FLORES
Offshore Renewable Energies partnership in the Pact for Skills

FLORES CARD GAME

Job profiles in the Offshore Renewable Energies sector

Co-funded by
the European Union

About the game

Forward Looking at the Offshore Renewables (FLORES) aims to raise awareness about careers in offshore renewables.

There are many job profiles in this sector that you probably don't know about. But everybody has a place in it, regardless of gender, age or ethnicity.

The job profiles that are included in this game are crucial to building offshore renewable projects. Some are performed mainly at sea (offshore), for example the job of a diver, while others are performed on land (onshore). Some require office or laboratory work – a marine biologist for example. And some others combine both work at sea and on land, for example a cable installation manager.

Different job profiles can be found across the lifecycle of offshore renewable projects. For the purposes of this game, we have included job profiles from the following phases:

Check out the interviews of people working in the Offshore Renewable Energies sector

Planning and development

This is the first step where you pick the best places for renewable energy projects such as wave energy systems, tidal energy installations, offshore wind farms, and floating solar photovoltaic panels. Before moving on to the building and operation phases, it is very important to make sure that projects are technically and financially possible.

Installation and construction

This is the phase when we build structures and equipment that are needed to generate renewable energy offshore. This includes activities such as installing solar panels on movable platforms, assembling wave energy converters, and siting tidal energy devices in certain places. The goal is to make sure that the well-thought-out plans come to life by building facilities at sea that can be used.

Operation and maintenance

This is all about taking care of and managing the offshore renewable energy facilities after they are up and running. For example by checking how well solar panels, wind or tidal turbines are working on the spot. Or by regularly inspecting the equipment and making sure that all of its parts stay in good condition. The goal is to maintain the facilities operating smoothly so that they can keep generating renewable energy for a long time.

Objective of the game

The objective of the game is to learn about different, interesting and potentially unusual job profiles that contribute to offshore renewable development. Players should figure out job profiles by mimicking, drawing and asking questions to get a deeper understanding of the jobs.

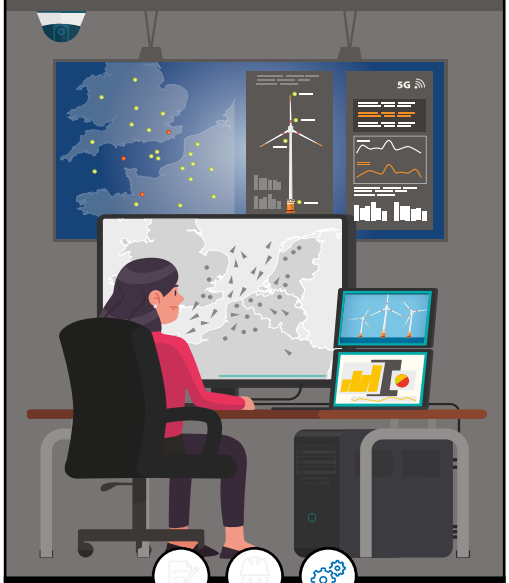
Players: 2-16

What do you need: a timer, a pen(cil), blank paper or board.

Set-up: divide into equal teams (maximum of 4 teams). Playtime is quicker and more exciting when there are fewer teams, and more players per team.

Winner: each correct guess receives 1 point. The winner is the team with the most points.

Kate



Digital Surveillance Manager

Nathalie

Wind Farm Tour Guide

Helen

Cable Installation Manager

Mark

Health Safety & Environment Manager

Emily

High Voltage Expert

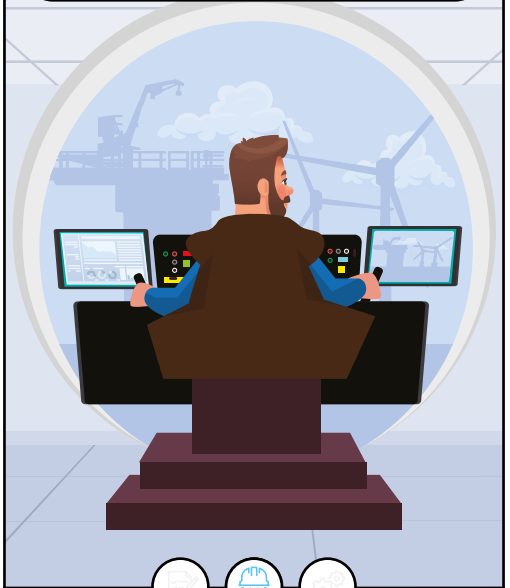
Ann

Steel Structures Specialist

Olivia

Rope Access Technician

Brian



Simulator Engineer

Steven

Marine Biologist

Who can help you get renewable energy from the middle of the ocean to the shore? I can!

