

# CAA-CPMR | Transatlantic project

## Mission to Quebec – Report

October 28<sup>th</sup> – November 1<sup>st</sup>, 2024



## Executive summary

The primary objective of this mission was to introduce members of the delegation of representatives from European maritime regions, belonging to the Atlantic Arc Commission (CAA-CPMR), Forum Oceano, and CEI-MAR, to Quebec's rich maritime research, development, and innovation ecosystem. More specifically, in alignment with the mission of the *Transatlantic* project, the mission held a particular focus on the Blue Economy, including green maritime infrastructure, energy transition, and adaptation to climate change. This initial contact between the CAA-CPMR and Quebec's diverse maritime ecosystem has led to rich and insightful discussions, resulting in concrete steps between participating stakeholders to lay the grounds for collaborative pilot projects. This was the first of two missions within the Transatlantic project, which will also serve as a model for the next study visit in Wales in 2025.

Two main themes were identified as having a strong potential for transatlantic collaboration: Green Shipping & Corridors, and Sustainable Aquaculture.

Green shipping initiatives would focus on developing transatlantic green corridors to reduce emissions and enhance sustainable maritime trade, leveraging AI for route optimization and carbon monitoring. Benefits include environmental gains, economic growth, job creation in green industries, and policy alignment between Canada and the EU.

In aquaculture, collaboration could explore sustainable farming practices, disease management, and AI-driven monitoring. Benefits include reduced environmental impact, increased sustainable trade, job creation, and regulatory harmonization.

Main funding opportunities include Horizon Europe and INTERREG Atlantic Area programs.

# Table of contents

<b>Executive summary</b> .....	<b>2</b>
<b>List of delegation and hosts</b> .....	<b>4</b>
Organizing committee.....	4
European delegation.....	4
Quebec organizations.....	6
<b>Mission objectives</b> .....	<b>8</b>
<b>Summary of activities</b> .....	<b>9</b>
Day 1 : Quebec City.....	9
Welcome and introduction.....	9
Introduction to key organizations in Quebec’s sustainable shipping sector.....	10
Introduction transnational and transatlantic cooperation & the Blue Economy.....	10
Day 2 : Quebec-Rimouski.....	12
Day 3 : Rimouski.....	13
Introduction to Quebec’s R&D&I ecosystem.....	13
Startup elevator pitches.....	15
Capacity building workshop: Strategy and tools for Transatlantic Cooperation in the sector of the blue economy (triple and quadruple helix approach).....	18
Part 1: Introduction   Plenary session.....	18
Part 2: Thematic sessions: how to strengthen the added value of the transatlantic cooperation.....	20
Day 4 : Rimouski-Lévis-Montreal.....	23
Lunch & learn : Blue tourism in Quebec and Portugal.....	23
Day 5 : Montreal.....	24
Introduction to AI research centres and SMEs in Montreal.....	24
<b>Outcomes and Impact</b> .....	<b>28</b>
Delegate feedback.....	28
Communication.....	28
<b>Key Takeaways</b> .....	<b>28</b>
<b>Other recommendations</b> .....	<b>31</b>
<b>Next steps</b> .....	<b>31</b>

# List of delegation and hosts

## Organizing committee

Organization	Representative	Contact details
Technopole Maritime du Québec (TMQ)	<b>Iliass Lamrini</b> Interim Executive Director	<a href="#">Email</a>   <a href="#">Website</a>
Réseau Québec maritime (RQM)	<b>Viridiana Jimenez-Moratalla</b> Communications Advisor	<a href="#">Email</a>   <a href="#">Website</a>
Quebec Ministry of Transport and Sustainable Mobility (MTMD)	<b>Geneviève Désy</b> Strategic Advisor	<a href="#">Email</a>   <a href="#">Website</a>
Quebec Ministry of International Relations (MRIF)	<b>Julien Fouquet-Asselin</b> Economic Advisor	<a href="#">Email</a>   <a href="#">Website</a>

