the European Commission, GreenComp serves as a reference framework for sustainability competencies at the EU level. It provides guidance for educators by defining common values and skills related to sustainable behavior. The framework consists of twelve competencies organized into four domains: embracing sustainability values, embracing complexity of sustainability, envisioning sustainable futures, and political agency. GreenComp aims to foster critical thinking and promote sustainability through education, serving as a catalyst for learning about environmental sustainability.

ESCO: ESCO, the European classification of skills, competences, qualifications, and occupations, is a multilingual classification system launched as part of the Europe 2020 Strategy. It serves as a dictionary for key skills and occupations relevant to the European labor and education market. ESCO includes 10 categories of occupations and 13,485 different concepts structured in a hierarchy, covering knowledge, skills, attitudes/values, and language skills. Since 2022, ESCO also includes categories identifying capabilities' impact on the environment: brown skills (increasing negative impact), white skills (neutral impact), and green skills (reducing negative impact). A total of 571 concepts are identified as green skills, covering various fields such as engineering, manufacturing, construction, and natural sciences.

Both frameworks are detailed in the first module of the Green Diving course, as well as in the **Digital Toolkit for Green Skills**¹.

GREEN SKILLS COURSE FOR VET TEACHERS PROFESSIONAL DEVELOPMENT

Modules and Support resources

The Course was designed to enhance sustainability awareness and practices within the maritime field. As the maritime industry plays a pivotal role in global trade and transportation, it also holds significant environmental and social responsibilities. Recognizing the importance of sustainability in ensuring the long-term viability of maritime activities, this training program has been developed to equip professionals with the necessary knowledge and skills to navigate the challenges and opportunities presented by sustainable practices.

Throughout this program, participants will engage with six modules, each focusing on key aspects of sustainability within the maritime sector. From understanding the importance of sustainability to fostering environmental literacy, promoting social responsibility, and embracing ocean literacy, this training will provide a holistic perspective on sustainability in

¹ Green Diving, 2022. **Digital Toolkit for Green Skills**. Results of the Green Diving project. DOI 10.5281/zenodo.10684112 (Green Diving – Green Diving (green-diving.eu))



the maritime field. Additionally, we will explore European initiatives aimed at building a green and sustainable maritime workforce, reflecting the global efforts to address environmental and social concerns in the industry.

The modules are organized in six topics that comprises the contents about green skills in maritime sector:

- Module 1 The importance of sustainability in the Maritime Field
- Module 2 Environmental awareness and literacy
- Module 3 Ecosystems and biodiversity awareness
- Module 4 Social Responsibility
- Module 5 Ocean Literacy: Boosting green and Sustainable VET maritime schools
- Module 6 Building Green Actors: European Initiatives

As an example, here is the planning for the delivery of the course as it was scheduled in 2023.

Week	Syncronic	Assyncronous	Topic	Modules
1	1h	4h	The importance of sustainability in the Maritime Field.	Module 1: The Importance of sustainability in the maritime Field
1	20 min		Introduction to the toolkit (general view of it) + inform the students they will have to prepare a class plan to present on week 4.	School Transition – Environmental
2	30 min		Presentation of Unit 1: Impact of Litter in natural spaces	Module 2:
2	30 min	-	Presentation of Unit 2: Alternative fishing gears	Environmental
2	30 min	8h -	How to reduce footprint in training and in real life: good practices	awareness and literacy
3	30 min		Presentation of unit 3: Microplastics in maritime areas	Module 3: Green School Transition -
3	30 min	2h	Presentation of unit 4: Raising awareness on sustainability	Ecosystems and
3	30 min		Presentation of unit 5: Impact of boat-building materials	biodiversity
3	30 min		Presentation of unit 6: Waste managment	awareness
4	2h	2h	Students present their projects. Partners attending: Coroso, Latvian, CETMAR, Inova +, BBZ-NOK + 8 externals	Module 4: Green School Transition: Social Responsibility
5	1h	6h	Ocean literacy (7 principles), 30 mins.	Module 5: Ocean Literacy: boosting green and Sustainable VET
5	1h		Inova + presents Blue Schools project	maritime schools
6	2h		Building Green Actors: General Overview of the Programme + Evaluation - Final Session.	Module 6: Building Green Actors: European Initiatives



USING THE GREEN SKILLS COURSE IN SCHOOL SUBJECTS

Who can use the Green Skills Course?

The Green Skills Course is specifically designed for teachers and school directors within the maritime field who are looking to enhance sustainability awareness and practices within their educational institutions. This course is ideal for:

- Teachers: Educators who are responsible for designing and delivering maritimerelated curricula, including vocational education and training (VET) programs. The course equips teachers with the knowledge and resources to integrate sustainability principles into their teaching, ensuring that students develop a strong understanding of environmental, social, and economic aspects of sustainability within the maritime sector.
- School Directors: Administrators and decision-makers who oversee maritime education institutions. The course provides school directors with insights into the importance of sustainability in the maritime field and offers guidance on implementing sustainable practices within educational institutions. By completing this course, school directors can lead their institutions towards becoming hubs for sustainability education and foster a culture of environmental responsibility among students and staff.
- Maritime Education Institutions: Schools, training centres, and other educational institutions offering maritime-related programs. The course is tailored to meet the needs of these institutions by providing relevant and practical knowledge on sustainability topics. By incorporating the Green Skills Course into their professional development programs, maritime education institutions can enhance the skills and competencies of their teaching staff, ultimately benefiting students and preparing them for careers in the sustainable maritime industry.

