turning blue

Awareness Training Manual

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Turning Blue Awareness Training Manual

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Forword

Turning Blue Awareness Training

The Turning Blue Awareness Training has been developed to create enthusiasm among disadvantaged young people in detention for employment opportunities within the Blue Economy sectors.

This document provides trainers the necessary information to deliver the training sessions and is subject to change due to the growing and evolving of the training.

Structure of the Training Manual

The Training Manual consists of five parts:

1. **How to work with this manual:** This section includes the introduction, guidance on how to use the decision tree; and instructions on how to conduct the workshops.
2. **Turning Blue Awareness Training Manual**: This section provides an overview of the modules, learning goals, module plans and a presentation guide with background information for preparation.
3. **Didactics**
4. **Frequently Asked Questions (and answers)**
5. **List of annexes:** The annexes include presentation slides and workshop guides.

Training Subjects

The training covers the following subjects. Mandatory components are indicated in **bold.** The remaining content can be adapted by the trainer depending on available time and interest of the group:

1. **Introduction in Turning Blue and the Blue Economy**
    - **Pre-evaluation**
2. **Experiences from the sector**
3. Fisheries and Aquaculture
4. Maritime services and Tourism
5. Port industry
6. Shipping and Transport

7. The ocean and sustainability
8. Final workshop
    - Post-evaluation

How to use this manual

1. Introduction

Before using this training, trainers are encouraged to adapt the images, examples and case studies to the local context. It is essential to recognize that the Blue Economy differs significantly across European Member States and is unique in many aspects. The guidance provided in this manual is intended to offer the instructor an operational baseline to develop a training programme meets local needs and requirements, while also incorporating their own experience, expertise and ideas.

Implementing the Turning Blue Awareness Training for youngsters in conflict with the law across different countries requires careful adaptation to each specific situation for that country or region. This includes adjustments related to education level, language, culture, specifics of the Blue Economy and the surrounding environment. This manual should therefore be used as a starting point and source of inspiration, rather than as a strict blueprint.

2. List of necessary materials

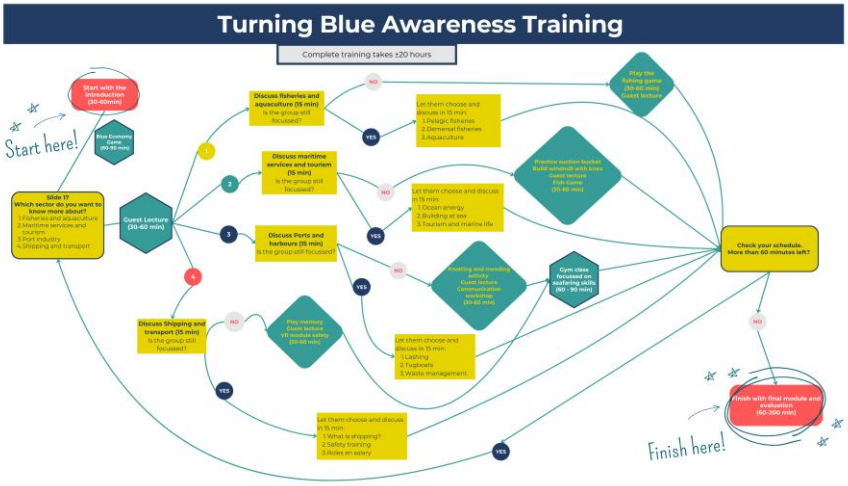
Chapter	Activity	Materials needed
3	Representing the Blue Economy game	• A3 or ideally even larger printed scenario images (1 per group) (tip: Print on thick paper to improve durability and ease of use) • Pre-cut (be aware that this may be time-consuming) visuals representing tools/professions from all 13 Blue Economy sectors (focus on fishing, energy, aquaculture, etc.) • Definitions of the 13 sectors, printed and cut into strips • Glue, markers, blank paper for drawing/writing additions
3	Mind map about the Blue Economy	For each group: • Colour pencils and markers • Large A3 or A2 papers

5	Tragedy of the Commons (Fishing Game)	• Washtubs ("seas"), enough for 2-4 teams (2 per team) • Candies ("fish"): 100-150 total • 15 candies for 2-3 teams • 20 candies for 4 teams • Candies individually wrapped, small enough to fit on a teaspoon • Teaspoons ("fishing gear"), one per team • Large dinner and serving spoons ("innovative fishing gear"), enough for every group to be able to innovate • Blindfolds ("innovative fishing gear"), one per team
6a	Climate regulation workshop	• Big see through tub (glass or plastic) • Food dye red and blue • Hot water • Ice cubes
6b	Building a windmill	• K'Nex or Lego or other building materials for kids • "How to" video • Weights to test
6b	Building a boat	• Wood and fabric • Paper • Popsicle sticks • Pond, pool or inflatable baby-pool
6c	Fishing for Facts game	• Internet access (for research phase) • Optional: Worksheets with guiding questions • Pens and paper for notes • Optional: Fish cards of pre-selected species
7	Communication exercise (describing)	• 2 printed drawings on A4 paper (non-see-through): • Drawing 1: Large rectangle, diagonal line (top-left to bottom-right), blue circle (top-right), square (bottom-left) • Drawing 2: Large rectangle, two overlapping wavy lines (one touching bottom), blue wavy shape near right side • Blank paper and pens for participants

7	Communication exercise (Listening)	• Pre-written story (4 sentences), preferably printed • 6 multiple-choice questions (Yes / No / I don't know), preferably printed • Pen and paper for participants
8	Memory game of vessel types	• 2 complete sets (30 cards each) of vessel memory cards (image/name pairs and purpose/description pairs)
8	VR experience	• VR set • VR module
8	Maritime Gym	• Noise cancelling headphones • Tools • Ropes • Pylons • Hoops • Stopwatch • A gym
9	CV building	• CV fill in paper • Pens • Recording material (if allowed)
9	Platform testing	• iPads • Internet
	For every module	• Printed answer cards for Quiz

2. Decision Tree

This is a modular training with guidance from a decision tree. The decision tree shown below can be found with the training materials in annex 1. **Make sure you print this before the training!**



Before you start giving this training, it is important to consider a few key constraints that will shape how you work with the youngsters:

- **Your knowledge and capabilities:**
  Think about your own knowledge and capabilities. Focus on topics you feel confident exploring, so that you can guide discussions effectively and respond to questions with ease.
- **Time:**
  Take time into account. Find out not only how much time you have in total, but also how it is divided and what the group's attention span is. Even if the training is split into several blocks, each part should still form a logical and coherent piece of the overall story you want to tell.
- **Guest lectures:**
  It is also valuable to look at which guest lectures you can arrange. Guest speakers often spark curiosity and enthusiasm, and their presence can make the subject matter more vivid for the youngsters. If the group shows interest, you can build on the guest lecture and go deeper into the topic afterwards.
- **The participants/youngsters:**
  Above all, keep the participants themselves at the centre of your approach. Your aim is to make them enthusiastic, which means their interests should guide the direction of the training. By checking in

with them and discovering what they find engaging, you can shape a learning experience that effectively resonates.

3. Workshops

The objective of the training is to achieve **awareness and enthusiasm** for the Blue Economy, stimulate personal involvement, a sense of personal responsibility and commitment to work in a sustainable Blue Economy.

Awareness and involvement require more than knowledge and theory. To achieve awareness and to instigate a thinking process, the training developers have included several workshops for small groups of participants. These workshops are seen as essential to achieve awareness. The assignments are designed to give participants structured time to talk and think, and process the information acquired through the theoretical lectures and videos.

In addition, during the workshops participants are asked to voice their ideas and opinions, to listen to the opinions of other participants and to think about their own role and interests. The training developers stress the importance that participants are given time and space to share their ideas and opinions. In many cases there is not "one solution", and sharing different ideas and opinions about different aspects of the Blue Economy gives the participants a chance to develop their personal views and sense of enthusiasm.

Tips for leading workshops:

- Create an “open atmosphere” of acceptance of the opinions of participants to lower the threshold to participate.
- At the start of each workshop, make sure all groups understand the assignment.
- All participants bring their ideas and opinions to the room. Allow them to share these to add to the value of the workshop.
- Give groups enough time to work on the assignments at their own pace. Sharing ideas and opinions takes time.
- Do not allow individual members to monopolize the group activity but ensure that all members have a chance to express opinions and ideas.
- Do not steer the group in the direction you want by superimposing your opinion. Giving suggestions (“Have you thought about…?”) is often more

helpful. In achieving awareness, the thinking process is just as important as the result of the assignment.

- Be prepared to get some unexpected results – some results you might not agree with!

Awareness Training Modules

1. Module “Introduction in Turning Blue and the Blue Economy”

Module Overview

This first section of the training starts with introductions of the trainer(s) and participants, as well as the Awareness Training itself. The participants are asked to form pairs and to create mind maps on the maritime sector to gauge their level of knowledge. The mind maps are afterwards discussed in class. The four subsectors of the maritime sector (shipping, fishing & aquaculture, maritime services & tourism, port work) are introduced.

Learning objectives:

- Participants get to know each other and the trainer(s).
- Participants know what to expect from the Awareness Training.
- Participants agree on the Cooperation Agreements during the training.
- Participants have a global overview and understanding of the Blue Economy.

Module plan

Slide	Duration	Content and activities	Materials and tools
Slide 1 to 7	15 - 20 min	**Opening, pre-evaluation and introduction** - Create trainer introduction slide - Hand out printed evaluation forms	- Pre-evaluation forms - Pen for every participant
Slide 5 to 11	15 min	**Introduction to project Turning Blue**	-
Slide 12 to 18	15 - 30 min	**Creation of Blue Economy mind map** - Create groups of 4	- Flip chart - Marker; one each group

		- Hand out flip chart and marker - Let them create mind map	
Slide 19	5 min	**Turning Blue's vision on Blue Economy and its sectors, quiz** and **preview**	- Printed answer cards for the quiz; one set of A, B, C, D for each student
Total	**45-70 min**	**19 slides**	**4 sections**

Presentation guide

Opening

Set clear expectations, build trust, and create an open atmosphere.

Steps to follow:

1. **Personalize the opening slide**
    - Add the date, your name, and your organization.
    - Greet participants warmly.
2. **Clarify expectations**
    - Explain what you expect from participants:
        - Attention and engagement.
        - Honest input and feedback.
    - Share what they can expect from you:
        - Transparency and honesty.
        - Relevant, realistic content.
        - Openness to feedback.
3. **Build connection**
    - Use inclusive language:
        - Emphasize that the training is for them and their needs.
        - Acknowledge you don't know their exact experiences, invite their perspective.
    - Suggest collaboration:

- Frame the day as something meaningful and interesting, not just obligatory.

4. **Key messages**
    - *"We're passionate about this project and want to share it with you."*
    - *"Your input matters help us make this useful and relevant."*
    - *"Let's make this a good day together."*
5. **Set the tone**
    - Be honest about limitations (e.g., not promising unrealistic job options).
    - Encourage open feedback positive or negative.
    - Make participants feel safe to speak up.
    - Be clear, friendly, and assertive avoid sounding strict. Speak naturally, not like reading a script.

Section 1 - Pre-evaluation

Hand out pre-evaluation forms, these can be found in annex 2 and explain why and how we evaluate.

- Hand out pre-evaluation forms to each young participant
- Make sure participants answer the 7 questions by circling 'Yes' or 'No'
    - This may require you to explain, read the questions out loud and assist them in whatever way needed
- Collect all pre-evaluation forms after 5 minutes

Section 2 - Introductions

Start by welcoming participants and adding the date, your name, and organization to the slide. Explain what you expect from them attention, engagement, and honest feedback and what they can expect from you (honesty, relevant content, and openness). Emphasize collaboration: *"Let's make this day useful and interesting together."* Keep the tone friendly and clear, not strict.

Trainer & company

- Add company logo and photos.
- Create a personal trainer introduction slide.
- Share a relatable story about yourself.

Participants

- Ask participants to introduce themselves.
- Have them share their current education activities since this helps you to understand their education level and interests.

Section 3 - Turning Blue the project

Explain the purpose of the project and what it offers: exploring jobs in the Blue Economy that are accessible with a criminal record, showing what training is needed (this course informs, but does not lead to certification), and developing a prison-accessible job search platform.

- Explore jobs in the Blue Economy that are interesting and accessible with a criminal record.
- Show required training for these jobs (this course informs but does not lead to certification).
- Develop a prison-accessible job search platform.
- Bring participants closer to the Blue Economy.

Who's involved

Countries: Cyprus, Italy, Netherlands, Portugal, Romania. Each has different training pathways but the same goals.

How we'll achieve it

Build a network with Blue Economy sectors offering jobs. Provide insight into sectors and jobs via the Awareness Training. Create an online platform to match interests with employers. Investigate realistic jobs and a "Certificate of Conduct"[1] requirements. Develop an introductory course (today's session gathers input). Goal: Make something useful and accessible for participants.

[1] A Certificate of Conduct (Verklaring omtrent Gedrag (VOG) in Dutch) is a record of behaviour and possible misconduct. Can be related to a criminal record but is not the exact same. Companies working with sensitive data can ask employees show their certificate of conduct.

Section 4 - The Blue Economy

Start by introducing the concept: *What is the Blue Economy?* Explain why it matters, this sector is growing, needs people, and offers adventurous, well-paid jobs. Emphasize that there is potential for youngsters in detention to benefit from these opportunities.

Engage participants with an activity: create a **mind map** about the Blue Economy in small groups (2–3 people). Encourage creativity, use colours, and large paper. Afterward, discuss the mind maps with guiding questions like: *What do you find interesting?* And *can you think of jobs in the Blue Economy?*

Next, show the official EU definition of the Blue Economy and clarify that not all sectors are relevant or accessible. Some require university degrees or are restricted by criminal record checks. This training focuses only on jobs that are realistic and accessible for participants.

Optionally, replace the mind map with the **Representing the Blue Economy Game**, a hands-on activity where groups build collages of different sectors and jobs, then match them to definitions. This sparks curiosity and gives a broad overview of the Blue Economy before introducing the four focus sectors of the course.

Finally, present the four sectors chosen for this project:

1. Fisheries and aquaculture
2. Maritime services and tourism
3. Port sector
4. Shipping and transport

Let participants vote on which sector they want to explore first using A, B, C, D cards. Then continue with the corresponding slides. Conclude by explaining the training structure and what comes next.

2. Module “Guest lecture”

Overview module

A guest speaker is invited to talk about their field of work with the participants. The guest speaker needs to work in the maritime sector, should be available and preferably have experience with young people and/or giving guest lectures. Inviting a guest speaker can inspire participants to pursue a career in the maritime sector as they hear real-life examples. In addition, participants have room to ask any remaining questions regarding job qualifications etc.

When choosing a guest speaker, it is important to find somebody that is self-confident, can stand in front of a group and has an interesting story to tell. It is key that the guest speaker brings as many photos or videos as possible and/or can undertake some kind of fun activity with the participants. It is important to inform the guest speaker about the target group, discuss dos and don’ts to make it a pleasant experience for everyone.

The provided PowerPoint slides are the backbone of this presentation. However, the guest speaker is expected to fill in these slides with his/her own story. The different topics and subtopics or questions on the slides are meant to provide guidance on the subjects to cover during the presentation.

Learning objectives:

- Participants comprehend what a job in the Blue Economy entails.
- Participants get an insight into ‘A day in the life of…’.
- Participants get enthusiastic.