## European delegation

Organization	Representative	Contact details
Atlantic Arc Commission - Conference of Peripheral Maritime Regions ( AAC-CPMR)	<b>Elise Wattrelot</b> Executive Secretary	<a href="#">Email</a>   <a href="#">Website</a>
Ad Mare	<b>Margarida Soeiro</b> Ad mare solutions	<a href="#">Email</a>   <a href="#">Website</a>
Bangor University	<b>Shelagh Malham</b> Professor in Marine Biology	<a href="#">Email</a>   <a href="#">Website</a>
CEI-MAR	<b>Eva Mena Medina</b> CEO	<a href="#">Email</a>   <a href="#">Website</a>
CEI-MAR	<b>Lorena Ruiz Suárez</b> Thinkinazul project Regional Marine Sciences Plan from Andalusia: Marine monitoring observatory, Sustainable Aquaculture and Blue Economy initiatives	<a href="#">Email</a>   <a href="#">Website</a>

<b>CEI-MAR</b>	<b>Tania Vera Santos</b> Project manager of Thinkinazul project Regional Marine Sciences Plan from Andalusia: Marine monitoring observatory, Sustainable Aquaculture and Blue Economy initiatives	<a href="#">Email</a>   <a href="#">Website</a>
<b>Columbi Salmon</b>	<b>Jean-Noël Calon</b> Business Development Manager	<a href="#">Email</a>   <a href="#">Website</a>
<b>Escola Superior de Hotelaria e Turismo de Estoril</b>	<b>Maria de Lurdes Calisto</b> Professor	<a href="#">Email</a>   <a href="#">Website</a>
<b>Estação Piloto de Piscicultura de Olhão</b>	<b>Pedro Pousao</b> Researcher, Head of Estação Piloto de piscicultura de Olhão	<a href="#">Email</a>   <a href="#">Website</a>
<b>Forum Oceano</b>	<b>Gonçalo Santos</b> Internationalisation coordinator	<a href="#">Email</a>   <a href="#">Website</a>
<b>Innofuse Blue Portugal</b>	<b>Susanne Wedin Schildt</b> Founder and managing partner	<a href="#">Email</a>   <a href="#">Website</a>
<b>Institut France-Québec maritime (IFQM)   Université de Bretagne Occidentale (UBO)</b>	<b>Vianney Pichereau</b> Co-director of IFQM (France) & Vice-President of the Ocean Department at UBO	<a href="#">Email</a>   <a href="#">Website</a>
<b>Maritime and Marine Cluster of Andalusia region (CMMA)</b>	<b>Javier Ivan Noriega Fernandez</b> President	<a href="#">Email</a>   <a href="#">Website</a>
<b>Nantes Métropole</b>	<b>Flavie Martin</b> Nantes-Québec Relations Lead	<a href="#">Email</a>   <a href="#">Website</a>
<b>Région Nouvelle Aquitaine</b>	<b>Pascale Maîtreau</b> EU officer	<a href="#">Email</a>   <a href="#">Website</a>
<b>Région Nouvelle Aquitaine</b>	<b>Mathieu Bergé</b> Political member	<a href="#">Email</a>   <a href="#">Website</a>
<b>Region of Wales</b>	<b>Geraint Green</b> Head of Agile Cymru	<a href="#">Email</a>   <a href="#">Website</a>
<b>S2AQUA</b>	<b>Alexandra Silva Marques</b> Innovation and projects manager	<a href="#">Email</a>   <a href="#">Website</a>
<b>Sines Tecnopolo</b>	<b>Tiago Santos</b> CEO	<a href="#">Email</a>   <a href="#">Website</a>
<b>TRANSATLANTIC Project</b>	<b>Wim Stubbe</b> Coordinator	<a href="#">Email</a>   <a href="#">Website</a>
<b>University of Almeria</b>	<b>Alfredo Alcayde García</b> Professor	<a href="#">Email</a>   <a href="#">Website</a>

