

## **Student Sustainable Entrepreneurship in Action: UNIC Methodology and Innovation Gaps in Ouessant, France as a part of the Interreg FREIIA project**

Jenny Louise Helt<sup>a</sup>, Patrick Kakis Gabrielsen<sup>a</sup>, Sofie Guldborg Gretland<sup>a</sup>, Gunnar Andersson<sup>a</sup>, Per Walter<sup>a</sup>, Bjørn Gitle Hauge<sup>a</sup>

<sup>a</sup>Department of Engineering, Østfold University College, Fredrikstad, Norway

### **Abstract**

*FREIIA, Facilitating Resilience Embracing Islands Innovation, is a INTERREG project financed by the European Union running from 1. October 2022 until 31. December 2025. The project consists of 14 partners from 6 countries, Netherlands, Denmark, Sweden, Germany, France and Norway.*

*The aim of this project is to help 6 island communities in the European Union to create competences, capabilities & structures that support the public sector in becoming successful in the green transition, through the involvement of community, young entrepreneurs and students.*

*Østfold University College is responsible for Work Package 4 (WP4), which focuses on fostering student entrepreneurship. The main objective of WP4 is to integrate entrepreneurship students into the strategic governance of island innovation, strengthening their role in green transitions. When referring to the FREIIA project in this paper, it refers to WP4 of the FREIIA project.*

*This paper outlines the process of identifying innovation gaps on the Island Ouessant in France, utilizing students from the participating universities alongside local stakeholders. The subsequent phase will focus on addressing these gaps by developing new solutions through innovative approaches such as design thinking.*



*Figure 1, Students arriving Le Conquet*

## Ouessant

Île d'Ouessant is an island located in the Atlantic Ocean off the western coast of Brittany, France. It is the westernmost point of continental France and lies approximately 20 km from the mainland. Covering an area of around 15.5 km<sup>2</sup>, Ouessant is renowned for its dramatic coastline, powerful waves, and rugged landscapes shaped by the harsh maritime climate.

As of 2023, Ouessant had a permanent population of around 800 residents. Like many island communities in the region, the population increases significantly during the summer months due to seasonal tourism. The local economy relies primarily on summer tourism, public services, and small-scale agriculture. Historically, Ouessant has maintained a strong maritime identity, with many residents connected to the sea through seafaring and lighthouse keeping, which have played a key role in shaping the island's cultural heritage.

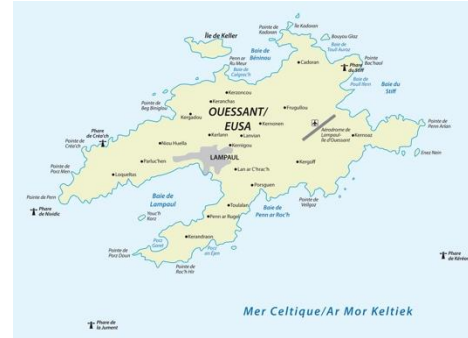


Figure 2, Ouessant

Visitors are drawn to Ouessant for its untamed natural beauty, scenic coastal trails, and rich biodiversity. The island is home to several protected natural areas and serves as an important nesting site for rare seabird species. Due to limited car traffic and well-maintained roads, many tourists choose to explore the island by bicycle, allowing for an immersive and sustainable experience of the landscape.

Access to Ouessant is typically via ferry from Le Conquet or Brest, with travel times ranging from one to two hours depending on the departure point. There is also a small airport with flights to and from the French mainland, though most visitors prefer traveling by sea.

In recent years, discussions around sustainable development and environmental conservation have become increasingly important for the local community. Authorities, residents, and organizations are working together to promote a model of tourism that supports long-term ecological balance and preserves the island's cultural identity. Efforts include initiatives to reduce the environmental impact of tourism and protect the island's natural heritage for future generations.

## Introduction

Ouessant Island, a remote and windswept outpost off the western coast of Brittany, France, stands as a symbol of resilience in the face of both natural and socio-economic challenges. Known for its dramatic cliffs, powerful tides, and longstanding maritime traditions, the island has historically depended on seafaring, lighthouse keeping, and, in more recent decades, seasonal tourism. Today, like many small island communities, Ouessant faces a shifting landscape—economically, demographically, and environmentally.

As part of the FREIIA project, we have explored the innovation dynamics of Ouessant by working in close collaboration with local stakeholders and students. This partnership has allowed us to map out the island's unique assets and identify key challenges and opportunities for sustainable development. Our aim is to uncover how communities like Ouessant adapt and innovate within tight ecological and logistical constraints.

