

# STUDENT COMPETITION

# OFF-SHORE INNOVATIONS

Win € 750

## Introduction

Generating and distributing electricity became a key issue in industrialized countries during the third phase of the industrial revolution, mainly between 1880 and 1930. In developing countries this progress is still ongoing. Without exaggeration, we can say that the generation and distribution of electricity is perhaps the greatest technical achievement of the twentieth century, which has had (and still has) a huge economic and societal impact in many respects. Although the electrification process already has a longstanding history, we only recently discovered the opportunities of electrification at sea. A major incentive has been the need to rethink energy generation systems as a result of rising CO<sup>2</sup> levels in the atmosphere and the resulting global warming. To combat global warming, we need cleaner forms of energy, not only for the shipping industry, but also for onshore activities.

Scientists, professionals and practitioners from across the globe have been working on solutions that may be feasible and successful in the (near) future, like in the EU's Green Deal. However, there must be many other opportunities out there. We are looking for students who can turn problems into opportunities by being creative and thinking outside the box, coming up with bold and innovative solutions that can be turned into business propositions, which in turn may form the basis for new business models.

That is why we are organizing a challenging competition, and we invite you to participate.

**IF YOU ARE INTERESTED BUT DON'T KNOW WHAT YOUR IDEA OR TOPIC SHOULD CENTERED AROUND, YOU FIND SOME IDEAS BELOW:**

- New ways to generate energy from, on and above the sea surface
- Increasing the capacity of windmill (parks)
- Increasing capacity and efficiency of the transport of electricity to land
- Optimizing offshore "electric gas stations" for ships
- Accelerating the transition from a fossil fuelled shipping industry to a more sustainable electrically powered shipping industry
- Innovations to make new electrically powered ships more efficient
- Optimizing the electricity storage on ships, but also in wind turbines
- Creating new, more sustainable ways to catch fish, etc.
- Creating new sustainable ways to harvest other food from the surface or from the depth of the North Sea

Students from PERISCOPE regions (The Netherlands, Germany, Denmark, Norway, Sweden, the UK) are invited to submit highly innovative, impactful and feasible ideas/business propositions for off-shore energy and other sustainable off-shore inventions. These ideas/business propositions must contribute to a sustainable or circular economy.

**Interreg**  
North Sea Region  
**PERISCOPE**

European Regional Development Fund



EUROPEAN UNION



# STUDENT COMPETITION OFF-SHORE INNOVATIONS

## Requirements

### Group size

The group can consist of a maximum of 3 students.

### Intra-curricular/extra-curricular

The ideas or business propositions may emanate intra-curricular projects or assignments, but also from extracurricular activities.

### Format

The ideas must be handed in according to the following format, the document as a whole should have a maximum of 4000 words.

### 1. Front cover

The front cover must mention the theme of the business proposition/idea, the names and e-mail addresses of the group members, the university they are studying at and the date of submission.

### 2. Theme

Define the idea in no more than one sentence. It should summarize the idea or business proposition (For some examples, see the appendix)

### 3. Objective

What is the objective or purpose of the business proposition/idea, and what is/are the innovative aspect(s). Please be as explicit and accurate as possible.

### 4. Description of the final idea

What exactly is the idea about? Please be as explicit and accurate as possible.

### 5. Social, ecological and economic benefits

What are the social, ecological and economic benefits or impacts? Are the values that are being created only positive, or can negative impacts also be identified? What are these values? Please make sure to convincingly argue if, why and how positive value creation outweighs negative value creation. Please be as explicit and accurate as possible.

### 6. Key stakeholders and their roles

Please identify the key stakeholders, or stakeholder groups, and explain why they are considered to be key stakeholders.

### 7. What is needed?

What (exactly) is needed to realize your idea? Please be as explicit and accurate as possible.

### Submission deadline

The ideas or business propositions must be submitted by 1 October 2020. The ideas or business propositions must be sent to [periscope@org.hanze.nl](mailto:periscope@org.hanze.nl)



# STUDENT COMPETITION OFF-SHORE INNOVATIONS



Win € 750

## Jury

An expert jury will assess the submitted business opportunities on three criteria (innovativeness, feasibility and societal impact), and the best team will be invited to pitch their idea at a PERISCOPE Partner Meeting

## Time and venue

In November 2020 participants will be informed whether they will be invited to come to the PERISCOPE partner meeting in one of the North Sea countries, to pitch their ideas and to elaborately discuss these with an expert panel, ultimately by January 2021.

More information on the Periscope network can be found at: [Periscope-network.eu](http://Periscope-network.eu)

## Contactpersons

Drs. D.J. Schorren;  
e-mail address [d.j.schorren@pl.hanze.nl](mailto:d.j.schorren@pl.hanze.nl);  
phone +31 50 595 5552

Dr. E. Dommerholt;  
e-mail address [e.dommerholt@pl.hanze.nl](mailto:e.dommerholt@pl.hanze.nl);  
phone +31 50 595 2362

## WHATS AT STAKE?

Of all submissions, the three best teams will receive a cash prize. The winning idea will be rewarded with €750 the second best idea with €500, and the third best idea with €250. The best team will be invited to come to the Netherlands (see venue) to pitch their ideas in November/ December 2020. The trip to the Netherlands will be paid for by the organizing committee. The best ideas will appear on the website of the European-funded project, the Periscope network, and will be reported on internationally in various media. Furthermore, the invited team members are offered a trip to a wind farm at sea. The best submission will also make a deep dive, implying that they will be subjected to questions by experts from the North Sea countries. The second and third best teams will receive written questions from the partner countries' experts, with whom they can continue to collaborate to see whether a new business model can also be linked to their idea.