Module plan

Slide	Duration	Content and activities	Materials and tools
Slide 19 to 21	5 – 10 min	**Introduction guest speaker**	-
Slide 22 to 23	15 - 20 min	**Background and experience**	-
Slide 24 to 26	20- 30 min	**Showcase and Q&A**	-
Total	**60 min**	**7 slides**	**3 sections**

Presentation guide

The slides outline a guest speaker session on experiences in the maritime sector. The goal is to inspire participants and provide practical insights into working in the Blue Economy. The session includes:

- **Introduction**: Present the topic and introduce the guest speaker (name, position, experience).
- **Visuals**: Share photos or videos of real work situations to make the experience tangible.
- **Skills & knowledge**: Highlight what young people need to succeed in the maritime sector.
- **Career background**: Explain the speaker's motivation, education, first steps, and major milestones.
- **Life at Sea**: Describe daily routines, challenges, highlights, and work-life balance onboard or onshore.
- **Personal stories & advice**: Share anecdotes, lessons learned, and tips for newcomers.
- **Engagement:** Showcase something fun from the sector and end with a Q&A.

This structure ensures the session is both informative and inspiring, giving participants a clear picture of opportunities and realities in the maritime sectors.

3. Module “Fisheries and aquaculture”

Overview module

Introduce the fishing and aquaculture sectors through videos and a lecture. If VR glasses are available in the prison system, Virtual Reality (VR) can be used to allow the participants to experience the sector more closely. Discuss the country-specific fishing and aquaculture sectors (e.g. pelagic and demersal fisheries in the Netherlands). Potential jobs in the sector are discussed, including practical information on what the jobs look like, expected salaries, and necessary further training or education. It is important to be transparent and clear about the career possibilities. Put the focus on jobs that are within reach for the youngsters, meaning jobs that are achievable with little or no education, and that they can get started with right away.

Learning objectives:

- Participants have a basic understanding of the fishing and aquaculture industry.
- Participants have a basic understanding of the differences between fishing and aquaculture.
- Participants understand potential jobs and careers in the fishing and aquaculture industry.
- Participants are informed of the job requirements, expected salaries, and education.
- Participants know the difference between overfishing and sustainable fishing.

Module plan

Decision tree steps:

- Are the participants interested in fisheries and aquaculture? Go through slide 57 to 61.
- Still interested or interested in a specific branch? Move to that section.
- Getting tired of theory? Play the fishing game.

Slide	Duration	Content and activities	Materials and tools
Slide 27 to 31	15 min	**Opening and introduction to fisheries**	Printed answer cards for quiz
Slide 32 to 40	15-20 min	**Pelagic fisheries theory**	Printed answer cards for quiz
Slide 41 to 49	15-20 min	**Demersal fisheries theory**	Printed answer cards for quiz
Slide 50 to 57	15-20 min	**Aquaculture theory**	Printed answer cards for quiz
Slide 58 to 62	20-30 min	**Fishing game and sustainable fishing**	Dish wash tubs, candy or marbles, small spoons and big spoons and blindfolds
Total	**105 min**	**29 slides**	**4 sections**

Presentation guide

The four sectors might still feel a bit vague at this stage.

- Take the participants through the fishing and aquaculture sector thoroughly, step by step.
- Clearly explain what it involves.
- Highlight realistic job opportunities within the sector.
- Provide an indication of what is needed to enter a job and typical salary expectations to give context and motivation.

Provide an overview of the content of the module. This module will give an overview of the fishery and aquaculture sector. Respective job opportunities are being highlighted, too. First, the module will cover what fisheries refers to in the target country.

Section 1 - Fisheries (in your country)

Start the conversation

Start your session by creating a relaxed atmosphere and encouraging interaction. A good way to do this is by asking participants which fish or seafood they enjoy eating. This simple question helps break the ice and connects their personal experiences to the topic of fisheries.

Global fisheries overview

Once the conversation is flowing, introduce the global perspective. Explain that fisheries are a major part of the world's food system and highlight the three species most captured worldwide[2]:

1. Anchovies
2. Alaska Pollock
3. Skipjack Tuna

These species dominate global catch statistics because they are abundant, highly demanded, and targeted by large-scale fishing operations. Emphasize the scale of this sector by sharing

- Around 60 million people work in fishing and aquaculture.
- Fisheries provide essential protein for billions of people, especially in coastal and developing regions.

Local eating habits

Next, bring the discussion closer to home by focusing on the most eaten fish species in your country.

- Present the most eaten fish species in your country.
- Incorporate participant input (e.g., dishes like Fish & Chips or Kibbeling[3], a popular Dutch variation to fried fish).

Use input from participants to make this part interactive. They might mention dishes like Fish & Chips or Kibbeling, which are popular in some regions. Clarify that these are dishes rather than species. Wrap up this section by explaining that some of the species mentioned come from wild fisheries, while others are farmed in aquaculture. This distinction is important for understanding the diversity of sources in seafood supply.

Fishing sector in your country

Finally, provide an overview of the fishing sector in your country. Describe the main types of fisheries and the characteristics of the local fleet. For example, in the Netherlands, there are pelagic fisheries operating large freezer trawlers and demersal fisheries using cutters. If your country only has

[2] This information can be found on the website of the FAO. Make sure you have the latest info.

[3] Fish & Chips = battered and fried white fish, often cod and haddock while Kibbeling = battered and fried pieces of various white fish, commonly entail cod and whiting.

small vessels, adjust your explanation accordingly. To keep participants engaged, ask them which species they would like to learn more about and continue the discussion based on the most popular choice.

Section 2a - Pelagic trawler fisheries

Introduce local species and scope

Start by introducing two fish species that are commonly caught in your country's national waters. Explain that the fishing sector often extends beyond these waters. For example, Dutch fisheries do not only involve ships sailing under the Dutch flag and fishing in Dutch waters for species such as herring and mackerel but also include operations targeting fish outside Dutch waters. This helps participants understand the scope and complexity of the industry.

Explain vessels and techniques

Once the species are introduced, describe which vessels and techniques are used to catch them. Explain the type of ship, the fishing gear[4] involved, and how the process works. To make this interactive, include a quiz question about an interesting fact related to the fishing method such as the size of the vessel, the type of nets used, or the number of fish that can be caught with a single haul. This keeps participants engaged and curious.

Visualize the answer

Follow up by showing the answer visually. For instance, if the question was about the size of a pelagic freezer trawler, display an image or diagram that illustrates its scale. Understanding the size of these vessels helps participants imagine what life on board looks like, including the number of crew members, the facilities available, and the equipment used. This visualization sets the stage for later discussions about working conditions.

Highlight job opportunities

Next, shift the focus to job opportunities in the fishing sector. Highlight roles that do not require a diploma even when they might be less common, such as assistant cook, cleaning personnel, or fish processor, as well as positions that do require formal education. Provide an overview of potential career growth within the industry to motivate participants.

Requirements for non-diploma roles

[4] This website gives an overview of fishing techniques: https://www.seafish.org/document/?id=35572

Explain what is needed to qualify for jobs that do not require a diploma. In the Netherlands, for instance, anyone who wants to work on board a fishing vessel, regardless of the job, must obtain a Medical Fitness Certificate and a Basic Training Fishery Certificate. These minimum requirements ensure safety and readiness, even without specialized education.

Show real-life examples

To make the experience more tangible, play a short video showing what it's like to work in one of these roles. Then, show another video that gives an impression of life on the type of vessel typically used for the fishing method in your country. These visual examples help participants picture the environment and daily routines.

Discuss salaries and growth

Provide salary information for entry-level positions and give an idea of potential earnings after a few years. Briefly mention what top positions in the industry can earn to inspire long-term ambition. Conclude by explaining what a typical work schedule looks like, including time spent at sea and rest periods at home. For example, on Dutch pelagic freezer trawlers, time at sea depends on the species targeted and the location of fishing grounds, which affects travel time and quotas. Longer trips usually mean longer rest periods at home.

Wrap up with a quiz

End this section with a fun quiz about the vessel's interior and facilities. This reinforces what participants have learned and keeps the session interactive.

Section 2b - Demersal trawler fisheries

Start by helping participants understand where they are in the module. Explain that the next topic focuses on **demersal fisheries**, which represents different fishing methods and vessel types compared to the previous section. If the fishing sector in your country cannot be divided into distinct categories, you can skim this part for inspiration and adapt it to your context.

Identify species and engage with a quiz

Introduce marine species typically caught using this second fishing segment in your country. For example, in the Netherlands, demersal fisheries (cutter fisheries) in the North Sea target species such as sole (*Solea solea*) and brown shrimp (*Crangon crangon*). To make this interactive, play a quiz asking participants to match the species shown on the slide with the correct names. This activity reinforces recognition and sparks curiosity.

Explain vessels and techniques

After the quiz, describe the vessels and techniques used to catch these species. Explain the type of gear, how it operates, and what makes this method different from pelagic fishing. This helps participants understand the diversity of fishing practices.

Crew size quiz

Engage participants with another quiz: ask how many crew members typically work on board these vessels. For example, cutters in the Netherlands have significantly fewer crew members compared to pelagic freezer trawlers. This comparison helps participants visualize the working environment and team size.

Job opportunities and requirements

Highlight job opportunities in this segment of the fishing sector. Include roles that do not require a diploma, such as deckhand or fish processor, as well as positions that require formal education. Explain what is needed for non-diploma roles, such as a Medical Fitness Certificate and Basic Safety Training, so participants understand the basic requirements for entry.

Salary and growth potential

Provide salary information for entry-level positions and share what crew members can earn after gaining experience. In some countries, such as the Netherlands, crews work as share fishers, meaning their income (partially) depends on landings. Briefly mention what top positions can earn to inspire ambition and show career progression.

Show life onboard

Play a video that gives an impression of life on a type of fishing vessel used in your country. This visual insight helps participants imagine the daily routine and working conditions.

Working schedule

Explain what a typical work schedule looks like, including time spent at sea and rest periods at home. Emphasize how factors such as fishing grounds, quotas, and species targeted influence trip length and time off.

Education and preferences

Provide a geographic overview of where participants can pursue education or training if required. If your country has distinct fishing segment, include a quiz asking which segment they would prefer to work in. If not, ask whether

they would enjoy working on the presented vessel or which job role appeals most to them.

Section 2c – Non trawler fisheries

Techniques, culture, and job opportunities

The **fisheries** discussed in section 2a and 2b are both trawler fisheries, meaning they tow their nets either over the bottom or through the water column. In European waters there are many fishing techniques which don't tow a net. They will be discussed in the following part.

Key fishing techniques

Here are four widely practiced methods across countries like Portugal, Italy, Cyprus, and Romania:

1. **Pole-and-Line fishing**

Fishers catch one fish at a time using a pole, line, and hook. It's a method widely used for tuna in the Azores and for species like mackerel in coastal European waters.

2. **Longlining**

Involves deploying a main line with hundreds of baited hooks set horizontally in the water. It's used to catch larger species such as tuna, swordfish, hake, and seabream.

3. **Gillnetting (Including trammel nets)**

A wall of netting that traps fish by their gills as they swim into it. Trammel nets, made of multiple layers, are especially effective for catching crustaceans and flatfish. Fishers set the nets and return later to collect the catch.

4. **Trap fishing (cages and pots)**

Baited traps or cages made of wire capture crustaceans like lobster, crab, or octopus. These allow the target species to enter but prevent escape.

These techniques, grounded in tradition and local ecosystems, support the livelihoods of coastal communities. The FAO's guidelines emphasize that such small-scale methods are vital for food and nutrition security, poverty reduction, and cultural continuity.

Section 3 - Aquaculture (in your country)

Start with engagement

Begin by helping participants understand where they are in the module: this part focuses on **aquaculture**. Start with an interactive question: *"Does anyone know what aquaculture is?"*. If someone answers, let them explain and add comments or corrections if needed. If no one knows, clarify: **Aquaculture is the farming of fish and other aquatic species, such as seaweed and mussels, either in the ocean or on land.**

Follow up with another question to spark curiosity: *"Which saltwater fish is the most farmed in the world?"* The correct answer: **salmon**.

Explain types of aquacultures

Aquaculture can take place in two main environments:

Sea-based aquaculture[5]

- **Location:** Seafood is farmed in large cages (fish mostly), on large fields (mussels for instance) or on ropes (seaweed), directly in the ocean.
- **Environment:** Uses natural seawater, exposed to natural flow and temperature.
- **Challenges:** Exposure to diseases, parasites, weather risks, and potential escape affecting wild populations.

Land-based aquaculture

- **Location:** Organisms are raised in tanks, ponds, or closed systems on land.
- **Environment:** Fully controlled, often using recirculating aquaculture systems (RAS).
- **Advantages:** Better control of water quality, temperature, and disease; reduces risk of escape and environmental damage.
- **Challenges:** Higher energy and infrastructure costs, especially for maintaining water quality and temperature.

[5] Difference between land-based and sea-based aquaculture: https://www.amar-seafoods.com/news/land-based-vs-offshore-aquaculture-operations

Keep this interactive, give hints and let participants suggest differences before summarizing.

Show real-life examples

Play a short video explaining aquaculture and what it's like to work in the sector. If possible, find a video specific to your country for relevance. *(FAO has excellent resources: https://www.fao.org/state-of-fisheries-aquaculture)*

Discuss job opportunities

Explain that aquaculture offers roles for people with and without formal education. Examples include:

- Maintenance Labourer
    - Tasks: Cleaning tanks, feeding fish, maintaining equipment and water quality.
    - Education: Minimal formal education required; on-the-job training provided.
- Harvesting & Processing Worker
    - Tasks: Catching, handling, and preparing fish or shellfish for processing and packaging.
    - Education: Minimal education required; food safety training often provided.
- Technician Assistant
    - Tasks: Supporting technical staff with repairs, equipment setup, and routine checks.
    - Education: Minimal formal education; basic technical skills helpful.

Local context

Give examples of species farmed in your country and show pictures of installations (e.g., tanks, nets, or mussel farms). In the Netherlands, aquaculture includes some land-based farming like turbot. Recently there is a growing interest in seaweed production in the Netherlands, but this is not done on a commercial scale.

Wrap up

Play a video about aquaculture and its products. Explain that aquaculture may represent a larger part of the Blue Economy in some countries, so research your local context. End by asking if participants have questions, compliment their engagement, and introduce the guest lecturer.

Section 4 - Sustainable fishing game

Purpose of the game

Sustainable fisheries start with taking less fish from the stock than the stock can reproduce. The Fishing Game is an interactive way to help participants understand why this is only feasible with fisheries management. By playing, participants experience the dynamics of shared resources and the consequences of overfishing.

For an extensive outline of the game look at the “Tragedy of the Commons Training Guide” in annex 3.

Learning goals:

- Illustrate the **Tragedy of the Commons** theory.
- Show how this theory applies to fisheries.
- Highlight the need for rules to manage fish stocks.
- Make the session fun and engaging.

Discussion points after the game

- **Reproduction principle:** Tubs with leftover candies were refilled by doubling the amount of candy left, showing why leaving fish in the sea is crucial for stock recovery.
- **Blindfolds:** Represent the reality that fishers cannot see underwater, making decisions harder.
- **Gear innovation:** Reflects real-world trends where fishers invest in more efficient gear, increasing pressure on stocks (technological creep).
- **Rat race effect:** If everyone fishes harder without management, stocks collapse. Discuss whether anyone hesitated to invest in more efficient fishing gear and why they had doubts. Also ask what would have happened if they would not have invested, but all their neighbours would.

- **Optimal strategy:** Leaving half the fish each round would yield more in the long run—but requires cooperation. This illustrates why **fishery management rules are essential**.

Connect to theory

Explain the **Tragedy of the Commons**:

When individuals act for maximum personal gain in shared resources, everyone loses in the long term. In fisheries, this can lead to overfishing and stock collapse.