University of CADIZ	<b>María del Mar Cerban Jiménez</b> Professor logistics Management and Operations Management	<a href="#">Email</a>   <a href="#">Website</a>
University of CADIZ   SEA-EU	<b>Irene de Andrés Márquez</b> Responsible of communication area in SEA-EU. Universities of the seas	<a href="#">Email</a>   <a href="#">Website</a>
University of Evora/MARE Research Centre	<b>Carlos Alexandre</b> Researcher	<a href="#">Email</a>   <a href="#">Website</a>

## Quebec organizations

Organization	Representative	Contact details
Alliance Verte   Green Marine	<b>Véronique Trudeau</b> Program Director	<a href="#">Email</a>   <a href="#">Website</a>
Arctus	<b>Abigaëlle Dussol</b> Executive Director	<a href="#">Email</a>   <a href="#">Website</a>
Arctus	<b>Thomas Jaegler</b> Project Manager & Remote sensing specialist	<a href="#">Email</a>   <a href="#">Website</a>
Centre de recherche sur les biotechnologies marines   CRBM	<b>Julie Dionne</b> CEO	<a href="#">Email</a>   <a href="#">Website</a>
CIDCO	<b>Jean Laflamme</b> Executive Director	<a href="#">Email</a>   <a href="#">Website</a>
CIDCO	<b>Jihed Bentahar</b> Innovation & Commercialization Manager	<a href="#">Email</a>   <a href="#">Website</a>
Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation (CIRRELT)   Université du Québec à Trois-Rivières (UQTR)	<b>Jean-François Audy</b> Researcher & Professor of Logistics and Sustainable Transport	<a href="#">Email</a>   <a href="#">Website</a>
Quebec Innovation Council	<b>Anne Nguyen</b> AI Manager	<a href="#">Email</a>   <a href="#">Website</a>
Cruise the St. Lawrence	<b>René Trépanier</b> Executive Director	<a href="#">Email</a>   <a href="#">Website</a>
Innovation maritime	<b>Alexandre Boudreau</b> Operations Director	<a href="#">Email</a>   <a href="#">Website</a>

Innovation maritime	<b>Raphaël Côté</b> Director, Business Development and Communications	<a href="#">Email</a>   <a href="#">Website</a>
Institut des Sciences de la Mer, Université du Québec à Rimouski	<b>Guillaume St-Onge</b> Director	<a href="#">Email</a>   <a href="#">Website</a>
Institut des Sciences de la Mer, Université du Québec à Rimouski	<b>David Deslauriers</b> Professor of Eco-physiology	<a href="#">Email</a>   <a href="#">Website</a>
Institut des Sciences de la Mer, Université du Québec à Rimouski	<b>Réjean Tremblay</b> Professor of Eco-physiology and Oceanography	<a href="#">Email</a>   <a href="#">Website</a>
Institut des Sciences de la Mer, Université du Québec à Rimouski	<b>Déborah Benkort</b> Professor of Ecosystem Dynamics	<a href="#">Email</a>   <a href="#">Website</a>
IVADO	<b>Jean-François Bruneau</b> Tech transfer and innovation advisor (CIRRELT)	<a href="#">Email</a>   <a href="#">Website</a>
Merinov	<b>Katherine Beaudry</b> Strategic Advisor	<a href="#">Email</a>   <a href="#">Website</a>
MILA	<b>Sophie Le Drew</b> Senior Advisor, Partnerships	<a href="#">Email</a>   <a href="#">Website</a>
St. Lawrence Global Observatory (SGLO)	<b>Astrid Tempestini</b> Coordinator	<a href="#">Email</a>   <a href="#">Website</a>
Ocean Riot / CIDCO	<b>Guillaume Morissette</b> Developer	<a href="#">Email</a>   <a href="#">Website</a>
Oneka	<b>Alain-Olivier Desbois</b> Chief Finance and Impact Officer	<a href="#">Email</a>   <a href="#">Website</a>
Oneka	<b>Daniel O'Brien</b> Non-Dilutive Investment Manager - Quebec	<a href="#">Email</a>   <a href="#">Website</a>
OpDAQ Systems   MTE Instruments	<b>Charles Massicotte</b> President	<a href="#">Email</a>   <a href="#">Website</a>
Port of Québec	<b>Pierre-Luc Gosselin</b> Director, Business Intelligence	<a href="#">Email</a>   <a href="#">Website</a>
Québec Circular Economy Research Network (RRECQ)	<b>Cathy Baptista</b> Scientific Director	<a href="#">Email</a>   <a href="#">Website</a>
Québec Circular Economy Research Network (RRECQ)	<b>Benjamin Laplatte</b> Assistant Director	<a href="#">Email</a>   <a href="#">Website</a>
Sensea Canada	<b>Marie-Laurence Bazinet</b> Executive Director	<a href="#">Email</a>   <a href="#">Website</a>