Unlike mainland regions where access to markets, labor, and infrastructure is more abundant, Ouessant's insularity presents a distinctive set of limitations. Effective solutions must not only be contextually grounded and practically feasible, they must also be deeply anchored in the local population. Community

engagement and ownership are crucial to ensure long-term relevance and sustainability. Without the trust and involvement of residents, even the most technically sound interventions risk falling short. Therefore, fostering inclusive processes that center the voices and knowledge of Ouessant’s inhabitants is essential in any pathway forward.

**Method & Process**

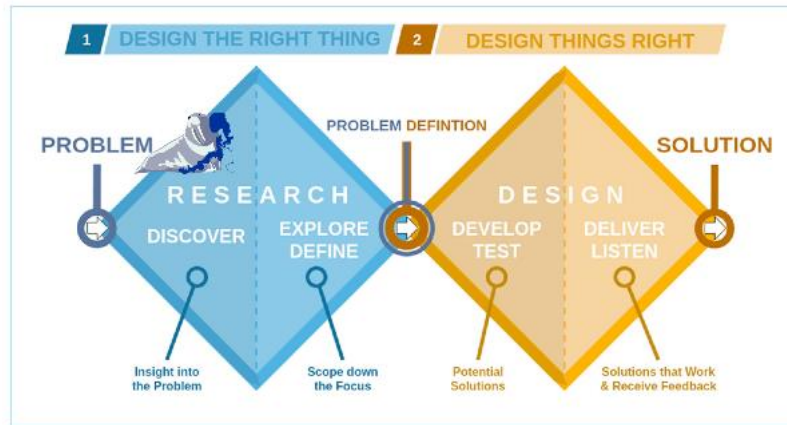


Figure 3, Double Diamond framework

The research on Ouessant was designed using the Double Diamond model as a framework to guide the process of understanding the island's current situation and identifying development potential (The Double Diamond Model, 2024). On this trip, there was a stronger emphasis than before on applying the Double Diamond framework not just as a conceptual guide, but as a practical structure that shaped the design and delivery of the fieldwork. The first phase (V1) focused on exploring and defining key innovation gaps through direct engagement with local stakeholders. At the heart of this phase was the UNIC method, a structured approach aimed at identifying the gap between a community's present conditions and its desired future (Hein, L, 1988).

Students from Østfold University College traveled to the island to carry out a series of qualitative interviews. These interviews were conducted using a structured interview guide developed to uncover community strengths, ongoing challenges, past and present development initiatives, and the degree of collaboration among local actors. Interviewees included representatives from different parts of the local community.

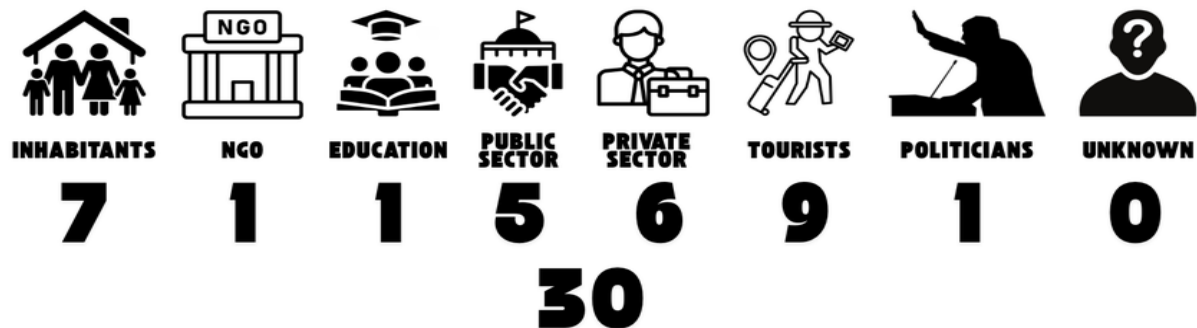


Figure 4, Number of stakeholders divided in categories

In contrast to earlier field visits in the project, the students were not assigned specific stakeholders to interview. Instead, the island was divided into geographic zones, with each student group responsible for collecting insights from their designated area. This approach enabled a more exploratory and place-based understanding of the community, encouraging students to engage more freely and organically with residents, businesses, and local environments.



Figure 5, The island of Ouessant divided into geographical areas for interviews

(Johannesen et al., 2023, s. 108)

Two French students from Université Paris-Est Créteil (UPEC) also joined the fieldwork and assisted two of the student groups with conducting interviews. Their participation helped bridge language gaps and brought valuable local cultural and contextual knowledge into the data collection process.