Solutions:

- Private ownership
- Collective management

Show the recommended video for deeper understanding: https://www.youtube.com/watch?v=CxC161GvMPc
https://www.youtube.com/watch?v=CxC161GvMPc

The goal is to discuss what fisheries management is and why it is uniquely challenging compared to managing other natural resources. Engage participants with this statement:
“Managing fish is like managing trees, only fish are invisible and they move.”

4. Module “Maritime Services and Tourism”

Module Overview

The maritime services and tourism sector is a big cluster of sectors that provide services to humans. Within the project Turning Blue the sectors shipping, fisheries and aquaculture and, ports were chosen because of their importance in every Turning Blue partner country. More information on this choice can be found in the Turning Blue Roadmap. All other maritime activities providing a service to society and relevant to your country can be discussed in this module. The construction of ships is included in this module because the building of ships and structures, like oil platforms, are often build in the same wharves and factories. Activities such as oil drilling, or the building of windmills are performed at sea due to lack of space on land or the availability of resources in sea.

Start by writing *“Maritime Services”* on the board and ask participants to guess examples. Common answers include wind farms, oil and gas rigs, dredging, deep-sea mining, sand replenishment, pipelaying, shipbuilding, and leisure activities like whale watching, scuba diving, sailing, surfing, and snorkelling.

Play a short video showing why the ocean is important and what services the ocean provides to us. Afterward, ask if anything surprised them or if they noticed activities not mentioned earlier.

Show pictures of maritime activities and explain what is happening. Highlight that there is little limit to what we can build. We can create **land** where we used to have water, introduce the concept of land reclamation. Then clarify what maritime services are: activities requiring vessels at sea for purposes other than transport, such as building offshore structures, extracting resources, or creating new land.

Transition to tourism: explain that maritime tourism includes sailing tours, diving excursions, surf schools, and cruise ships (a hybrid of tourism and transport).

Finally, ask participants which topic interests them most:

- Ocean energy
- Building at sea
- Tourism and marine life

Use A, B, C, D cards for voting and continue with the most popular choice.

4a. Ocean energy

The ocean provides a lot of energy. Traditionally we extract a lot of energy from the ocean in the form of fossil fuels (oil, gas) but a transition is taking place to harvesting renewable energy from the ocean (wind, sun, currents).

Learning objectives:

- Participants have increased knowledge about ocean energy.
- Participants understand climate change: what it is and what is changing.
- Participants comprehend the possible consequences of climate change.
- Participants identify various ways of producing renewable energy.

Module plan

Slide	Duration	Content and activities	Materials and tools
Slide 68 to 69	15 min	**Why ocean energy**	-
Slide 70 to 78	15 min	**Climate change**	-
Slide 79	30 min	**Workshop: Visualisation of ocean currents**	
Total	**60 min**	**10 slides**	**3 sections**

Presentation guide

Section 1 - Ocean energy

Start by asking participants: **“What types of renewable energy can we harvest from the ocean?”**

A. **Oil** is found beneath the seabed and extracted through offshore drilling. While it's a significant energy source, it's a non-renewable fossil fuel and not considered sustainable ocean energy.

B. **Gas** is another fossil fuel that can be extracted from under the seabed. Like oil, it's non-renewable and typically not included when discussing renewable ocean energy sources.

C. **Wind** energy, on the other hand, comes from offshore wind farms that use powerful ocean winds to turn turbines. This is a renewable way to generate electricity.

D. **Wave** energy captures the natural motion of ocean surface waves to produce power. It's a promising and innovative form of renewable energy that utilizes the ocean's constant movement.

Guide them toward the correct answers:

- **Offshore wind energy** – turbines use strong ocean winds to generate electricity.
- **Wave energy** – captures the motion of ocean waves to produce power.

Explain that oil and gas, while important energy sources, are **fossil fuels** non-renewable and not considered sustainable ocean energy.

Why Look for New Energy Sources?

Encourage discussion on why the world is shifting toward renewables. Highlight two key reasons:

- **Environmental impact:** Burning fossil fuels causes air pollution and drives climate change.
- **Energy security:** Oil and gas reserves are finite. Relying on imports makes Europe vulnerable to global market fluctuations and geopolitical tensions.

By investing in renewable ocean energy, Europe strengthens its **self-sufficiency**, reduces dependency on external suppliers, and gains resilience in global politics. This transition supports climate goals while ensuring long-term energy security.

When introducing renewable ocean energy (like offshore wind and wave power), it's important to explain **why this transition matters**. The Blue Economy, including shipping, contributes to air emissions, pollutants that cause acidification, impact human health, and release greenhouse gases such as CO_2 and methane. These gases trap heat in the atmosphere, driving climate change and its impacts: rising temperatures, melting ice, sea-level rise, and more extreme weather events.

Traditional energy sources like oil and gas are not only **finite** but also contributors to these emissions when being burned. By shifting to renewable energy, we reduce greenhouse gas output, improve air quality, and help mitigate climate change. This transition also strengthens Europe's

energy security, reducing dependence on fossil fuel imports and increasing resilience in global politics.

So renewable energy could be a solution to both **environmental challenges** and **strategic autonomy**:

- Emission neutral energy = fewer emissions = healthier ecosystems and communities.
- Renewables = long-term security and increased autonomy for Europe.

Not all emission neutral energy sources can be produced without emitting problematic gasses or without ending up with non-recyclable waste. You can discuss how good these new energy sources are for the environment. This is an interesting discussion, for more info research: well to wake.

Section 2 - Air emissions and climate change

Understanding climate change

Climate change refers to long-term shifts in climate patterns, caused by natural variability or human activity. It is broader than global warming, which specifically means rising temperatures. Climate change also includes changes in rainfall, humidity, and cloud formation. Weather is short-term; climate is the average over decades.

Over the past century, scientists have observed clear changes:

- **Global warming**: Average temperatures have risen by about 1.1°C since 1880.
- **Melting ice sheets** and **sea-level rise**, partly due to thermal expansion of warmer water.
- Each of the last three decades has been warmer than any previous decade since 1850.

Why is this happening?

The Earth's natural greenhouse effect keeps the planet habitable, but human activities have intensified it. Burning fossil fuels increases greenhouse gases, trapping more heat in the atmosphere this is the **enhanced greenhouse effect**. Scientific consensus (IPCC) states it is extremely likely (95%) that human influence is the dominant cause of observed warming since the mid-20th century.

Visible impacts

Climate change is already evident through stronger storms, floods, droughts, and wildfires. Warmer oceans fuel more intense storms, and ecosystems are under stress from rising temperatures.

Section 3 - Climate regulation workshop

Our climate is partly regulated by ocean currents, which act like a global conveyor belt driven by temperature differences at the poles.

To demonstrate this, use a simple experiment the workshop can be found in annex 4.

Section 4 - Renewable energy

“What is renewable energy?”
Give everyone a post-it and let them write or draw their ideas. Discuss answers together. Emphasize that renewable energy comes from sources that are naturally replenished and never run out, such as the sun, wind, and waves. Its energy can be harvested indefinitely without depleting resources.

Follow this discussion with a practical workshop to make the concept tangible. The optional workshops are discussed below.

4b. Building at sea

Due to limited space on land, we start building at sea. Building at sea takes a lot of innovative engineering activities. Under building at sea, we also discuss shipbuilding because structures at sea are often build in shipyards as well.

Learning objectives:

- Participants know why we are building at sea.
- Participants can name at least two different structures we build at sea.
- Participants comprehend the possible job availability for them.

Module plan

Slide	Duration	Content and activities	Materials and tools
Slide 80 to 83	15 min	**Jobs in building at sea**	-

Slide 84 to 85	30 min	**Workshop building at sea**	
Total	**45 min**	**6 slides**	**2 sections**

Presentation guide

Section 1 - Working in construction at sea

Why do we build at sea?

Around 71% of the Earth's surface is ocean, offering vast space and natural resources that are increasingly valuable as coastal and inland areas become crowded. Offshore areas provide access to oil, gas, wind energy, and opportunities for land reclamation when countries need space for infrastructure.

Well known examples include:

- Palm Jumeirah in Dubai, a large artificial island built to expand tourism opportunities and create new coastline. It added 72 km of coastline and was constructed entirely from sand and rock using large dredging vessels.
- Changi Airport in Singapore, which expanded through land reclamation into the sea because there was no space on land (widely documented, though not captured directly in our search results).

These mega-projects demonstrate how building at sea helps nations grow when natural land is limited.

What do we build at sea?

The marine environment hosts a wide variety of structures, such as:

Energy structures

- Oil and gas platforms, essential for global energy supply. These are often assembled onshore in modules, transported by giant crane vessels, and then installed at sea.
- Offshore wind farms, use strong, steady ocean winds to generate renewable energy. Offshore wind is by some seen as the answer to challenges surrounding energy availability and climate change. "However, offshore wind farms face many challenges of their own, including high installation and maintenance costs, grid connection

difficulties, environmental impacts on marine ecosystems, and technical issues related to harsh offshore conditions."

Land reclamation and coastal infrastructure

- Artificial islands (e.g. Palm Jumeirah).
- Ports, tunnels, and coastal protection structures. These depend heavily on dredging, the removal of sand, silt, and rock to deepen or reshape the seabed. Dredging enables coastal protection, new land creation, port construction, and ensures that large vessels can safely enter harbours.

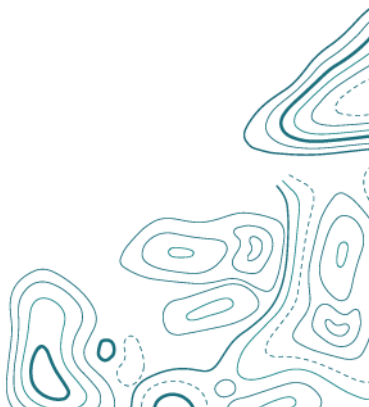
How do we build at sea?

1. Dredging, it is used to create new land or deepen waterways. It involves:
    a. Hydraulic dredging, which creates a slurry of sediment and pumps it to reclamation sites.
    b. Mechanical dredging, using grabs or backhoes to remove harder seabed material. Both methods are critical for offshore wind development and port expansion.
2. Piling and heavy marine construction:
    a. Offshore structures must withstand extreme forces strong waves, wind, and corrosion far greater than on land. Specialist companies with marine engineering expertise design and install foundations deep into the seabed using:
    b. Steel piles
    c. Gravity-based structures
    d. Floating structures held by mooring systems (e.g. floating wind turbines)
3. Modular construction. Large offshore platforms are often built in pieces onshore and then transported and installed at sea using heavy-lift vessels capable of lifting to 14,000 tonnes.

Jobs in maritime and offshore construction

Many maritime professions focus on building, creating, and maintaining structures both at sea and in shipyards. Examples include:

- shipbuilding and repair,
- land reclamation or deepening gulleys (dredging),



- constructing tunnels, bridges, and offshore wind farms.

Because the work involves ships and offshore environments, most roles require:

- Basic safety training (e.g., STCW: Standard on Training, Certification and Watchkeeping[6]),
- Medical fitness certificates.

In the Netherlands, dredging careers typically require a 3-year vocational maritime education.

Helpful skills for this sector:

- crane operation,
- welding,
- forklift operation.

Career pathways and opportunities

Offshore work creates thousands of jobs globally. In the Netherlands, one of the largest offshore and dredging companies is Boskalis, known for its major land reclamation and offshore wind projects. They offer internships and traineeships, including opportunities for people without formal education who want to learn on the job and explore different maritime career paths.

Note: No salary data appeared in our search results, so you can add local crane operator salaries in your own country to the slide.

Section 2 - Building at sea (workshops)

When constructing something as massive as an oil rig, an offshore wind turbine, or even an airport extension built into the sea, engineers always begin with a model. Models help test ideas, understand forces, and identify design challenges long before construction begins in the harsh ocean environment.

For trainers, a building workshop is an excellent way to help learners experience this principle for themselves. By building small-scale models, participants explore the same thinking processes used in maritime engineering on a level that is playful, practical, and educational.

[6] The international maritime organisation represents on an international level its members. They form conventions from which rules and regulations are applied to all ratifying (signing) members. One of the conventions is the Standard on Training, Certification and Watchkeeping of all personnel - STCW.

Workshop 1: Build an offshore wind turbine model

Participants recreate a simple wind turbine structure using K'Nex (or other children's building material available in your country). This allows them to explore concepts like balance, height, and resistance like real offshore wind turbine challenges.

Another example is the **suction bucket**. The foot of the windmill is lodged in place by forming a vacuum. This is called a **suction bucket,** it can be shown with an **experiment**, demonstrating the principles of pressure and engineering. Materials needed include an aquarium with sand and water, a can, and a straw. This hands-on activity helps participants connect theory to real-world applications in offshore energy.

Guidance on both offshore wind turbines building workshops can be found in annex 5.

Workshop 2: build a model ship

Participants design and construct their own miniature boats, then test them in water. This activity highlights basic principles of floating, hull design, material strength, and balance. Guidance can be found in annex 6.

4c. "Underwater world and tourism"

This module introduces the underwater world and its connection to maritime tourism and jobs. The sea attracts people for its beauty, mystery, and adventure and it also offers real career opportunities. Maritime tourism is a large part of the maritime services especially in southern European countries. Jobs in this field include sailing instructors, dive guides, and (eco-)tourism operators. Some roles require specific certificates, like becoming a divemaster or sailing coach, while others focus more on the hospitality aspect of tourism.

Understanding the marine environment not only helps to sustain the tourism sector that benefits from a healthy ecosystem, but it may also give an advantage for those who want to work in or near the sea. This module helps participants explore these opportunities and the knowledge needed to understand the connection between the underwater world and tourism and want to succeed in this exciting sector.

Learning objectives:

- Participants have increased knowledge on the beauty and importance of the ocean.

- Participants understand what phytoplankton is and its importance.
- Participants can identify the different aspects of an ecosystem and can give an example of an ecosystem.
- Participants understand the lifecycle of some marine species representable for the country.

Module plan

Slide	Duration	Content and activities	Materials and tools
Slide 86 to 88	15 min		-
Slide 88 to 108	30 min	**Marine ecology**	
Slide 109 to 111	30 min	**Workshop fishing for facts**	Print fish assignment
Total	**75 min**	**25 slides**	**3 sections**

Presentation guide

Section 1 - Maritime tourism

Maritime tourism covers water-based recreation activities (e.g. boating, yachting, cruising, nautical sports) and includes tourism operations of landside facilities (chartering, manufacturing of equipment and services). These activities contribute significantly to many coastal economies.

Begin by asking participants what they already know about maritime tourism. Collect their examples or experiences on a flip chart or whiteboard.

Common maritime tourism activities include:

- Sailing and yachting
- Scuba diving and snorkelling, often linked to reefs, shipwrecks, or marine wildlife
- Surfing, canoeing, kayaking, and other nautical sports
- Whale watching, ecotourism, and cultural coastal tourism

Sailing

You can earn money by teaching people how to sail or by taking guests on sailing trips or holidays. Required certificates depend on the country, vessel size, and whether the work is commercial or recreational.

Scuba Diving

Professional diving requires formal training. Roles include:

- Divemaster: leading certified divers underwater
- Dive instructor: teaching others to dive, requiring extensive training and investment

Some divers also work in technical roles such as cleaning ship hulls or maintaining underwater structures, which require additional certifications and advanced diving skills. Becoming a professional usually requires four to five certifications and can be costly.

Closing activity

Ask participants to identify maritime tourism opportunities in their area, what skills or certifications these jobs require, and which roles interest them most.