With my engineering knowledge, I know how to design and install cable structures, building energy bridges at the bottom of the sea.

You have no idea how big and heavy these cables are! We use them to bring electricity from offshore renewable energy plants back to shore, powering homes with clean energy.

I see our wind farms as a major city landmark.

I take people on boat trips to take a look at the awe-inspiring wind farms. I share the secrets of wind energy, talk about how turbines work, and help them climb onto the turbine.

Inside, they can see just how big powerful they are, supplying millions of people with clean energy. And the best part? Being on my boat, I can take in the nature and meet new people from all over the world.

Offshore wind farms are gigantic and so much action takes place around them!

In my position, I design special software, allowing operators to oversee the wind farm and track their people working at sea. I'm their digital guardian, making sure everything runs smoothly and that the wind turbines keep spinning.

Join me! The Information and Communication Technology (ICT) world is open to everyone, you just need some basic software experience.

I'm the expert who maintains the massive foundations supporting wind turbines at sea.

So what does that involve?
I go offshore, I climb 20 metres up the turbine, I repair the turbine when it's damaged by the salty sea water, and I estimate its lifetime. I'm passionate about the sea, steel and metallurgy.

If you want to become a steel structure specialist too, you might want to think about doing a degree in engineering.

I'm responsible for the offshore substations. These are massive offshore structures that collect all the electricity from the wind farm and send it back to shore.

I oversee the substation's installation and maintenance and make the necessary high voltage tests. I can carry out these tasks based to my technical background, including a university degree in engineering and certification on asset management.

I help to maintain a safe working environment and uphold the highest health and safety standards during offshore renewable project construction and maintenance. Together with my team we draw up and enforce safety rules, oversee suppliers and check that everything is environmentally friendly.

Using my educational background and especially my safety certifications, I inspect the work environment, investigate accidents, organise safety trainings and make sure everyone is safe to do their work.

Did you know that a lot of fish love offshore wind farms? That's because the turbines provide them with an artificial reef and protection. And we've found this out thanks to work from professionals like me!

What do I do? I study the impact of renewable energy structures on the marine environment, I try to understand how marine species respond to the new habitat and I look at options for how marine creatures and offshore structures can coexist.

My job is to create a digital replica of the real world on my computer!

Or in other words, I make perfect digital twins of ships used for building offshore renewables. With these simulations, I train all the people involved in construction to reduce any risks and help make the project a success!

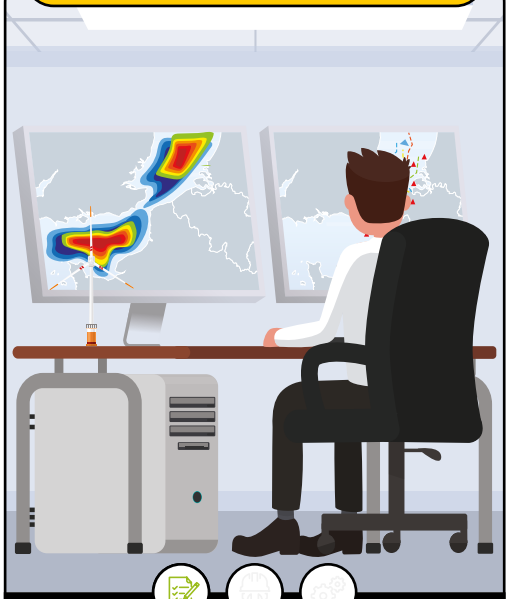
Sounds like something you'd be into? A university degree in naval engineering is the right place to start.

I love the sea, climbing, scaling new heights and going on new adventures. And I've found the perfect job!