<b>Société de développement de l'industrie maricole (SODIM)</b>	<b>Jerome-Alexandre Lavoie</b> Executive Director	<a href="#">Email</a>   <a href="#">Website</a>
<b>St.Lawrence Economic Development Council (Sodes)</b>	<b>Mathieu St-Pierre</b> Executive Director	<a href="#">Email</a>   <a href="#">Website</a>
<b>Technopole maritime du Québec (TMQ)</b>	<b>Fabrice Fanou</b> MeRLIN Coordinator	<a href="#">Email</a>   <a href="#">Website</a>
<b>Université du Québec à Rimouski (UQAR)</b>	<b>Loubna Benabbou</b> Researcher & Professor of Operations Management and AI	<a href="#">Email</a>   <a href="#">Website</a>
<b>Whale Seeker</b>	<b>Justine Boulent</b> Lead AI Researcher	<a href="#">Email</a>   <a href="#">Website</a>
<b>Whale Seeker</b>	<b>Christine Fürthaller</b> Head of Growth	<a href="#">Email</a>   <a href="#">Website</a>
<b>Wolastoqiyik Wamspekek First Nation</b>	<b>Guy-Pascal Weiner</b> Fisheries Director	<a href="#">Email</a>   <a href="#">Website</a>

## Mission objectives

For this first meeting between the AAC-CPMR and Quebec's marine and maritime ecosystem, within the framework of the *Transatlantic* project, the overall approach was to create spaces to share knowledge, expertise, and best practices in the Blue Economy sector, to start developing transatlantic partnerships in related fields (e.g. green maritime infrastructure, energy transition, and climate change adaptation). This was broken down into three main objectives:

1. Introduce the members of the AAC-CPMR delegation to Quebec's marine and maritime ecosystem by organizing meetings with key stakeholders and organizations from research, industry, and governmental and para-governmental institutions.
2. Develop and structure cooperation links between Quebec and the peripheral regions of the AAC-CPMR, which can generate sustainable partnerships in research, economic development, and innovation in the field of the Blue Economy.
3. Organize a capacity-building workshop involving members of the AAC-CPMR delegation and Quebec organizations, to explore concrete ways to collaborate on transatlantic projects in the field, with two special task forces – Industry & SMEs and Research & Academia respectively.



# Summary of activities

## Day 1 : Quebec City

Monday, October 28, 2024

### Welcome and introduction

#### **Technopole Maritime du Québec (TMQ)**

Iliass Lamrini – Interim Executive Director

Technopole maritime du Québec (TMQ) is a non-profit organization dedicated to the promotion and development of Quebec's innovative maritime sectors, including maritime transportation, marine technologies, and marine biotechnologies. Interface *par excellence* between industry and research, TMQ prides itself on being a unique facilitator and liaising organization. The organization specializes in generating interactions, growth and innovation in the maritime sectors.