Maritime tourism activities benefit from healthy oceans; tourists which are exploring the ocean often have better experiences when the oceans are clean and healthy. Understanding basic marine ecology principles helps ensure these environments stay protected for future generations. In the next section, we will explore how marine ecosystems function and why their health is essential for both nature and the tourism sector.

Section 2 - Marine ecology

The sea fascinates people for many reasons. You can start by asking participants how they feel when they think about being near or in the ocean. Many parts of the ocean are still unexplored, about 0.001% of the deep ocean floor [7](deeper than 200m) has been seen by researchers. Large parts of the ocean floor have not been mapped, which makes it feel mysterious and "like another world."

For instance, the deep sea, which also contains strange, unique animals that live under extreme pressure, cold temperatures, and darkness, adding to this sense of wonder. People are not only drawn to the ocean emotionally but also benefit from it physically and mentally. Research on "blue spaces"

[7] NOAA https://oceanexplorer.noaa.gov/ocean-fact/explored/

shows that being near water can reduce stress and improve wellbeing. The European 'BlueHealth' project collected evidence on how coasts and waterways support mental and physical health.[8]

This fascination links directly to why the sea matters for maritime tourism. Healthy oceans create the experiences visitors usually come for, namely clear water, reefs, seagrass, and wildlife. When these ecosystems are damaged by pollution, crowding, or careless tourism, the tourist experience becomes poorer and local income can fall. Understanding marine ecology therefore becomes a practical skill: operators, guides, and instructors who know the environment can offer safer, richer, and more sustainable trips.

It also helps to remind learners that we live on "Planet Water." About 70–71% of Earth's surface is ocean, and about 97% of all water is saltwater. Even though the ocean looks endless, the amount of freshwater available is extremely small. This helps explain why protecting water and ocean systems is important.[9]

Participants should also learn some basic ocean ecology. Sunlight only reaches the upper 200 meters of the ocean, the photic zone, where most marine plants and algae grow. Below this zone, animals depend on food drifting down from above.
Here you can introduce phytoplankton, tiny plant-like organisms that form the base of the food chain and produce about half of the oxygen generated on Earth each year. Understanding why the ocean matters can also be supported with a few strong facts:

- More than 80% of global trade moves by ship, showing how vital oceans are for the world economy.
- Much of today's new oil and gas activities happen offshore, which means many countries depend on the sea for energy, but also need to manage risks.

To inspire curiosity, it can help to explore the deep sea. The Mariana Trench reaches nearly 11 km deep and near the seafloor it is extremely cold, dark, and life is exposed to a high pressure. Yet life survives there with special adaptations like glowing bodies (bioluminescence) and slow growth. This helps learners understand how different life below 200 m truly is.

End the session by bringing the subject close to home. For example, in the North Sea, even though the water may look grey, it is full of life. Sandy areas

[8] [fisheries.noaa.gov], [britannica.com]
[9] [apps.dtic.mil], [usgs.gov] [maritime-s....europa.eu], [en.wikipedia.org]

support their own species, and shipwrecks or rocky areas act as biodiversity hotspots. Asking participants to name animals they know from their local sea helps connect global ideas to local reality. This is also a good moment to link ocean knowledge to jobs in tourism, where guides with ecological understanding can offer better and more responsible experiences.

You can close with a question such as: "Think of one tourism activity you enjoy. Which part of the ocean ecosystem makes it possible?"

The goal is for participants to understand that the sea is both a place of wonder and an interconnected system that supports maritime tourism, and that it is our shared responsibility to look after the ocean.

Section 3 - Fishing for facts game

Play the 'Fishing for Facts' Game with the participants.

This activity encourages participants to explore how biological knowledge supports sustainable fishing. Divide the participants into groups or pairs if needed. Each student or pair/group selects one of the marine species showcased on the slide. **Action required:** adjust the slide, including target species relevant to your local fishery and do the necessary research about their key traits beforehand. Extra information on this workshop can be found in annex 7.

5. Module “Port work”

Overview module

This module gives an overview of ports and harbours in the local region. Ports and harbours are different, and different jobs can be found. These jobs can be good alternatives for those who don’t like to go to sea. Examples are waste handling, lashing, rowing, and fish handling. Skills that are beneficial are forklift driving, welding, informatics and communication.

Learning objectives:

- Participants have a basic understanding of the work in ports.
- Participants understand potential jobs and careers in ports and are informed of the job requirements, expected salaries, and education.
- Participants know physical requirement for working in ports.
- Participants know the importance of communication.

Module plan

Slide	Duration	Content and activities	Materials and tools
Slide 112 to 118	15-20 min	**Ports and harbours**	-
Slide 119 to 1	15 – 20min	**Jobs and certificates in the port sector**	-
Slide 119 to 136	20 – 60 min	**Communication**	- Print language experiment - Print listening experiment Bring A4 paper and pens for everyone
Total	**45 - 100 min**	**32 slides**	**3 sections**

Presentation guide

Section 1 - Ports and harbours

1) Understand the difference between a port and a harbour. Participants should learn that:

a) Ports are large, industrial areas focused on cargo, transport, logistics, and international trade.

b) Harbours are smaller, protected areas that offer safe anchorage and are often used by fisheries and recreational vessels.

c) Ports usually have extensive infrastructure and commercial activity; harbours are often publicly owned and serve local or traditional functions.

2) Recognize the economic and logistical importance of major ports. Using the Port of Rotterdam, or a local equivalent, as an example, participants should understand:

a) Large ports are central hubs for global and regional trade. They offer significant employment opportunities across logistics, vessel handling, maintenance, customs, security, and more.

b) Some ports, like Rotterdam, connect coastal areas to inland European countries, making them essential gateways for goods.

3) Understand the variety of port and harbour types within a country. Participants should become aware that:

a) Countries often have multiple seaports, each specializing in different types of cargo or industry.

b) Fishing harbours support local fisheries and will be covered in more detail in the fisheries module.

c) Recreational harbours cater to leisure boating, sailing clubs, and sometimes ferries, depending on local context.

d) Harbours also support nature-based tourism such as birdwatching or coastal tours.

Trainer guidance & activities

1) Start with a local example. Show an image of a well-known local port or harbour. Ask participants what activities they associate with that location.

2) Explain the distinction between ports and harbours. Use simple comparisons:

a) Port: big, busy, commercial, heavy cargo movement, large ships, global trade.

b) Harbour: small, sheltered, local activity, fisheries, leisure boats.

3) Highlight the importance of major national ports. Use Rotterdam as the model (or replace with the main port in the region where you teach). Explain how such ports contribute to national income, jobs, trade, and transport. Mention that their scale leads to thousands of jobs, directly and indirectly.

4) Video activity. Show a short video (e.g., about the Port of Rotterdam or a local port). Discuss what participants noticed: size, types of ships, machinery, workers, cargo.

5) Explore the national port landscape. Point out that many countries have several major seaports plus smaller specialized ones. Reinforce that fishing harbours and recreational harbours also play important roles in local economies and communities.

6) Connect to broader training modules. Fishing harbours link to the fisheries module. Recreational harbours link to the maritime services and tourism modules.

Key message for trainers to emphasize

Ports and harbours together make up a diverse, interconnected maritime system.

Ports drive international trade and economic growth, while harbours support local communities, fisheries, and recreation. Understanding this structure helps participants see how many different maritime careers exist from heavy industry to small-scale coastal livelihoods.

Section 2 - Roles, jobs and certification

This part of the module introduces participants to the wide range of work available in ports, focusing especially on jobs that still require human skills despite technological progress. Emphasize the diversity of roles, the pathway opportunities, and the mix of physical work, teamwork, and maritime experience gained in these environments.

By the end of this topic, participants should:

1) Understand key port jobs and why they matter. Participants should understand:

   a) Some port tasks cannot be automated, especially the securing of cargo. Workers in these roles carry significant responsibility for safety at sea.

b) Ports offer a range of jobs that do not always require formal education and allow on-the-job learning.

2) Recognize the importance of proper cargo securing (lashing)

   a) Lashing is the process of attaching or freeing containers on a vessel while it is docked. It is specialist work requiring training on the job, precision, and physical strength. Proper lashing is essential: unsecured loads can shift at sea, causing danger to the vessel, crew, and cargo. Trainers may show the Port of Rotterdam example and supplement it with local videos where possible. (Source example: Discovery Nederland video on lashing, educational use only.)

3) Identify additional common port roles. Participants should become familiar with jobs such as:

   a) Rowers / Dockworkers / Boatsmen – workers who guide ships into port, help with mooring, and manage docking lines. These roles often offer entry-level opportunities with training provided on the job, making them accessible to people without prior maritime education. (Example reference site for Dutch boatsman training: KRVE.)

4) Explore waste-management work in ports. A practical example is the Dutch company 'Bek & Verburg', which collects ship waste at sea and onshore. They often hire people with a distance to the labour market, demonstrating that ports can offer pathways into employment. Work may include roles onshore or experience as a deckhand. Some roles require basic safety training and medical fitness, while other roles (such as forklift or crane use) benefit from additional certificates.

5) Recognize training and certification pathways. Trainers should:

   a) Investigate whether the same jobs exist locally in the participants' own region.

   b) Identify necessary certification (e.g., basic safety, medical fitness, equipment certificates).

   c) Provide local salary information only when accurate to avoid unrealistic expectations.

   d) Highlight that port jobs can be stepping stones into broader maritime careers due to the hands-on seafaring experience gained.

Trainer activities & guidance

Show local relevance. Replace Rotterdam examples with local port videos or images where possible. Discuss which jobs participants already recognize from their own communities.

Demonstrate lashing and securing work. Show the lashing video for context. Ask participants why they think this work cannot be automated. Discuss risks of improper cargo securing and how lashers protect maritime safety.

Compare job requirements. Encourage participants to explore:

- which port jobs in their region require certification,
- which offer on-the-job training,
- and which have growth opportunities over time.

Show role diversity. Play short clips to make these roles tangible and relatable. Use examples such as:

- Waste-collection crews
- Dockworker teams
- Boatsmen and mooring crews
- Entry-level port jobs

Emphasize career advantages, highlight that port jobs:

⇒ still take place on or near the water,

⇒ allow workers to return home daily,

⇒ offer more regular hours than many at-sea roles,

⇒ require resilience, teamwork, and physical effort,

⇒ and offer excellent starting points for building maritime experience.

Key message for trainers to emphasize

Ports offer a wide range of essential, hands-on jobs from lashing to mooring to waste services that remain deeply connected to seafaring. These roles are accessible, often trainable on the job, and can open the door to long-term careers in the maritime sector. Many of these workers become highly skilled professionals whose work directly impacts the safety and efficiency of global maritime transport.

Section 3 - Communication

Good communication is essential in ports and harbours. Ships must move safely through busy waterways, bridges need to be opened at the right time, and crews must work together without misunderstandings. The same applies on board ships, where poor communication can quickly lead to unsafe situations. This module helps participants understand how communication works, why it matters, and how different communication styles affect cooperation in maritime settings.

Understanding different ways of communicating. People communicate all the time even without speaking. Communication can be:

- Verbal: talking, telling stories, shouting, singing, discussing.
- Non-verbal: body language, facial expressions, posture, gestures, actions.

Non-verbal signals often carry more weight than spoken words. A message can be softened with humour or become hurtful through tone, attitude, or physical stance. Trainers should explain that how something is said often has more impact than what is said. Invite participants to name local examples of verbal and non-verbal communication and discuss strengths and weaknesses of each.

Constructive vs. aggressive communication. Communication can build trust or destroy it. In ports and at sea, clear but respectful communication is essential for teamwork and safety. Constructive communication may include:

- Asking questions
- Listening first
- Calm explanations
- Offering solutions

Aggressive communication may include:

- Shouting
- Ignoring others
- Dismissing opinions
- Threatening body language

Discuss examples from the local maritime or coastal community. Ask learners which style is more effective and why.

Recognising aggressive non-verbal communication. Some conflicts in fisheries and maritime work happen without words. Show the example video of non-verbal aggression among fishers. Guiding questions could be:

- What do you think of this kind of communication?
- Is it effective or harmful?
- What could be done differently?

Example of constructive dialogue: British & Dutch fishers. The pulse-fishing conflict between British and Dutch fishers illustrates how dialogue can lead to solutions. After complaints about reduced catches, the groups communicated, listened to each other, and agreed on avoiding certain areas reducing conflict and ending negative campaigns. Discuss why this approach worked. Ask learners if they know similar examples from their region where communication changed a problem into cooperation.

Digital communication challenges

Much communication today happens online. Digital communication is fast, but lacks tone, facial expressions, and body language. This makes misunderstandings more likely, and messages can spread widely and quickly.

Trainer tip: ask participants whether they've ever misinterpreted a message online and why this happens.

Workshops on Perception, Language, and Listening

This part of the session includes three optional short workshops (10–15 minutes each). Trainers may choose one or all.

1. Workshop: Different Perceptions

Everyone sees the world through their own experiences. When shown the same picture, people may see different things.

Examples of perception exercises:

- A picture of a cat → friendly pet, angry animal, cute, scary, etc.
- A container ship → global trade, consumer goods, pollution, jobs
- A purse-seine haul of fish → great catch, overfishing, livelihood, environmental harm

- A Greenpeace vessel → heroes, troublemakers, protectors, liars
- A wind turbine → renewable energy, ruined view, threats to fishing grounds, sustainability

Key message:

Different perceptions do not make cooperation impossible—but awareness of them makes cooperation easier. Activity: Show images and ask: "What do you see?" Invite learners to share perspectives without judging.

2. Workshop: Communication experiment (drawing exercise)

This activity illustrates how difficult communication becomes when people lack shared language or reference points.

How it works: One student sees a picture and must describe it without showing it. He/she is only allowed to use words, so no body language. Others draw based only on this description. Compare drawings and select the winner. Repeat with a more abstract picture. **Learned lessons:** The second round is harder because there is no common language for the symbols. This demonstrates how important shared language, clarity, and listening are.

Materials for this workshop can be found in annex 8.

3. Workshop: The listening experiment

This activity shows that people make assumptions when listening.

Steps: Read a short story about a man's morning routine. After hearing the story, you (the trainer) will ask a couple of questions. The answer to each question is either 'yes', 'no' or 'don't know'. Participants will give different answers even though they heard the same story. Reveal that the correct answer to all questions is "don't know", because the story never provided those details. **Learned lessons:** People listen through their own "filters": personal experiences, assumptions, and expectations. For example, if your routine is to go to work by car you will likely think this man will as well.

Materials for this workshop can be found in annex 9.

Communication in maritime environments is more than speaking clearly. It includes:

- understanding perception
- listening actively
- choosing constructive communication
- recognising non-verbal signals

- adapting to digital communication challenges

Encourage participants to reflect on how they communicate, to notice their own assumptions, and to consider how different styles affect teamwork especially in ports, harbours or on-board ships.

6. Module “8. Shipping and Transport”

The shipping sector is introduced through videos and a lecture. The importance of shipping (responsible for 80-90% of global trade) is highlighted. Various industries (containers, cruise, oil tankers etc.) are displayed and the variety of ships is demonstrated through a memory game. Potential jobs are discussed, including practical information on what the jobs look like, expected salaries, and necessary further education. It is important to be transparent and clear about the career possibilities.

Learning objectives:

- Participants have a basic understanding of the shipping sector.
- Participants have knowledge of potential jobs and careers in the shipping sector.
- Participants are informed of the job requirements, expected salaries, and education needed.