Overall, the Green Skills Course is a valuable resource for teachers and school directors within the maritime field who are committed to promoting sustainability education and practices within their educational institutions. Whether you are an educator looking to enrich your teaching methods or a school director aiming to lead your institution towards sustainability, this course offers comprehensive insights and practical strategies to achieve your goals.

How to use the course in online format?

To use a course available on a website in an online format, follow these steps:

- 1. Access the Course Website: Visit the website hosting the course. Navigate to the section where the course is located, it's not required any login or registration, the content is an open resource in many languages.
- 2. Review Course Content: Familiarize yourself with the course content, structure, and any prerequisites or requirements.



- Course Modules: Identify the individual modules or lessons within the course. Understand how the content is organized and the order in which it should be completed.
- 4. Accessing Modules: Click on each module to access its content. This may include text, images, videos, quizzes, assignments, or other interactive elements.
- 5. Engage with Content: Engage actively with the course content by reading, watching videos and participating in interactive activities as directed.
- 6. Review and Assessment: Review the material as needed and complete any assessments or quizzes associated with each module to check your understanding of the content.
- 7. Certificate (if applicable): If the course applied by the user wants to offer a certificate of completion, you can use the template in annexes in this guide.

By following these steps, you can effectively use the course available on a website in an online format.

How to implement the course?

Implementing an online course in a classroom setting requires thoughtful planning and adaptation. Here's a guide on how to implement the Green Skills Course in a real class:

- **Introduction and Orientation**: Begin by introducing the Green Skills Course to your students. Provide an overview of the course objectives, topics covered, and expectations for participation.
- Access to Online Materials: Ensure that all students have access to the online course
 materials. This may involve providing access to computers or mobile devices with
 internet connectivity, as well as any necessary login credentials for the course website.
- **Supervised Learning:** Allocate dedicated class time for students to engage with the online course materials. This could involve setting aside specific periods during regular class sessions or scheduling dedicated "online learning" sessions.
- **Guided Exploration**: Guide students through the course content, facilitating discussions, answering questions, and providing additional explanations or examples as needed. Monitor students' progress and help as they navigate through the modules.
- Group Activities: Incorporate group activities or discussions based on the online course content. Encourage students to collaborate, share insights, and reflect on their learning experiences together.
- **Hands-On Exercises**: Supplement the online course with hands-on exercises, experiments, or projects related to sustainability in the maritime field. This could include field trips, simulations, case studies, or practical demonstrations.
- Reflection and Discussion: Facilitate reflection sessions where students can discuss
 their experiences with the online course, share insights, and identify areas for further
 exploration or improvement.
- **Integration with Curriculum**: Integrate the online course into your existing curriculum, aligning it with relevant topics, learning objectives, and standards. Make connections between the online course content and other subjects or disciplines taught in the classroom.
- **Evaluation and Adaptation**: Continuously evaluate the effectiveness of implementing the online course in your class. Gather feedback from students and reflect on your own



observations to identify strengths, challenges, and areas for improvement. Adapt your approach as needed to optimize student engagement and learning outcomes.

By following these steps, you can effectively implement the Green Skills Course in a real class, providing students with a structured and supportive learning environment to explore sustainability in the maritime field.

In which academic subjects does the course find applicability?

In the maritime sector, the Green Skills Course is vital for equipping students with knowledge and skills to address environmental challenges. It covers regulatory compliance, sustainable practices like renewable energy and waste reduction, and fosters awareness about marine conservation. With a focus on green skills, students are better prepared for careers in a sector increasingly prioritizing sustainability.

In this matter, you can adapt this resource with your better understanding of your institution's needs, if your school has a sector to the maritime matters you can use in subject relate to: Marine Conservation, Maritime Safety and Security, Maritime Operations, etc.

What activities within the curriculum does it align with?

The Green Skills Course aligns with various activities within the curriculum, including:

- Environmental Science Activities: Modules related to environmental awareness, sustainability principles, and ecosystem conservation align with environmental science activities focused on understanding ecological systems, human impact on the environment, and conservation efforts.
- Hands-On Projects: Activities that involve hands-on projects, experiments, or fieldwork related to sustainability practices, renewable energy technologies, or marine conservation can complement the practical aspects of the Green Skills Course.
- Group Discussions and Debates: Activities that involve group discussions, debates, or case studies on environmental issues, sustainability challenges, or maritime regulations encourage students to apply the knowledge gained from the course and engage in collaborative learning.
- Overall, the Green Skills Course aligns with a variety of activities within the curriculum, offering opportunities for both theoretical learning and practical application across different subjects and disciplines within the Maritime VET sector.

INSPIRATION: BEST PRATICES

Besides the documents developed by the Green diving project, the partnership has collected a set of materials to inspire teachers and trainers in the process of developing training actions addressed at sustainability.

We suggest to share this list with the students and trainers following this course.

Link to the list of materials. https://zenodo.org/records/10719083



CERTIFICATE OF PARTICIPATION

Participated in the *Green Skills Course,* promoted by XXXXXXX online, between xxxxxxx, held by the project Green Diving.

The units attended were:

Module 1: The Importance of sustainability in the maritime Field

Module 2: Green School Transition – Environmental awareness and literacy

Module 3: Green School Transition - Ecosystems and Biodiversity Awareness

Module 4: Green School Transition: Social Responsibility

Module 5: Ocean Literacy: boosting green and Sustainable VET maritime schools

Module 6: Building Green Actors: European Initiatives



CONSORTIUM













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