»» [Skip to TMQ's presentation](#)

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#### **Réseau Québec maritime (RQM)**

Viridiana Jimenez-Moratalla – Communications Advisor

Réseau Québec maritime (RQM) is a collective infrastructure for the co-development of knowledge and innovation in the marine and maritime field. The network's activities are carried out in an intersectoral context, thus integrating the sectors of Nature and Technologies, Society and Culture, as well as Health, to work towards a sustainable maritime future.

»» [Skip to RQM's presentation](#)

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#### **Port of Québec – Lighthouse Innovation Lab**

Pierre-Luc Gosselin – Director, Business Intelligence

The Québec Port Authority is a Canadian port authority (under federal responsibility) whose mission is to promote and develop maritime trade, serve the economic interests of the Québec City region and Canada, and ensure its profitability while respecting the community and the environment.

»» [Skip to the Port of Quebec's presentation](#)

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## Introduction to key organizations in Quebec's sustainable shipping sector

### **Avantage Saint-Laurent: Québec's New Maritime Vision**

Geneviève Désy, Strategic Advisor, Ministère des Transports et de la mobilité durable (MTMD)

The Québec government is committed to making the St. Lawrence a powerful driver of economic, social, and environmental development. With *Avantage Saint-Laurent*, the government plans to harness the power of the river and unleash its potential to increase Quebecers' collective wealth and chart a new course toward prosperity and growth. The Government's goal is to make the St. Lawrence a thriving economic corridor while respecting affected ecosystems and the interests of maritime communities.

»» [Skip to MTMD's presentation](#)

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### **Société de développement économique du Saint-Laurent (Sodes)**

Mathieu St-Pierre, President and CEO

The St. Lawrence Economic Development Council (Sodes) is a non-profit organization mandated to unite Québec maritime ecosystem stakeholders and rally them around the economic, environmental and social opportunities offered by the St. Lawrence corridor. SODES represents the maritime community, with its public and private stakeholders whose activities directly or indirectly impact the St. Lawrence economy, in all regions of Québec.

»» [Skip to Sodes' presentation](#)

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### **Green Marine | Alliance Verte**

Véronique Trudeau, Program Director

Green Marine is a voluntary environmental certification program for the North American marine industry. It was founded in Quebec and now has over 180 participating members. For some years now, Green Marine has had a European branch (Green Marine Europe).

»» [Skip to Green Marine's presentation](#)

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## Introduction transnational and transatlantic cooperation & the Blue Economy

### **Introduction to the AAC and the transatlantic project**

Elise Wattrélot, Executive Secretary, AAC-CPMR

The Atlantic Arc Commission is one of the six Geographical Commissions in the Conference of Peripheral Maritime Regions of Europe, and its action, although specific to the requirements of its member Regions, is part of a more general framework. The Atlantic Arc Commission was established in 1989 in Faro (Algarve, Portugal). It covers six States (Ireland, United Kingdom, France, Spain, Portugal and Canada) in a territory spreading from Andalucía to Québec. With some 60 million inhabitants, it represents 12% of the European population. The Atlantic Arc Commission is the lead partner of the TRANSATLANTIC pilot project, supported by the European Parliament and Commission. This project comes from the political ambition of its member regions to have a global vision of the Atlantic area, including exploring cooperation with non-EU regions.

»» [Skip to AAC-CPMR's presentation](#)

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### **The importance of transatlantic cooperation: strategy of the Region Nouvelle Aquitaine** Mathieu Bergé, Conseiller Régional de la Région Nouvelle Aquitaine.

The Nouvelle-Aquitaine region, the largest in France, plays a crucial role in territorial, economic, and ecological development. It is committed to advancing various sectors such as innovation, education, and ecological transition. With its extensive network of regional and international stakeholders, it promotes sustainable and inclusive growth. The Aquitania Port Links that Mathieu Bergé chairs is a unique governance to coordinate ports in the Region.