Module plan

Slide	Duration	Content and activities	Materials and tools
Slide 147 to 150	15 min	**What is shipping**	- Printed answer cards for Quiz
Slide 151 to 161	15 - 30 min	**Memory** Discover the diversity of ships within the shipping sector: - Create groups of 4 - Hand out memory cards - Let them play the memory game (optional: discuss vessel types more in depth afterwards)	- Ship Memory Cards - Memory instruction
Slide 162 to 165	15 min	**Jobs and certificates in the shipping**	-
Slide 166 to 167	15 min	**Salary on board**	- Printed answer cards for Quiz

Slide 168 to 174	15 min	**Basic safety (theory)**	-
Slide 175 to 176	15-30 min	**VR basic safety**	- VR modules - VR glasses -
Slide 177 to 178	60-90 min	**Maritime gym**	- Gym classroom - Mechanic headphones - Toolbox - Ropes - Beam - Pylons
Total	**30 -210 min**	**26 slides**	**4 sections**

Presentation guide

Participants showed interest in shipping. Use the decision tree. Start with small batch of theory: What is shipping? After slide check if the group is still interested. Do you get questions on safety? Go to slide 46. Questions on jobs and salaries go to these sections. Do you as a trainer feel they need more interaction use the memory game or VR glasses.

Section 1 - What is considered shipping?

Shipping plays a crucial role in the world economy. The modern system we rely on today became possible after the invention of the standardized shipping container a box designed to fit easily on ships, trains, and trucks. Because containers can be lifted quickly by cranes and stacked high on vessels, global transport has become efficient, fast, and relatively cheap. This makes the world feel smaller: products from every continent now appear in local supermarkets, shops, and homes.

One quiz question often surprises participants:

“What invention made global shipping grow the most?”

The expected answer might be ships or cranes, but the correct answer is the standardized container.

What is shipping?

Shipping can be defined simply as the transport of goods or people from point A to point B. These goods can be almost anything:

- food
- clothing
- electronics
- raw materials
- furniture
- machinery

A useful activity is asking participants to look around the room and identify an item that likely arrived by ship. Almost all answers will be correct: between 90% and 99% of global goods are transported by sea.

Making global trade visible

To help participants understand the scale of shipping, show the video explaining how global container transport works (WSJ video) and allow time for discussion.

If time permits, you can also play the 7-minute containership video to give a sense of the size, speed, and complexity of modern shipping operations.

(Videos for educational use only.)

Discussion prompts: What surprised you about the journey goods take? How did containerization change daily life? Why is sea transport preferred over air or road for most goods?

Key learning goals for this module

By the end of this topic, participants should be able to:

- Understand the importance of containerization. Containers enabled fast, safe, and cheap global transport. Their standardized design allows movement across ships, trucks, and trains.
- Recognize how essential shipping is to everyday life. Almost everything around us has touched a ship somewhere along its journey. Maritime transport is the backbone of global trade.
- See shipping as a connected system. Ports, ships, logistics companies, and inland transport all work together. A delay in one part of the chain affects the entire system.

- Appreciate the scale of the maritime sectors. Gigantic containerships can carry thousands of containers. Global shipping routes connect all continents in a continuous flow.

Suggested trainer activities

Use these activities to make the session interactive and relatable:

- Quiz question:
  - "Which invention made worldwide shipping possible?"
  - Reveal the answer: the standardized container.
- Room challenge:
  - "Find something here that probably came by ship."
  - Explain that nearly all everyday items qualify.
- Video discussion:
  - After watching the video(s), ask guiding questions such as:

    (a) What did you notice about the movement of cargo?
    (b) How complex do you think ship operations are?
    (c) What did you learn about the global supply chain?
- Local connection: Discuss local ports or shipping routes relevant to your country.

Source video: downloaded from:

https://www.youtube.com/watch?v=0MUkgDIQdcM&ab_channel=TheWallStreetJournal - **Not for distribution, just educational use**.

Source video: downloaded from:

https://www.youtube.com/watch?v=l2JMaJTFSvw&t=447s&ab_channel=QuestTV - **Not for distribution, just educational use**.

Section 2 - Memory

So shipping is important, for us and for the world economy, and it can transport everything, everywhere, all over the world. But what does it look like? We will explore this with a memory game.

Action: Play the memory game, printables for this game can be found in annex 10. You have two sets, so they can play the game in small groups. Depending on the time, choose to play one or two rounds. Take 5 minutes to

explain. Let them play for 20 minutes, the person with the most sets wins. Take 5 to 10 minutes to discuss the different ships. If you have more than 30 minutes left, use this time to play for a longer time or take more time to discuss the different ships.

Memory rules:

- Shuffle the cards and place the cards face down
- The youngest can start, take turns clockwise
- Each turn, you flip over two cards (one at a time, so you can see the first one before picking the second)
- If the two cards match, then they are removed from the game, otherwise they are returned in the same place
- The game ends when all the cards are removed

Talk about the memory game; Did they see new ships, or ships that need more explanation? Explain that some of the ships are used for fishing and others for activities under maritime services. More explanation about these ships will come in the following modules. You can use the game as a guide to what we will be discussing in the rest of the training. Focus on the topics that you will discuss and explain why you won't discuss some other sectors.

Action: Discuss the transporting ships that need more explanation (don't discuss all the following slides, only the ones asked for). If nothing comes from the group choose 2 or 3 types of ships to discuss, depending on the time.

Optional to discuss ships further

In global shipping and maritime work, many different vessel types operate side by side each designed for a specific purpose. Trainers should help participants recognize these ships, understand what they carry, and see how they fit into the larger maritime system. The following overview provides clear explanations of the most common vessel categories.

Containerships (container vessels)

Containerships are the most familiar ships in modern trade. They transport goods inside standardised containers, which can be moved easily between ships, trucks, and trains. This system has transformed global trade by allowing fast loading, unloading, and stacking of cargo.

Key features:

- Carry thousands of containers (measured in TEU: Twenty-foot Equivalent Unit).
- Fast turnaround in ports due to crane-based container handling.
- Transport almost anything: electronics, clothing, food, machinery, furniture.
- Backbone of global consumer trade.

Trainer action: Show the containership video to visualise scale and operations.

Bulk carriers (bulk ships)

Bulk carriers transport dry, unpackaged raw materials such as iron ore, grain, coal, salt, or fertilizers. Cargo is stored in large internal holds beneath heavy watertight hatches.

Essential facts:

- Carry "bulk cargo": ore, grain, coal, minerals
- Make up about 35% of the world fleet and move around 40% of all global seaborne cargo
- Typically built in China, Japan, and South Korea
- Range from small coastal bulkers to enormous dry cargo vessels
- Crew usually focuses on safe navigation, machinery maintenance, and cargo handling
- Crew size: from a handful to around 30 on the largest ships

Historical note: The John Bowes (1852) is considered the first modern bulk carrier.

Oil tankers

Oil tankers are designed to transport crude oil or refined petroleum products in large quantities. There are two main types:

Crude Tankers:

- Can transport unrefined oil from offshore platforms or oil-producing countries to refineries and,
- Are very large, including VLCCs (Very Large Crude Carriers) and ULCCs (Ultra Large Crude Carriers).

Product Tankers:

- Are smaller and,
- Can move refined fuels like gasoline, diesel, jet fuel, and heating oil to consumer markets.

Other important facts:

Tankers range from small coastal tankers to 550,000 Dry Weight Tonnage (DWT) ULCCs. They can move about 2 billion tonnes of oil per year. After pipelines, tankers are the most cost-efficient method of transporting oil.

Chemical tankers

Chemical tankers transport liquid chemicals in bulk, often dangerous or highly specialized.

Key features:

- Tanks may be coated or made of special materials depending on cargo.
- Often dedicated to one type of chemical or several compatible ones.
- High safety standards and strict handling procedures.

Trainers can explain that this specialization makes chemical tanker operations one of the most regulated maritime sectors.

Ferries

Ferries carry people, cars, and goods across water often over short or medium distances. They may be:

- Passenger-only
- Car/passenger combination vessels (Ro-Pax ferries)
- High-speed catamarans for daily commuter traffic

These ships are essential in island regions or coastal areas with no bridges or tunnels.

Roll-on/Roll-off ships (Ro-Ro)

Ro-Ro ships transport anything that can be driven on wheels, such as:

- Cars
- Trucks
- Buses

- Trailers
- Heavy machinery

Cargo literally rolls on and rolls off, making loading very fast.

Maritime services vessels

If your training includes the Maritime Services module, tell participants they will learn more later.
If it does not, give a short overview here:

- Heavy-lift ships: transport items too large or heavy for standard ships like cranes, drilling modules, entire ships, or oversized construction components
- Platform supply vessels: deliver goods, equipment, fuel, and personnel to offshore oil and gas platforms
- Construction vessels: build or install structures at sea: wind farms, cables, tunnels, artificial land, dikes
- Aircraft carriers (navy): carry fighter jets and military aircraft. Used in naval defence and operations
- Dredgers: remove sand or sediment from the seafloor. Used for land reclamation, deepening canals, and supporting coastal construction. Provide sand for concrete and other land-based industries

Fishing vessels (if not covered in fisheries module)

If this training includes the fisheries module, you can introduce these later.
If not, give a short explanation:

- Pelagic freezer-trawlers: among the largest fishing vessels in the world. They catch pelagic fish (species that swim in large schools in the open water column) and freeze the catch immediately on board. Fishing trips usually last a couple of weeks.
- Cutters / trawlers: can target both demersal and pelagic fish. They tow nets through the water column or over/near the seabed. The catch is stored onboard, but unlike pelagic freezer-trawlers it usually is not processed. Fishing trips usually last a couple of days.

Trainer tips for this lesson

Use visuals: vessel photos help learners immediately recognise ship types.
Connect to local context: mention which vessels visit your national ports.

Encourage curiosity: ask participants which vessel type surprised them most. Link vessel types to careers: each ship category represents different skills, roles, and job opportunities.

Section 3 - Jobs in shipping

Most seagoing vessels whether cargo ships, tankers, ferries, offshore vessels, or cruise ships organize their crew into three main departments. Each department has its own responsibilities, required skills, and career pathways. Understanding this structure helps participants see how many different jobs exist at sea and where they might fit best. Ships typically have the following departments:

1. Nautical (deck) department: This department is responsible for safely operating and navigating the ship.
   It includes:
   a. The captain (master)
   b. Officers responsible for navigation and communication
   c. Deckhands, ratings, and other support roles
2. Technical (engine) department. The technical team ensures the ship's machinery and systems function properly.
   It includes:
   a. Engineers
   b. Electricians
   c. Motormen, oilers, and machinery operators
3. Civil (hotel) department. The civil or service department focuses on taking care of the crew and passengers.
   It includes:
   a. Cooks and kitchen staff
   b. Stewards
   c. Housekeeping and service personnel

Trainer activity:
Write these three departments on a flip chart and ask participants which jobs they think belong in each one.

Nautical (deck) department

The Nautical Department handles everything related to ship handling and safe navigation. Tasks include:

- Steering the ship and monitoring navigation systems
- Route planning and weather communication
- Managing radio communication
- Docking and undocking procedures
- Watchkeeping (lookout duties)
- Emergency response and safety responsibilities

Career path and entry level jobs

The deck department has a clear hierarchy. Entry-level roles: deckhands and general ratings. These positions require little to no prior education. With training and experience, crew can progress to higher ranks such as able seafarer, officer, and ultimately captain.

What does a deckhand do? A deckhand is one of the most versatile roles on board. Deckhands support almost all operational tasks, giving them broad exposure to ship life.

Typical deckhand responsibilities include:

- Ship maintenance: cleaning, washing, painting, repairing surfaces.
- Handling lines and rigging: mooring and unmooring the vessel.
- Safety duties: participating in drills, handling emergency equipment.
- Navigation support: acting as lookout, assisting in steering when supervised.
- Cargo operations: supporting loading and unloading.
- Passenger support: on ferries or cruise ships, answering questions and helping customers.

For many people, deckhand work is an excellent entry point to a maritime career.

Technical (engine) department

The engine department runs the engine room, which is often the largest and most complex part of a ship. Large container vessels and tankers have engines the size of small buildings, along with hundreds of mechanical systems that all need attention.

Key responsibilities

- Operating and monitoring the main engine
- Maintaining generators, pumps, compressors, and other machinery
- Troubleshooting mechanical and electrical problems
- Ensuring fuel systems and lubrication systems run smoothly

Many technical jobs allow entry through on-the-job training or internships. Common starting positions include:

- Motorman: focuses on the engine equipment
- Oiler: checks lubrication systems and keeps machinery running smoothly
- Electrician (ETO): handles electrical and electronic systems

Ships with more complex machinery often have larger engineering teams, creating more job opportunities.

Trainer tip:
Check which entry-level engine positions exist in your country and what certificates may be required.

Civil (hotel) department

The Civil Department handles all services related to living on board. The size of this department varies greatly. On cargo ships for instance, it may be small (a cook and a steward). On cruise ships it is enormous, making up most of all crew roles.

Common civil service jobs

- Cooks and kitchen assistants
- Cleaners and stewards
- Laundry personnel
- Recreation staff (on bigger vessels)
- Hospitality and drinks service teams

On larger ships, the department is led by a Chief Steward, who supervises food services, cleaning teams, and all hotel-related areas.

Many civil service roles, require no prior certification, making them accessible starting positions:

- Cleaning staff

- Kitchen assistants (such as sous-chefs)

These roles can lead to more senior positions with additional training. After explaining all three departments, invite participants to reflect: “Which department seems most interesting to you, and why?” Start the deeper discussion with the department that receives the most votes. This helps keep the session engaging and linked to participant motivation.

Key take aways

A ship is like a small floating company, with clear departments and teamwork needs. Many maritime jobs do not require prior education except for basic safety training and medical fitness, offering learning-on-the-job pathways. All departments deck, engine, and civil offer opportunities for growth through certification and experience. Entry-level jobs (deckhand, motorman, oiler, cleaner) allow newcomers to explore maritime work before committing to long-term training. Each department plays a vital role: without navigation the ship cannot move, without engineering it cannot run, and without civil service the crew cannot function.

Section 4 - Salary on board

Let’s talk about money!

Begin by asking whether participants know the difference between gross and net salary. If needed, explain:

- Gross salary – the full amount you earn before tax and other deductions.
- Net salary – the amount that ends up in your bank account each month.

When people negotiate a job offer, salaries are almost always given as gross salary, so understanding the difference is important. Net salary can be significantly lower, depending on tax systems, social security, and other employment costs.

Extra benefits

In many countries (such as the Netherlands), employees receive additional payments such as holiday allowance, which is usually around 8% of annual income, often paid in May. This equals roughly one monthly salary. Some companies pay this monthly instead of once a year. Sometimes companies give performance bonuses: may be paid monthly, quarterly, or annually. Other extra benefits may include:

- Reimbursement of travel costs,

- Company car,
- Mobile phone,
- Accommodation or meals (especially common in maritime jobs).
- Pension
- Health care
- Insurance

Explain that benefits vary widely between employers and contracts, and it is always important to ask what is included.

Discussing salaries in shipping

This part should be country-specific, so trainers should research local salary levels before the session. If you provide incorrect or unclear figures, you risk losing participant trust. Focus on jobs participants can realistically access such as deckhands, engine ratings, stewards, or cooks and compare them to familiar land-based jobs. A useful comparison is deckhand at sea vs. truck driver on land (example: Netherlands). This comparison works well because both are accessible without prior experience, are physically active jobs, and they provide entry-level positions with growth opportunities. On average, deckhands in the Netherlands earn more, and their salaries increase faster with experience. Additional advantages of working at sea:

- Paid even when at home during off-rotation periods.
- Fewer distractions while working.
- More opportunities to learn on the job and move up in rank.