I hang from ropes and climb up dozens of metres to fix and maintain offshore renewable structures.

You don't need to study anything specific to become a rope access technician, but you need muscles and quite a lot of safety and rope training.

Tom



Cartographer

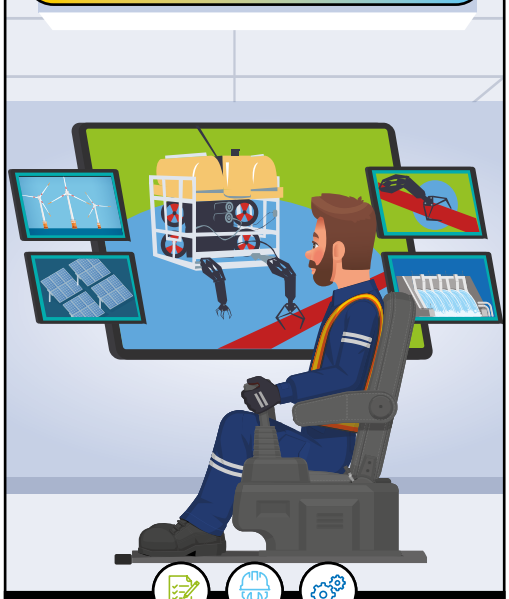
James

Unexploited Ordnance (UXO) Technician

Rachel

Crane Operator

Ian



Remotely Operated Vehicle (ROV) Pilot

Nick

Captain

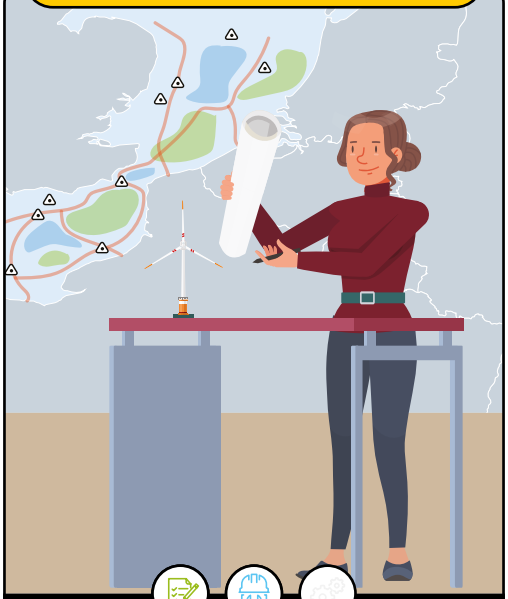
Oscar

Helicopter Pilot

Marie

Diver

Sophie



Maritime Spatial Planning Expert

Paul

Biodiversity Specialist

Wind turbines and other renewable installations are so sleek and elegant that we sometimes forget how heavy they are.

A single wind turbine can weigh several tonnes! I ensure that hefty components land exactly where they should. In the meantime, I enjoy a beautiful view from my cabin, which is often more than 100m above the sea. With a basic knowledge of mechanics and hydraulics, a crane license and safety certificate you can join me!

I've got the riskiest job in this game! I keep my people and projects safe from the risk of encountering explosive weapons – like bombs, or grenades that were buried at the bottom of the sea.

My role is to spot and defuse old underwater bombs and weapons near offshore renewable energy projects. If you like diving and you're the type who pays close attention to details and stays calm, then this job may be perfect for you! What do you need for this job? Specific trainings on explosive ordnance disposal are mandatory!

I draw digital geophysical and geotechnical maps and charts of the sea, showing the sea depth, unexploded bombs and grenades from the war and other objects.

Without these maps, a lot of unexpected things can stop us developing of renewable energies at sea. What do you need to do this sort of work? Special trainings to create digital maps are a good place to start!

I help to safely and quickly move people working offshore during rough sea conditions, or during an emergency.

I usually bring people to the vessels at sea during installation and construction – or even to the top of the turbines, mainly for maintenance. I've always loved being in the air but now that I'm contributing to the green energy transition, I love it even more.

Ahoy there! I carry out safe navigation back and forth from offshore renewable energy installations.