After the data collection phase, interviews were transcribed and analyzed using AI tools to help identify recurring themes, patterns, and problem areas. The AI-supported analysis made handling large volumes of qualitative data easier and highlighted several prominent challenges. Unlike previous phases in the FREIIA project, there was no separate student-led problem-framing session. However, several students took part in the AI analysis process itself and contributed valuable observations and reflections throughout the interpretation of the data.

This combination of the Double Diamond model, UNIC method, AI analysis, and student participatory involvement created a strong foundation for understanding key development issues on Ouessant and set the stage for the next phase of the project.



Figure 6, 1 french and 1 norwegian student conducting interviews with local stakeholders

## Results & discussion

The initial research on Ouessant uncovered a range of pressing issues that impact the island's ability to grow sustainably. By combining stakeholder interviews with AI-assisted analysis and student reflections, several key themes emerged that will guide future project work.

One of the most frequently mentioned **issues was housing**. Interviewees pointed to a shortage of affordable places to live, driven by the rise in second homes and high property prices. This has made it



*Figure 7, Picture taken of the Island*

difficult for locals, especially younger residents and seasonal workers, to find stable housing on the island.

**Energy and renewable projects** were also on the list of concerns. The island still relies on diesel-based energy production, and while there have been attempts to introduce wind and tidal energy, these have often faced technical difficulties or local resistance.

The island's **water infrastructure** was described as outdated, with several stakeholders noting that the current water treatment systems are obsolete and in need of replacement with more sustainable solutions.

**Transport and accessibility** also stood out. With limited ferry connections and weather-dependent schedules, access to and from the mainland can be unreliable, especially in the winter. This not only affects mobility but also access to essential services.

**Tourism management** came up repeatedly in interviews. While tourism supports the local economy, it also places pressure on infrastructure during peak season. Stakeholders expressed concern about maintaining a balance that supports economic vitality without overwhelming local systems.

In terms of **local food production**, stakeholders pointed out that most goods must be imported from the mainland, which increases costs and limits food security. There is little local agriculture or food production, and dependency on imports remains high.

**Community collaboration** was another area where challenges were noted. Several interviewees mentioned difficulties in working together due to interpersonal conflicts or differing visions among local actors. This has made collective innovation and long-term planning harder to achieve.

Finally, there was a noticeable **lack of digital communication** and innovation. Few interviewees mentioned the use of digital tools for governance, collaboration, or tourism services, highlighting a potential gap in the island's digital development.

These themes, originally surfaced through AI analysis of interview transcripts, were further interpreted with support from participating students. Their involvement in the analysis process helped ensure that the insights were well-grounded in the local context.

Together, the findings point to a set of interconnected challenges where one issue often reinforces another. For example, housing shortages contribute to labor shortages, which in turn affect local businesses' ability to operate year-round. Infrastructure issues and limited public services can discourage long-term residency, while seasonal tourism, though economically important, adds pressure to an already stretched system. The lack of coordination among community actors further complicates the ability to respond collectively to these needs.

With this strong base of findings, the project team is now ready to move into the second phase of the FREIIA project. In V2, these challenges will be explored further in a collaborative workshop with local stakeholders to co-create sustainable solutions for Ouessant.

## **Acknowledgement**

We would like to extend our sincere gratitude to everyone who has supported and contributed to the creation of this document. This white paper is the result of strong collaboration, and we truly appreciate the dedication and commitment of everyone involved.

First and foremost, we want to thank Bjørn Gitle Hauge, our project owner, for his leadership and continued support throughout this process, and for trusting us with the opportunity to lead the project. We are also deeply grateful to Gunnar Andersson and Frode Ramstad Johansen from Østfold University College for their valuable guidance and involvement during the trip.

A special thank you goes to the students from IPL 24. Their enthusiasm, fresh perspectives, and positive energy added great depth to the project and made the journey all the more memorable. We are also incredibly thankful to Maxime Turck, his collaboration and support made a significant difference, and the project wouldn't have been the same without him.

We would also like to acknowledge Noah and Azza from UPEC in Paris for their help with translation and their support in navigating language barriers and other aspects of our visit.

Finally, we extend our heartfelt thanks to all the stakeholders on Ouessant who generously shared their insights and experiences during the interviews and welcomed us so warmly. Their participation was essential in shaping both the transcripts and the overall outcome of the project.

To everyone who supported us in one way or another, thank you for helping make this journey both meaningful and successful.

## **References**

Hein, L. (December, 1988a). Diagnose på udviklingsfunktionen (Bilag A). UNIC-gruppen.

The Double Diamond Model: In Pursuit of Simplicity and Flexibility | Request PDF. (2024). | ResearchGate. [https://doi.org/10.1007/978-3-030-79879-6\\_2](https://doi.org/10.1007/978-3-030-79879-6_2)