Encourage participants to think not only about salary but also about lifestyle, learning opportunities, and career growth.

Show the salary comparison slide and invite participants to share their thoughts. Guiding questions:

- Which job seems more attractive to you and why?
- How important is salary compared to time at home?
- Does the possibility of career growth influence your decision?

Give several participants the floor to explain their reasoning. Encourage respectful debate about the advantages and disadvantages of each path.

Key messages for trainers to emphasize

Maritime salaries are often competitive, even in entry-level roles. Understanding gross vs. net pay helps participants avoid

misunderstandings. Benefits such as holiday allowance, paid rotations, and training opportunities add value. Honest, well-researched examples build credibility and trust with participants.

Section 5 - Basic safety training

The International Maritime Organisation (IMO) has set the Standards of Training, Certification and Watchkeeping (STCW) for seafarers. This Convention is ratified by almost all members of the IMO. This means that if you work at sea, you almost always need these two certificates:

- Basic Safety Training (BST) certificate
- Medical fitness certificate

These requirements form the foundation of safe work on board and are the first steps for almost everyone entering the maritime sector.

Basic Safety Training (BST)

Crew members must complete an approved Basic Safety Training course. BST ensures that every seafarer understands the core principles of working safely on board a vessel and knows what to do in case of emergencies.

Medical Fitness Certificate: a medical fitness check is a simple health examination carried out by a doctor. It typically includes:

- eyesight tests,
- hearing tests,
- heart and lung checks,
- general physical fitness assessment.

Explain that this certificate ensures that a seafarer is physically able to work safely at sea. What Does “Safety at Sea” Mean? Before explaining BST, trainers should explore participants’ associations with safety. Ask them: “Why is safety so important at sea?”

Reasons safety is critical at sea:

- Unpredictable conditions: Weather, waves, and wind can change quickly.
- Constant movement: A ship is always moving, making everyday tasks more challenging than on land.

- Emergency preparedness: Knowing how to respond to fire, flooding, man-overboard situations or collisions reduces accidents and saves lives.
- Accident prevention: Safety procedures help prevent incidents from happening in the first place.

Encourage participants to share real or imagined examples from their own lives (storms, slippery surfaces, machinery risks).

The four elements of BST

Trainers should explain that BST covers four main skill areas, each combining theory and hands-on practice.

1. Personal Safety & Social Responsibilities (PSSR) which includes understanding shipboard organisation, working safely with others and preventing dangerous behaviour.
2. Personal Survival Techniques (PST) which includes staying afloat at sea, abandoning ship, using lifejackets and life rafts and surviving in cold water.
3. Fire Prevention & Firefighting which includes recognising fire hazards, using breathing equipment, extinguishing different types of fires and, escape and teamwork in smoke-filled environments.
4. Elementary First Aid which includes helping injured or unconscious people, treating wounds, bleeding, and burns, responding to medical emergencies on board

BST is not a classroom-only training. Participants practice real emergency skills jumping into the water, entering lifeboats, using fire hoses, escaping smoke rooms, and performing CPR. Use the photos and video materials to illustrate what participants will do during BST. Examples include:

- Man-overboard drills
- Firefighting exercises
- Lifeboat launching
- Flooding and damage control
- First-aid simulations

Discuss with participants:

- Which skills look challenging?
- Which skills look exciting or fun?

- Why is hands-on practice so important for safety?

Demonstration or VR activity

Some training programs include a real-life demonstration (by a certified instructor) or a VR safety module. VR simulations may include:

- Man overboard
- Fire in the engine room
- Abandoning ship
- Emergency response scenarios

Use this moment to introduce the instructor or set up the VR activity.

VR is especially powerful for learners who have never been on a ship it helps them understand real dangers without real risk. They can be downloaded from: https://vr-me.eu/vr-me-training-course/

Key messages to emphasize

Working at sea is adventurous but requires serious preparation. BST ensures that everyone on board knows what to do in emergencies. Safety training makes the workplace safer not only for you, but for the entire crew. Medical fitness ensures you are ready to work in a challenging environment. Many maritime accidents can be prevented through good training and awareness.

- https://www.youtube.com/watch?v=K2JL0ESZ_LY&ab_channel=TheSeafarers%E2%80%99Charity

- https://fireaid.com/academy-items/stcw-basic-safety-training/
- https://uksa.org/course/mca-training/safety/stcw-basic-training/
- https://www.dhtc.nl/en/courses/maritime-fishery/basic-safety-training/
- https://www.yachtcrewtraining.com/products/stcw-basic-safety-training
- https://deltasafetytraining.com/nieuwe-standaard-gwo-sea-survival/
- https://falmouthtrainingsolutions.co.uk/courses/stcw-update-training/stcw-update-fire-prevention-and-fire-fighting-u-fpff/
- https://seascopemaritimetraining.com/courses/stcw-course-basic-safety-training/
- https://www.southwestmaritimeacademy.com/courses/elementary-first-aid/
- https://www.youtube.com/watch?v=QXMARrWYd_g&ab_channel=MPTMaritimeProfessionalTraining **Not for distribution, just educational use**.

Section 6 Maritime gym class

This gym session is designed to give participants a realistic feel for the physical demands of working in ports or on ships. Instead of only talking about maritime careers, this workshop lets them experience the kinds of strength, coordination, and teamwork required in those jobs. Before running the session, make sure to coordinate with a sports teacher in the detention centre so the activities are safe and appropriate for the group.

Working at sea or in a port means dealing with heavy equipment, constant movement, and tasks that require both physical power and precision. The exercises in this workshop are chosen to mirror those realities in a safe, controlled way. Participants begin with a short introduction and warm-up, followed by a relay that challenges them to communicate under pressure, push and carry objects, maintain balance, throw with accuracy, and climb with control. These challenges show how everyday port and ship tasks like passing tools in a noisy engine room or throwing mooring lines depend on much more than strength alone.

The physical activities help participants understand several key ideas:

- **Strength matters**, but technique matters too. Tasks such as pushing heavy equipment or lifting tools require controlled movement, not brute force.
- **Communication** can be difficult in noisy or high-pressure environments. Exercises that limit speaking mimic the communication challenges in engine rooms or busy decks.
- **Balance** and coordination are essential on a moving ship. Walking a narrow plank or climbing while carrying objects simulates working on unstable surfaces.
- **Teamwork** is central to maritime work. The relay structure shows how every task depends on cooperation, timing, and supporting one another.
- **Precision** saves time and prevents accidents. Practising accurate throws connects directly to mooring work and other shipboard duties.

The guidance for this class can be found in annex 11.

Overall, the purpose of this workshop is not athletic performance. It is about confidence, awareness, and insight. Participants discover how their physical skills relate to maritime work, realise they can train and improve, and leave with a clearer idea of what working in ports or at sea feels like. The hope is that they walk away feeling stronger, more capable, and more motivated to explore maritime opportunities in the future.

7. Module “Ocean and sustainability”

Overview of the module

A basic understanding of how the ocean works and its importance for life on earth is provided to increase the participants’ ocean literacy. Simultaneously, sustainability is introduced using the 3 Ps (People, Planet, Prosperity), while a basic understanding of climate change is taught. Some environmental challenges related to the maritime sector are introduced, such as marine pollution, invasive species, underwater noise, air emissions, and overfishing. Depending on the local situation, the trainer can decide which challenges are discussed in the training, as it is not necessary to discuss all challenges to avoid an excess of information. Various activities are proposed (underwater sound quiz, art workshop, demonstrating ocean specimens), which can be employed depending on availability.

Learning objectives:

- Participants have increased knowledge about the ocean.
- Participants understand the 3P concept of sustainability (People, Planet, Prosperity).
- Participants comprehend the basics of climate change and its consequences.
- Participants identify various environmental challenges related to the maritime sector.

Module Plan

Slide	Duration	Content and Activities	Materials and Tools
Slide 2 to 12	15 min	**Introduction to Sustainability**	
Slide 13 to 14	20 min	**Top 5**	
Slide 15 to 36	15-30 min	**Quiz: Solid waste**	Use the answering cards
Slide 37 to 48	15-30 min	**Quiz: Underwater Noise**	Use the answering cards
Slide 49 to 56	15-30 min	**Quiz: Invasive species**	Use the answering cards

Total	125 min	109 slides	5 sections

Presentation guide

Welcome slide for the module about the Ocean and Sustainability

This module we will come to a basic understanding of how the ocean works and its importance for life on earth is provided to increase the participants' ocean literacy. Simultaneously, sustainability is introduced using the 3 Ps (People, Planet, Prosperity), while a basic understanding of climate change is taught. Some environmental challenges related to the maritime sector are introduced, such as marine pollution, invasive species, underwater noise, air emissions, and overfishing.

For trainer: Depending on the local situation, the trainer can decide which challenges are discussed in the training, it is not necessary to discuss all challenges to avoid an excess of information. Various activities are proposed (underwater sound quiz, art workshop, demonstrating ocean specimens), which can be employed depending on availability.

Section 1 - What is sustainability?

This module helps participants shift from thinking only about daily work or short-term decisions to understanding the bigger picture of sustainability a concept that shapes the entire maritime and fisheries sector. The goal is not to turn them into experts immediately, but to spark awareness, curiosity, and critical thinking.

Sustainability is a word used everywhere, including in shipping, ports, and fisheries, but many learners have never been asked what it means. This part of the lesson helps them reflect on their own ideas first, before providing structure or definitions. By asking participants to write down just one or two words they associate with sustainability, you let them reveal their instinctive thoughts. Their answers often fall into broad categories nature, money, long-term thinking, technology, or innovation which makes it easy to show that **sustainability is not one topic**, but several woven together.

Once their ideas are visible on the board, you can introduce the concept of sustainable development: not only meeting today's needs but doing so in a way that still allows future generations to live well. It helps to point out that this idea emerged because the world has changed. Human knowledge, technology, and global trade give us enormous power to shape the planet building islands, reclaiming land, changing coastlines. This ability is

impressive, but it also has unintended consequences such as pollution, overuse of resources, and climate-related risks. The exercise is not about blaming individuals, but about showing that many environmental problems come from **unintended side-effects** of our activities, often driven by short-term thinking in politics, business, and daily life.

This sets the stage for discussing the Three Ps:

- People – fair work, safety, communities, and cultural traditions
- Planet – protecting ecosystems, fish stocks, water quality, and the climate
- Profit – earning enough to make a living and keep a business running

The key message is that sustainability only works if all three are balanced. A business that cares only about nature but earns no money cannot survive; a business that earns money, but harms people or the environment is not sustainable either.

Finally, connect this back to the maritime world. A sustainable Blue Economy requires not only rules and new technologies, but people who understand both. Participants should leave with the understanding that sustainability is practical, not abstract it is about long-term success, safety, fairness, and taking responsibility for the future ocean, they may one day work on.

If done well, this module helps participants see sustainability not as a complicated political word, but as something connected to their own work, values, and future opportunities.

Section 2 - Top 5

Ask the participants what they think are the most important issues with sustainability. Answers can be:

- Climate change
- Air pollution
- Waste
- Noise
- Overfishing
- Invasive species

Let's play a quiz, which topic would the group like to quiz. More time do another one. If there is no preference choose something that was mentioned in the top 5.

Section 3 - Quiz Solid waste

This part of the module introduces participants to where marine litter comes from, why plastic dominates global ocean waste, and what the consequences are for people, nature, and the maritime sector. The goal is not for learners to memorise statistics, but to understand the scale of the problem, common misconceptions, and the real impacts of marine waste.

1. **Why talk about solid waste in the ocean?** Begin by linking the issue to the local environment, whether that is the North Sea or another region. Many people assume ocean waste only comes from ships, but much of it also arrives via rivers, wind, beaches, cities, and land-based activities. This helps participants realise that marine waste is not "someone else's problem" it is a shared, global issue with multiple sources. Encourage them to think about what kind of waste is most common. The key insight is that plastic dominates ocean litter making up roughly 60–90% of solid waste, depending on the region.
2. **Why is plastic such a big issue?** Plastic became widely used after the Second World War because it was cheap, strong, lightweight, and extremely versatile. Its rapid growth was tied to rebuilding economies and the rise of global consumer goods. Today, although Europe may be reducing production, global plastic output is still rising in many countries. Plastic's strength is also its weakness. It barely breaks down, and when it does, it breaks down into smaller fragments rather than disappearing. These micro and nano plastics often contain chemical additives and persist for decades or centuries far longer than the products they came from.
3. **Where does plastic go in the ocean?** One common misconception is that most plastic floats in huge, visible piles. Less than 1% floats at the surface. Over time, algae grow on floating plastic, making it heavier so it sinks. Around 3–15% ends up on coastlines, but 94% sinks to the seafloor, where it is mostly invisible and poorly understood. The "plastic soup" in the media refers to the five large ocean gyres areas where currents trap drifting debris. But even there, much of the plastic is small fragments, not giant floating islands.

4. **How long does plastic last?** Plastic remains for decades to centuries. A bottle or fishing crate can last far longer than a thin plastic cup because it is made of stronger material and may float differently. Scientists estimate these lifetimes using accelerated ageing simulations, not by direct observation plastic hasn't existed long enough for us to measure its full natural lifespan. This helps participants see how long their own waste could remain in the ocean.
5. **Ecological impacts:** What happens to marine life? Most impacts occur out of sight. Waste on the seabed and in the water, column affects animals in several ways:
    - Ingestion: Animals mistake plastic for food especially turtles that confuse bags with jellyfish and can starve with a stomach full of debris.
    - Entanglement: Ropes, nets, and plastic straps trap animals and restrict movement, feeding, and breathing.
    - Spread of invasive species: Organisms hitchhike on floating plastics and arrive in ecosystems where they don't belong.
    - Smothering of habitats: Plastic on the seafloor, especially in high-density areas, prevents oxygen exchange and harms benthic life.

Nature is resilient, and some animals adapt for example, a fish may hide inside a can, but this does not outweigh the widespread negative effects.

6. **Impacts on People and Profit:** Sustainability is about People, Planet, and Profit so this module connects waste to all three:
    - Profit: Waste costs money. Ports and municipalities must clean beaches, ships must clear clogged filters or propellers, and water companies must filter microplastics from drinking water.
    - People: Humans ingest plastic through seafood and experience declining environmental quality. It also affects tourism, coastal livelihoods, and public safety.

This reinforces that marine litter is not just an environmental problem it affects economies, workers, and communities.

Main learning message

By the end of this module, participants should understand: Marine litter has multiple sources, including land. Plastics dominate ocean waste because we use so much and it lasts so long. Most plastic is invisible, either sinking or

breaking into small fragments. Marine waste harms the three P's: Planet, People, and Profit.

Reducing waste at the source is essential because once it enters the sea, it is extremely difficult to remove. This prepares participants for deeper discussions about sustainable behaviour, waste reduction, and the role of the maritime sector in protecting the ocean.

Section 4 - Underwater noise

This topic introduces participants to the world of sound underwater, helping them understand how marine animals communicate, navigate, hunt, and survive in an environment where visibility is often very low. For humans, sight is our most important sense but for marine life, sound is the main way to understand the world. This makes the ocean a noisy place with many "voices," and an important part of ocean literacy.

Begin by explaining that sound travels faster and further underwater than in air, which is why so many animals depend on it. The videos help participants experience this directly and spark curiosity about how different species use sound in completely different ways.

The sound quiz is not just for fun it helps learners realise that the ocean is full of natural sounds they might never have imagined: the booming call of a toadfish, the rapid clicks of a hunting sperm whale, or even the crack of a snapping pistol shrimp. Many are surprised to discover how loud, complex, and purposeful these noises are. The follow-up questions about what animals are communicating helps to show that underwater sound has different meanings attracting a mate, coordinating a hunt, staying safe in a group just like human communication.