What's the hardest part of the job? Manoeuvring the ship in tough weather conditions. Or close to renewable installations without causing any damage and protecting my crew and other workers involved in installing and operating these structures. But I enjoy the challenge! By drawing on previous experience working on ships, getting a licence to sail the vessel and taking some courses, you can become a captain too.

From the ship's cabin or remote control room, I control a cool underwater robot.

This device lets us explore the deep sea - some robots can dive to depths of up to 4000m! -, and it is used for data collection, installation but also inspection of offshore structures. It takes serious manoeuvring skills especially when the sea is choppy.

You definitely need specialised training, but if you are good at playing video games, and using a controller, this is already a good start!

Offshore renewable energy structures and nature can coexist, but we need to make sure that biodiversity is always protected.

I play a crucial part in shaping the future of biodiversity sustainability for the offshore renewable energy sector. I study how renewable energy structures impact the environment, especially bird life. I ensure that wind turbines and other installations are built to minimise any impact on these birds and other creatures as much as possible.

Imagine the sea as a huge cake! Everyone wants a slice, but we need to share it evenly.

This is where I come in, as a sort of a sea referee! I help Governments plan out manmade activities at sea and set the rules for how they can use it. This way, I help people to use the sea for different activities, like travelling by sea using the best shipping routes, fishing or developing offshore renewable energies structures. All while protecting biodiversity and the marine environment.

Since I was a kid, I've loved the sea and swimming. And I've turned my passion into my daily job.

Thanks to different trainings and courses, I can carry out a number of tasks underwater during all the phases of an offshore project. I help with cable installation, repairing damaged cables or even removing unexploded weapons like bombs from the World War. It never gets boring going underwater!

How to play

Game

A player picks a random card from the top of the deck and secretly looks at the job profile to be played. The player tries to explain the job profile described in the card, in different ways, following the steps explained below. The other players of the same team should try to guess the job profile.

IS YOUR GUESS CORRECT?

Some job titles may be hard to guess! In these cases, similar wording or partial guessing can be counted as a correct answer!

STEP 1: MIMIC

The player has 1 minute to try and mimic the job profile.
The guessing continues until the job profile is identified, or the time is up.

- If a guess is **correct**, the team gets 1 point. The next team starts a new round.
- If a guess is **wrong**, then the player moves on to Step 2.

STEP 2: SKETCH

Writing words is not allowed!

The player has 1 minute to sketch the job profile. The guessing continues until the job profile is identified, or the time is up.

- If a guess is **correct**, the team gets 1 point. The next team starts a new round.
- If a guess is **wrong**, then the player moves onto Step 3.

STEP 3: ASK A QUESTION

The other team player can ask 2 yes or no questions related to the job.

Example of questions:

- *Does this person work at sea/on land/both at sea and on land?*
- *Does this person usually work in the planning & development, installation & construction or operation & maintenance phase? (phases of development for offshore renewables energy)*
- *Does this job require engineering knowledge?*
- *Does this person mostly work with computers?*

Asking questions related to gender, facial characteristics, clothing is not allowed!

The other team players guess the answer.

- If the guess is **correct**, the team gets 1 point.
- If a guess is **wrong**, the team gets no points, and the text team starts a new round.

HINT! There are icons on each card, with info about the main work setting and the phases of offshore energy development.


At sea [1]


On land/in an office


Planning and development


Installation and construction


Operation and maintenance

Note: how to play when there are less than 4 players

If there are less than 4 players, players play the game individually.
The player picks a random card, and the other player(s) are trying to guess the job profile.
The player is following the same steps as in the instructions above.
The player with the most points at the end of the game is the winner.

1 Work performed mostly at sea but some administrative work in the office may be part of the job.

About FLORES

Forward Looking at the Offshore Renewable Energies (FLORES) is an EU funded project aiming at the development of tools and activities to foster skills in the offshore renewable energies sector.

15 partners across 8 countries in Europe are working together in this 2-year project that focuses on the spread of skills through dedicated training offers, promotion of careers in the sector, a Skills Observatory, and the promotion of sustainable partnerships to ensure the long-term success of this initiative.

The most committed stakeholders in the Offshore Renewable Energies sector have thus embarked on this project that feeds into the European Pact for Skills, supporting the activities of the Large-Scale Partnership for Offshore Renewable Energy.

Find out more:

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