»» [Skip to Région Nouvelle-Aquitaine's presentation](#)

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### **Green ports and green corridors : what are the key challenges and how to cooperate** Maria del Mar Cerban Jimenez, professor logistic management at the University of Cadiz

A comprehensive analysis of port competitiveness and the impact of decarbonization, focusing particularly on the Port of Algeciras Bay. It explores key factors influencing port competitiveness like infrastructure, location, and costs, alongside the growing importance of efficient logistic chains and environmental regulations. The study also assesses the competitive environment of ports in the Strait of Gibraltar, highlighting the increasing role of green fuels in enhancing port appeal amidst stricter emissions regulations. The findings provide insights for ports and policymakers to strategize improvements and adapt to evolving maritime trade dynamics.

»» [Skip to the presentation](#)

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## **Management and sustainable exploitation of aquatic ecosystems**

Carlos Alexandre, university of EVORA, manager of MARE research center and ARNET (Aquatic research network)

MARE is a center for scientific research, technological development and innovation, oriented to societal challenges. With technical and scientific skills to address all aquatic ecosystems, including river basins and adjacent areas, estuaries, coastal and oceanic marine ecosystems, MARE adopts an integrative and holistic approach, in close partnership with national and international institutions. MARE is a multi-institutional centre, created in January 2015, with a nationwide territorial implantation. It is located in eight Regional Research Units, at higher education campus in Portuguese mainland, respectively University of Coimbra (MARE-UCoimbra), Polytechnic of Leiria (MARE-PLeiria), University of Lisbon (MARE-ULisboa), NOVA University of Lisbon (MARE-NOVA), ISPA (MARE-ISPA), Instituto Politécnico de Setúbal (MARE-IPSetúbal), University of Évora (MARE-UÉvora), and ARDITI/University of Madeira (MARE-Madeira).

» [Skip to MARE's presentation](#)

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## **Marine renewable energy : key challenges for the Region of Wales**

Shelagh Malham, University of Bangor, professor of Marine Biology

presentation on the Celtic and Irish Sea Marine Renewables focuses on the strategic development of marine renewable energy sources, emphasizing the untapped potential of offshore wind and tidal power in these regions. It outlines the key challenges and opportunities in harnessing this potential, including environmental, technical, and infrastructural considerations. The initiative aims to foster sustainable growth through innovative energy solutions, aligning with broader regional goals of enhancing energy security, economic development, and environmental sustainability in the Celtic and Irish seas.

» [Skip to the presentation](#)

## **Day 2 : Quebec-Rimouski**

**Tuesday, October 29, 2024**

### **Visit of Rimouski's Institute for Ocean Sciences' (ISMER) research station**

David Deslauriers & Réjean Tremblay, researchers and professors

Located just a few kilometers east of Rimouski on the shore of the St. Lawrence Estuary, the ISMER research station is a satellite laboratory of the "marine station" type. It features an efficient seawater pumping system that enables year-round advanced research in aquaculture, marine biology, and ecotoxicology.

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## Day 3 : Rimouski

Wednesday, October 30, 2024

### Visit of Innovation maritime's research and innovation facilities

Raphaël Côté (Business development & Comms) & Alexandre Boudreau (COO)

Innovation maritime is a research center affiliated with the Collège de Rimouski (college center for technology transfer) that supports business competitiveness, stimulates excellence and fosters growth in the maritime sector through innovation.

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## Introduction to Quebec's R&D&I ecosystem

### Overview of a hybrid fishing vessel for the Wolastoqiyik Wahsipekuk First Nation

Guy-Pascal Weiner, Fisheries Director

The Wolastoqiyik Wahsipekuk First Nation is the only Wolastoqey Nation on Quebec territory. It owns reserve land in Cacouna, in the Bas-Saint-Laurent region. Its members' traditional activities include hunting, fishing and trapping. The innovative CIKTEK boat, which is designed for fuel efficiency and reduced environmental impact, represents an initial stride towards achieving carbon neutrality in the sector, highlighting the use of alternative energy sources like solar and wind in commercial fisheries operations.