After introducing natural sound, this module shifts toward human-made noise, especially from shipping. This helps participants see the contrast between natural acoustic environments and the underwater noise we add through engines, propellers, and machinery. In the last 60 years, shipping noise has doubled every decade, masking the sounds animals rely on for communication, feeding, and navigation. Even if people rarely think about underwater noise, it is one of the fastest-growing pressures on marine species.

The final visual showing how human noise overlaps with the hearing ranges of whales, seals, sea lions, and fish helps participants understand that noise pollution is not just annoying but can disrupt critical behaviours. When

animals can't hear each other, they can't find food, identify danger, or stay together. Emphasise that noise is an invisible stressor, but its effects can be serious.

Overall, this topic highlights:

- how crucial sound is for marine life,
- how diverse and fascinating natural underwater sounds are, and
- how human activities can unintentionally interfere with these natural communication systems.

By the end of the activity, participants should feel more aware of the hidden soundscape of the ocean, curious about marine behaviour, and more conscious of how human actions influence life under water.

Section 5 - Invasive species

This topic introduces participants to the idea that ships don't just move goods they can unintentionally move living organisms across the world. Understanding invasive species is essential for anyone entering the maritime sector, because shipping is one of the main pathways through which species spread to places, they do not naturally belong.

Begin by explaining that invasive species are not "bad" on purpose; they become a problem when human activities move them into environments where they don't have natural predators or limits. This helps participants see the issue not as a moral one, but as an ecological consequence of global transport.

A simple way to introduce the concept is through zooplankton. Some zooplankton, like copepods, remain tiny for their entire life. Others such as lobster or mackerel larvae start microscopic but later grow into large animals. When these larvae are sucked into ballast water tanks and released elsewhere, they may settle and grow into a species that never belonged to that environment. This illustrates how something invisible in a ship's tank can become a major ecological challenge elsewhere.

The quiz with yes/no statements helps clarify common misconceptions. Many learners confuse exotic species (species that arrive from somewhere else but cause no harm) with invasive species (species that survive, spread, and have significant impact). Guiding them through the three possible outcomes not surviving, surviving without effect, or surviving and causing major changes helps make the difference clear.

A key point for trainers to emphasise is what makes a species invasive: it must be able to survive, reproduce, and spread in the new environment. Once established, it may outcompete native species for food, space, or habitat. It might eat local species, take over ecological niches, or spread parasites and diseases. This is a natural process, but our ships have accelerated it far beyond what ecosystems can handle. The figures shown in the slides help underline that shipping is the number one global mechanism for spreading species sometimes through ballast water, sometimes through organisms clinging to hulls.

Finally, connect this back to daily life and the history of human movement. Humans have long transported species intentionally bananas, coffee, sugar cane because growing them elsewhere had advantages. But in modern times, global shipping has made species movement so fast and widespread that ecosystems often cannot adapt. This creates challenges for fisheries, biodiversity, and maritime operations.

Throughout the module, keep the focus on awareness and responsibility, not blame. When participants understand that species can easily hitchhike with ships, it is easier to understand the maritime regulations in place and solutions like ballast water treatment systems. In addition, they will realise that responsible behaviour at sea is an important part are of protecting the ocean they may one day work on.

8. Module “Working in the Blue Economy”

Overview of the module

The final workshop will combine various practical exercises to create confidence in the participants to apply for a job in the maritime sector and to further develop the necessary soft skills. Now that they know more about the maritime sector, they are instructed to choose a specific sector that stood out to them and prepare a job application for that sector. This can be done in various ways. Participants can choose to write an application letter, record a video, or practice a job interview with the trainer. This exercise can be done individually or in groups of 2-3, depending on the group dynamics.

Learning objectives:

- Participants are aware of the maritime sectors and its opportunities.
- Participants can compare their own qualities with possible job requirements.
- Participants know how to build a CV.
- Participants know how to prepare for a job interview.

Module Plan

Slide	Duration	Content and Activities	Materials and Tools
Slide 57 - 60	15 - 30 min	**Job selection** - Let the participant make a mind map of the training and their skills/interests	- A4 Paper - Markers/pencils
Let the participants choose which assignment they want to do. They can do the assignment alone or in duos: **A**. Build a CV **B.** Write a motivational letter **B**. Train for a job interview **D.** Working with the job platform			
A. Slide 61 - 65	15 - 30 min	**Build a CV**	- Coloured pencils - A4 paper

			- *Curriculum vitea* handout
B. Slide 66 - 68	15 – 30 min	**Write a motivational letter**	- Paper - Pens
C. Slide 69 - 73	15 - 30 min	**Train for a Job Interview workshop**	- Handout preparation sheet -
D. Slide 74 - 75	30 – 45 min	**Workshop working with the job platform**	- Computer/iPad with access to platform
Slide 76 - 77	15 min	**Conclusions and take aways**	-
Slide 78- 79	10 - 20 min	**Evaluation** - Hand out printed evaluation form	- Evaluation forms - Pen
Total	**200 min**	**23 slides**	**5 sections**

Presentation guide

Section 1 - Mind map activity

This final part of the programme is about helping the young participants connect what they learned to what they might want to do next. Many of them may never have seriously thought about a job, let alone one in the maritime sector. Your role is to make this step feel safe, practical, and motivating not overwhelming.

Start by giving each participant paper and a coloured pen. The aim is to help them slow down and reflect on the training in a simple, approachable way. Asking them to write down what they liked, disliked, or found interesting helps them discover their own preferences without pressure. Young people in detention often struggle to talk openly at first, so writing gives them a way in.

Encourage them to think about small things, not big life decisions:
Which part caught your attention? What surprised you? What felt boring?
Which tasks or jobs seemed “more you” and which clearly weren’t?
This reflection helps them build a basic “map” of what matters to them.

Once they've written a few ideas, guide them toward connecting these thoughts to possible jobs. The goal here is not to push them into choosing a career, but to help them see that every interest or strength matches a type of work including in the maritime world. If they enjoyed physical activities, maybe deck work appeals. If they liked technical explanations, maybe engineering roles fit better. If they liked helping others, maybe service roles on ferries or cruise ships suit them.

Gently guide them to answer three simple questions:

- Which job sounds interesting enough to try?
- What am I good at? (strength, personality, skills)
- Why might this job fit me?

These questions help them imagine a possible path without feeling locked in.

After that, you can introduce the basics of applying for a job. Keep this practical and encouraging many may not know what a CV is or what goes into a motivation letter. Explain that these tools simply help an employer understand who you are, what you can do, and why you want the job. A short, clear explanation of how to behave in a job interview can also give them a sense of confidence especially if this world feels far from their own experience.

The core purpose of this workshop is to help participants realise that they do have choices, and that interests, strengths, and even small moments of curiosity can point toward meaningful work. It's about giving them a clearer picture of what they might want and helping them understand that preparation is possible even from where they're standing now.

Remind them that knowing why they want a job is just as important as knowing which job they want. This sense of direction, even if small, can make the step toward work feel achievable and real.

Section 2, option 1 - build a CV

This part of the workshop is about helping participants gather the basic information they will later use to create their own CV. For many young people in detention, writing a CV can feel intimidating or pointless if they think they "don't have anything to put on it." Your role is to show them that everyone has skills, **experiences, and strengths** even if they've never had an official job.

The four guiding questions help them think about themselves step by step. These questions break down the CV into simple pieces, so the task becomes manageable:

- Who are you?

  This encourages participants to think about how they want to introduce themselves. It can include personality traits, background, or what they value. This helps them realise that identity is part of employability.

- What are your skills?

  Many participants underestimate what they can do. Remind them that skills are not limited to certificates, things like teamwork, fixing things, helping others, playing sports, or staying calm under pressure all count.

- What are your experiences?

  Help them see that experience comes in many forms: school tasks, helping family, sports, workshops, or responsibilities in the detention centre. This question builds confidence by showing they already have useful experience.

- What is your education?

  This simply helps them list what they've completed or started. Even unfinished education matters because it shows effort and direction.

Give them a few quiet minutes after each question. The short breaks help them reflect without feeling rushed, and writing things down allows even shy participants to express themselves.

Once these four sections are complete, the participants will have the core ingredients needed for a CV. Emphasise that format, clarity, and presentation also matter a CV that stands out for being clean, structured, and easy to read can make a real difference. You can use the printables for this from annex 12.

The purpose of this activity is to help them recognise that they do have something to offer and that a CV is simply a way of showing an employer who they are. By taking small steps and building confidence as they go, you set them up for the next stages of job applications and future opportunities.

Section 3, option 2 - Letter of motivation

This part of the workshop helps participants understand how to present themselves to an employer. Many young people in detention may feel they have nothing to offer, or they may never have applied for a job before. A cover letter gives them a chance to explain **why they want the job** and **why they deserve a chance**, which can be especially important for those rebuilding their lives.

Explain that a CV shows what you have done, but a cover letter explains who you are and why an employer should care. It is their opportunity to show motivation, effort, and honesty qualities many employers value highly, especially in entry-level maritime jobs.

Because formal writing can feel intimidating, showing simple examples first makes it easier. Let them see that a good letter is not about perfect grammar; it's about being clear, **brief, and sincere**. Encourage them to think about what they wrote in earlier exercises (skills, experiences, interests) and use that as the heart of their message. For some participants, a written letter may feel uncomfortable, so it can help to mention that people sometimes use alternative formats such as short videos if the employer allows it. This can make the task feel more accessible. It is also possible to record a conversation and let programs transcribe it to text when writing is difficult.

Reassure them there is a basic structure to follow, and that structure exists to make things easier, not harder. A letter should simply say: who you are, why you want the job, and why you would be good at it. Remind them not to oversell themselves, but also not to downplay their strengths. The aim is authenticity, not perfection.

Overall, this part of the workshop teaches them something bigger than writing a letter: it shows them how to speak for themselves, how to express their goals, and how to take a step toward a future outside detention. This builds confidence and gives them a tool they can use long after the training ends.

Section 4, option 3 - Job interview

When a young person gets invited for a job interview, it's often a moment of excitement mixed with anxiety. For many of the students you work with, this may be their first real interview or their first one after a difficult period in life.

Your role as trainer is to help them understand why preparation matters, and how preparation can build confidence, structure, and a sense of control. Print out the 9 steps to prepare for an interview, they can be found in annex 13.

Explain to them that an interview is not a test they have to pass perfectly. It is a conversation where both sides try to discover whether there is a good match. Preparation helps them feel more grounded and gives them tools to talk about themselves in a clear and positive way.

A big part of preparation is understanding the company and the role. Many young people have never been taught to look up an organisation or read a job description closely. Helping them do this makes the interview feel less like a mystery. When they know what the company does and what the job requires, it becomes easier for them to see where they fit in and to talk about it.

Another important element is helping them think about their own story. Young people in prison often worry about how they will be judged, what they should or shouldn't say, and whether they have anything valuable to offer. Guide them to reflect on who they are, what motivates them, and what experiences (good or difficult) have taught them. They don't need to tell everything; they need to tell what shows growth, responsibility, and readiness.

Talking about strengths and weaknesses is often uncomfortable for them. Encourage them to view strengths as things they do naturally well and weaknesses as things they're working on improving. You can help them practise saying these things out loud. Asking people, they trust to describe them can help them discover positive qualities they didn't realise they had.

Before the interview, appearance and behaviour matter. Not to impress, but to show respect and seriousness. This doesn't mean formal clothing; it means clean, appropriate, and comfortable clothing that allows them to feel like themselves. Many young people need guidance on how to carry themselves, how to shake hands, and how to speak clearly under stress. Practising this in a safe environment makes a big difference.

Difficult questions are often the biggest source of fear. Helping them practise common questions gives them language they can rely on when their mind goes blank. Questions about their background or gaps in their

CV can be especially sensitive. Teach them that honesty, and a focus on the future work best.

Encourage students to prepare their own questions for the employer as well. This shifts the dynamic they are not just “being interviewed,” they are also exploring whether the job suits them. It helps them feel more equal and more in control.

Talking about wages and salary is part of adulthood and responsibility. Many young people don’t know what is realistic, or they are afraid to talk about money. Preparing them early helps prevent stress later and shows them that it’s normal to discuss these things.

Finally, it helps to practise. Give them time to prepare quietly, then offer them a chance to run through a mock interview with you or another trainer. This type of role-play builds confidence quickly, especially for students who learn best by doing. Remind them that preparation is not about perfection. It is about knowing themselves, showing motivation, and taking their future seriously.

Section 5 - practice with platform

Let the participants practice with the job matching platform. Everyone needs a computer or iPad. They need to go to the website and search for jobs. When successful guidance can arrange for an application with the matched job. Give the participants different assignments to use and research the platform thoroughly.

The platform can be entered via the website www.Turning-Blue.org

Section 6 - conclusions

As you close this training, it’s important to help the participants look back on what they’ve explored. Over the course of the sessions, they were introduced to several sectors within the Blue Economy, areas like shipping, fisheries, tourism, and port industries. Even though the slide deck gives the factual overview, your task now is to create space for reflection. This matters because many young people in prison don’t often get asked what they enjoyed or found interesting. Giving them that moment helps them feel seen, valued, and part of the learning process.

Invite them to share which topics stood out or surprised them. This isn’t just about content; it’s about helping them notice what they’re naturally

curious about and what kind of work they can imagine themselves doing in the future.

During the training, you also touched on themes like safety, communication, and sustainability. These themes help them understand that the Blue Economy isn't only about physical work at sea; it's also about relationships, teamwork, respect, and responsibility. Highlighting this can help them discover strengths they might not realise they have.

Explain why the Turning Blue job platform exists. It's more than a website it's a tool to help them continue exploring possibilities outside the classroom. Many of these young people have limited networks, so a platform that points them to real opportunities can be a lifeline. Encourage them to see it as something they can return to when they are ready.

When it's time for the evaluation, frame it as a chance for them to influence the future of this training. Post-evaluation forms can be found in annex 13. Young people in prison often feel like things happen to them rather than with them. By filling in the evaluation form, they help shape what the next group will experience. Explain clearly why their opinion matters and keep the process accessible. If reading is difficult for some, offer to read the questions aloud or go through the form as a group whatever supports their dignity and participation.

Once the forms are completed and collected, take a moment to properly close the session. If this is the final class, make sure they know where they can go next. Encourage them to talk to their mentor if they want more information or support. Remind them that they can continue learning and exploring the Blue Economy through the platform.

As they leave, place yourself by the door if possible. This personal moment is powerful. Offer sincere, specific compliments about how they participated whether they were on time, contributed positively, showed curiosity, supported others, or simply stuck with the process. Many of these young people rarely receive positive, genuine recognition. Seeing them and naming their strengths can have more impact than the training itself.

This final moment ties into the heart of your role: giving them the sense that they are capable, welcome, and worthy of new opportunities.

Didactics

Group dynamics

When training youngsters in detention/prison it is important to be aware of group dynamics. When you are aware of these dynamics and have knowledge on how groups are formed and what you can do to influence these dynamics you have the tools to guide a group in your preferred direction.

One theory on group dynamics we like to discuss here is the theory of **Forming-Storming-Norming-performing** by Bruce W. Tuckman in 1965, a psychologist who studied group behaviour. He proposed that teams go through four predictable stages as they form and grow. Later, he added a fifth stage called "Adjourning" (or "Mourning") to describe the phase when a team disbands after completing its task.

Purpose of the model

Tuckman's model helps explain:

- Why teams struggle at first
- How they grow stronger over time
- What leaders or trainers can do to support each stage

It's widely used in education, business, sports, and training to improve teamwork and group performance.

As a trainer, you can use the **Forming–Storming–Norming–Performing** model to guide and support group development effectively. Here's how:

1. Forming – Set the Stage

- **What to do:** Help participants get to know each other.
- **How:** Use icebreakers, set clear goals, and explain the purpose of the training.
- **Why it matters:** Builds trust and reduces anxiety.

2. Storming – Manage Conflict

- **What to do:** Expect disagreements or confusion.
- **How:** Encourage open communication, listen actively, and mediate if needed.
- **Why it matters:** Helps the group move past tension and clarify roles.

3. Norming – Build Team Spirit

- **What to do:** Support collaboration and shared norms.
- **How:** Facilitate group discussions, define roles, and celebrate progress.
- **Why it matters:** Strengthens cooperation and commitment.

4. Performing – Empower the Group

- **What to do:** Let the group work independently and effectively.
- **How:** Step back, offer support when needed, and focus on outcomes.
- **Why it matters:** Maximizes productivity and learning.

Bonus Tip: Reflect and Debrief

After the training, guide the group in reflecting on their journey through the stages. This helps reinforce learning and team growth.

Training didactics for the target group

When training a group, success depends not just on what you teach, but how you connect with your participants. These key elements help create a learning environment where people feel engaged, respected, and motivated:

Establish a connection

Why it matters:

People are more open to learning when they feel a sense of connection with the trainer and the group. It builds trust and lowers resistance.

How to do it:

Start with warm introductions, use names, show genuine interest, and create a welcoming atmosphere. A little humour or personal sharing can go a long way.

What's in it for me?

Why it matters:

People are more motivated when they understand the personal value of the training. Make it relevant to their goals and challenges.

How to do it:

Clearly explain the benefits of the training. Link the content to their daily work, challenges, or personal growth. Ask them what they hope to gain.

Challenge! Don't accuse.

Why it matters:

People grow when they're challenged, but they shut down when they feel blamed or judged. Encourage critical thinking and growth by inviting reflection - not by pointing fingers. This keeps the atmosphere safe and constructive.

How to do it:

Use open-ended questions, invite reflection, and frame feedback as opportunities. Focus on behaviour or ideas, not the person.

Create a personal connection to the training

Why it matters:

Learning sticks when it's meaningful. If participants can relate the content to their own lives, they're more likely to remember and apply it.

How to do it:

Use real-life examples, case studies, or ask participants to share their own experiences related to the topic.

Involve on a personal level

Why it matters:

Ask questions, invite stories, and let participants contribute. Active participation increases engagement and ownership. People learn better when they're involved, not just listening.

How to do it:

Use group discussions, role plays, small tasks, or personal reflection exercises. Let them contribute ideas and insights.

Create a sense of responsibility

Why it matters:

Empower learners to take ownership of their learning. When they feel responsible, they're more likely to apply what they've learned. When learners feel responsible for their own learning and for contributing to the group, they take it more seriously.

How to do it:

Set clear expectations, encourage peer support, and let participants take the lead in parts of the session. Ask them how they plan to apply what they've learned.

Use the latest and factual information

Why it matters:

Using up-to-date and verified information ensures that decisions, predictions, and actions based on training are correct and trustworthy. Information evolves, training with current data helps align with present-day realities. Outdated or incorrect data can lead to flawed conclusions, poor performance, or even harmful outcomes.

How to do it:

Subscribe to Blue Economy related newsletters. Make a connection with local fisheries, seafaring companies, schools and research centres. And discuss topics you would like to know more about. Make sure that you always get different sides of the story. Try to leave your own opinions and emotions out of it and be aware of the emotions and opinions of others in the stories you are told.

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turning blue

Frequently Asked Questions

1. Introduction

1. **I get seasick. Are there jobs on land as well?**

- Yes! Many Blue Economy jobs are on land like working in ports. You don't need to go to sea to be part of it.

2. **I can't swim. Is that a problem?**

- Not always. Some jobs don't require you to swim (like port work). But for sea jobs, it is required to learn as most training starts with basic safety training that is water-based.

3. **What if I don't know anything about the sea?**

- No problem. Everyone starts somewhere. Most jobs teach you as you go, and most jobs in the Blue Economy don't require knowledge about the sea. However, it can be beneficial.

4. **I Hate Fish. Why Do I Have to Listen to This?**

- You don't have to like fish to find your place in the Blue Economy. It includes a wide range of jobs connected to the sea and many of those jobs don't involve fish whatsoever. Many of them are hands-on, outdoors, and don't require a long education.

2. Fisheries and aquaculture

1. **What is the most special fish you've ever caught?**
   - That was a mako shark. Massive and scary to put back into the ocean, but it's also not something we catch often in these waters. It was a memorable moment for the whole crew.
2. **Do you have to eat fish all through the week?**
   - Not at all! While we do enjoy fresh fish now and then, we bring a variety of food on board. Some boats even have a cook who prepares different meals.
3. **What do you do in the evening?**
   - Fishing doesn't follow a 9-to-5 schedule. Depending on the type of fishing, we might work in shifts around the clock. In our downtime, we rest, eat, or chat with the crew.

4. **How do you become a fisherman?**
   - You can go to school for it! There are vocational programs and maritime schools that teach navigation, safety, and fishing techniques. Many also learn on the job through apprenticeships.
5. **How much do you earn?**
   - It varies a lot. Some fishermen earn a fixed salary, while others are paid based on the catch. The income can be good, but it depends on the season, weather, and market prices.
6. **How many hours of sleep do you get per day?**
   - Usually between 4 to 6 hours, depending on the fishing schedule. We often work in shifts, so rest is taken whenever possible.
7. **What is your biggest catch ever?**
   - A giant halibut weighing over 150 kilograms. It took several of us to haul it in!
8. **Are there female fishermen too?**
   - Yes, absolutely! While it's still a male-dominated field, more women are joining the sector every year, both on deck and in leadership roles.
9. **What is the most unusual thing you've ever caught?**
   - Once we pulled up an old bicycle tangled in a net. You never know what the sea will give you!
10. **Do you often get seasick?**
    - Some do, especially when starting out. Most of us get used to the motion over time. Ginger, medication, and staying hydrated help a lot.
11. **Do you have a cook on board?**
    - Larger vessels often do. On smaller boats, we take turns cooking or prepare meals in advance.
12. **Is it a dangerous job? Do accidents happen often?**
    - It can be dangerous. We deal with heavy machinery, rough seas, and long hours. Safety training and good teamwork are essential to prevent accidents.
13. **Do you get a fixed salary, or how does that work?**
    - It depends on the boat and the company. Some pay a fixed wage; others share the profits from the catch. It's often a mix of both.
14. **Do you disturb the seabed all week long?**
    - Not necessarily. It depends on the fishing method. Some techniques, like trawling, do affect the seabed, but others like line fishing or pots are much less invasive.
15. **Are you allowed to keep all the fish you catch?**
    - No, there are strict regulations. We must release undersized fish or protected species. Authorities monitor this closely.

16. Are all the fish that go back overboard dead?

- Not always. Some survive, especially if handled quickly and gently. But certain fishing methods can cause stress or injury, reducing survival rates.

17. Do you have a lot of trouble with wind farms or closed areas?

- Yes, sometimes. Wind farms and marine protected areas can limit where we're allowed to fish, which affects our routes and planning.

18. Do you clean the fish on board as well?

- Yes, most of the time. We gut and clean the fish right after catching to keep them fresh. Some boats have processing facilities on board.

19. Is there still a future in fishing?

- Definitely, but it's changing. Sustainability, innovation, and regulation are shaping the future. Young people with new ideas are very welcome in the sector.

20. What's so fun about being a fisherman?

- The freedom, the connection to nature, and the teamwork. Every day is different, and there's a real sense of pride in bringing in a good catch.

21. Is there still enough fish in the sea?

- There are concerns about overfishing, but with proper management and sustainable practices, fish stocks can recover. It's a shared responsibility between fishermen, scientists, and policymakers.

22. Can you eat turtles?

- Yes, you can, in many cultures they do. However, most sea turtles are endangered so you are not allowed to eat them anymore.

Do fish farms smell bad?

- Sometimes, especially during cleaning. But you get used to it, and hygiene rules help keep things under control.

23. Do you work in all kinds of weather?

- Yes, most of the time. If it's too dangerous, you stay in port. But rain, wind, or cold usually don't stop the job.

24. Do you ever get bored at sea?

- Every day looks different. But with all the adrenaline when hauling the nets and being with a good crew and maintenance tasks to do, time passes fast. It's not like a 9-to-5 desk job.
- Yes! Some days the ocean surprises you.

25. Do you see whales or dolphins sometimes?

- Yes! Some days the ocean surprises you.

26. Don't you smell like fish all the time?

- During a fishing trip, it's normal to pick up some of that fishy smell as you're handling gear, bait, and fish all day. But when you're out there working, especially with the fresh sea breeze, you don't really notice it.

It's just part of the job, and once the trip's over, a good shower takes care of it.

27. What do you do on the ship when you're not working?

- Rest, eat, watch movies, read, talk to the crew. On the Freezer Trawlers, which are like floating factory, you can sometimes even find a cafe of a little gym.

28. Isn't it boring and sad for fish to just swim in circles all day in aquaculture systems?

- It can indeed seem a bit boring or unnatural that fish in a tank swim in circles all the time. In the wild, they often have more space and variety in their environment. That's why it's important to think carefully about their welfare. At the same time, for many species swimming constantly is not necessarily a bad thing; fish are used to moving a lot, and the round shape of a tank helps keep the water clean and healthy. So, aquaculture can work well, but only if we make sure the fish have enough space, good water quality, and some variation. Otherwise, it really can become a welfare problem. That said, the sector continues to evolve with better practices to ensure fish are raised humanely and sustainably.

3. Maritime services and tourism

1. **Why do we need sand?**

- We make a lot of things from sand for instance glass and concrete are made up of fine sands.

2. **Do you need to speak English for tourism jobs?**

- It helps a lot, and most jobs even require it. Many tourists speak English, so even basic words and sentences can get you hired faster.

3. **Is it only summer work or can I do this all year?**

- Some jobs are seasonal, like beach tourism. But ferries, diving schools and other maritime tourism related companies often work year-round, especially in busy coastal regions.

4. **Is the pay any good?**

- It depends on the job, the season, and your role. Entry-level jobs start modest, but with tips, overtime, or special skills, it can add up. Especially, tips can be a big part of your income if you're friendly and helpful.

4. Ports and Harbours

1. **Can I work with containers with a criminal record.**

- Yes, it depends on the crime, however. If you were stealing from containers before you probably won't be able to do this.

2. **What are the working times?**

- Ports run 24/7 and shift work is common. You **often get paid extra** for evenings, nights, or weekend hours.

3. **Can I become a crane driver?**

- Yes. You need special training and a license, but it's a good job with decent pay.

4. **Is it safe to work in a port?**

- Ports have strict safety rules. If you follow the training and wear the gear (helmet, boots, vest), it's safe if you stay alert.

5. **But then I stay a driver for the rest of my life?!**

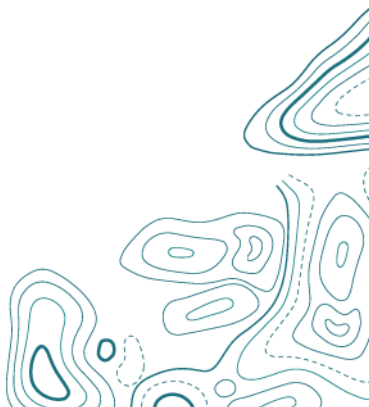
- Many people start as loaders or drivers and move up to team leaders, planners, or even port management with time and experience.

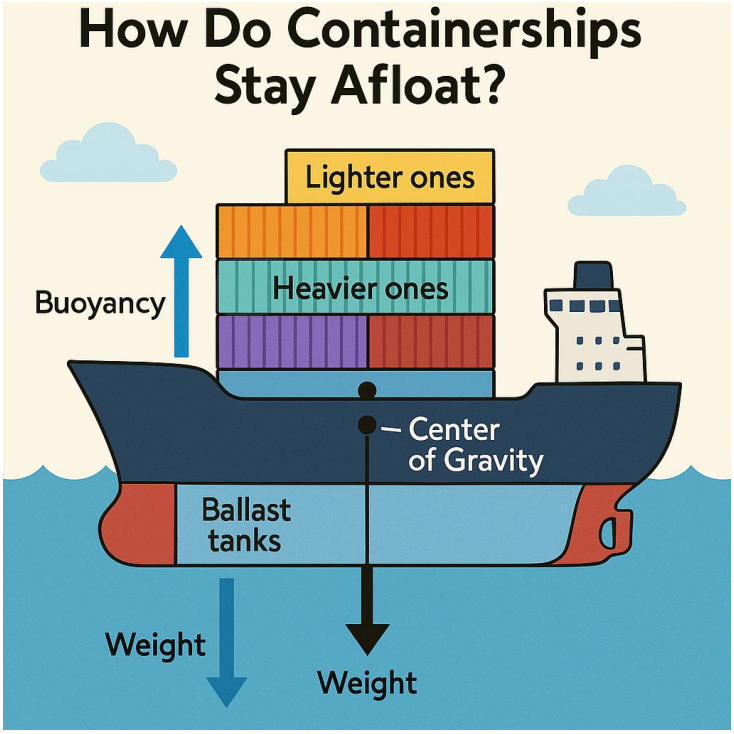
5. Shipping and transport

1. **How does a containership that big stay afloat. Why doesn't it fall over.**

Why does a containership float?

– A containership floats because of buoyancy. When the ship is placed in water, it pushes water out of the way (displaces it). If the weight of the water pushed away is equal to or more than the weight of the ship, the ship floats. This is called Archimedes' Principle.





Why doesn't it fall over?

- Containerships are designed to be very stable:
  - Wide and heavy at the bottom: The hull (bottom part) is wide and filled with heavy materials or ballast water, which keeps the centre of gravity low.
  - Containers are stacked carefully: Heavier containers go at the bottom, lighter ones on top.
  - Stability systems: Some ships have stabilizers or use ballast tanks to balance the ship if it tilts.
- So even though they look top-heavy, they're built to stay upright even in rough seas.

2. Can you use your phone or internet at sea?

- Sometimes. On big ships, there's limited Wi-Fi or satellite connection. But it's not like being on land, so you also learn to enjoy disconnecting and the quiet too.

3. What do you do on the ship when you're not working?

- Rest, eat, watch movies, read, talk to the crew.

4. How do you steer such a big ship?

- Big ships have bridges (control rooms) with high-tech navigation systems. Trained officers are well equipped to operate them.

5. If there is a fire on the vessel, is there someone on board who will extinguish it for me?

– Every crew member is trained and responsible for fire safety and can help extinguish a fire. All crew are trained in firefighting procedures, and vessels are equipped with fire extinguishers, hoses, and other firefighting equipment as part of their basic safety training. Everyone on board has a role in responding quickly, raising the alarm, and helping contain the fire if necessary. Fire safety is a team effort, so you won't be expected to handle it alone. However, there are no external firefighters on board who will put out the fire for the crew.

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List of annexes

1. Training material:
    a. decision scheme
    b. b. PowerPoint slides
2. Pre-evaluation form
3. Tragedy of the Commons workshop
4. Climate regulation workshop
5. Building a windmill workshop
6. Building a boat workshop
7. Fishing for facts workshop
8. Communication drawing game
9. Communication listening workshop
10. Memory game
11. Gym class
12. CV building and interview preparation.
13. Post-evaluation form