» [Skip to CIKTEK's presentation](#)

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## Institut des Sciences de la mer de Rimouski (ISMER)

Guillaume St-Onge, Executive Director

The Institut des sciences de la mer de Rimouski (ISMER) at Université du Québec à Rimouski (UQAR) is a leading research institution focused on oceanography. ISMER conducts advanced multidisciplinary research to understand marine and coastal environments, with a focus on sustainable development. Researchers from diverse fields including biology, chemistry, physics, and geology collaborate on studies spanning the Arctic to Africa, addressing challenges from

climate change and human activity impacts. ISMER also plays a vital role in educating highly skilled personnel in marine sciences.

»» [Skip to ISMER's presentation](#)

### **St. Lawrence Global Observatory**

Astrid Tempestini, Coordinator

The St. Lawrence Global Observatory is a not-for-profit organization in accordance with the Income Tax Act. Its objective is to establish and operate an autonomous center for the integration and dissemination of data and information about the St. Lawrence's global system. A significant amount of information regarding the entire St. Lawrence – Great Lakes ecosystem is produced on a continuous basis by various organizations operating within the territory (ministries, research organizations, management organizations, etc.). It is therefore necessary to have an efficient and enabling infrastructure to best access and make use of this vast information inheritance. The vision of SLGO is to be the central access point to quality open data on the St. Lawrence and to ensure its international reach.

»» [Skip to SGLO's presentation](#)

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### **Merinov**

Katherine Beaudry, Executive Strategic Advisor

Merinov is Canada's largest integrated center for applied research in fisheries, aquaculture, processing, and marine bioresources technology. Its mission is to enhance the competitiveness and sustainable development of Quebec's fishing, aquaculture, and marine biomass industries through research, technology transfer, and innovation. Merinov is also responsible for the administrative and operational management of the Cégep de la Gaspésie et des Îles's CCTT (College center for the transfer of technology).

»» [Skip to Merinov's presentation](#)

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### **Centre de Recherche en Biotechnologies Marines (Marine Biotechnology Research Centre)**

Julie Dionne, Executive Director

A non-profit research center, the CRBM's mission is to support and contribute to the growth of the marine biotechnology sector through scientific research and development and industrial transfer, particularly for the life sciences and environmental sectors.

»» [Skip to CRBM's presentation](#)

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## **CIDCO**

Jean Laflamme, General Manager

The Interdisciplinary Centre for the Development of Ocean Mapping (CIDCO) is a marine geomatics and hydrosatial R&D organization. Dedicated to the enhancement of state-of-the-art technology for hydrosatial data acquisition, management and graphic representation, CIDCO is a not for profit organization answering the R&D needs of the industry and the community at large.

»» [Skip to CIDCO's presentation](#)

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## **OpDAQ systems**

Charles Massicote, President

Company specialized in the development, production and installation of instrumentation systems to improve energy management and mechanical performance. OpDAQ offers a range of products to accurately measure the mechanical power and the flow of fluids, including fuel. Their proprietary software is designed to process and analyze real-time data from a multitude of instruments and sensors. Their services include the installation and repair of instrumentation systems, performance evaluation and custom design instrumentation systems at competitive prices.

*Columbi Salmon did not provide a presentation, but you can check out their website [here](#).*

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## **Startup elevator pitches**

### **Ocean Riot**

Guillaume Morissette, Developer

Startup offering organizations working with aquatic environments services based on new technologies, in particular artificial intelligence models. CIDCO is a non-profit training and R&D organization in marine sciences and hydrography.

»» [Skip to OceanRiot's presentation](#)

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## **Arctus**

Thomas Jaegler, Project Manager

Arctus is a private R&D company providing research, development and applications in remote sensing, Earth Observation (EO) and Geographical Information System (GIS) technologies for governmental agencies, scientific communities and the general public. Arctus is specialized optical remote sensing of aquatic environments, from lakes to oceans.

» [Skip to Arctus' presentation](#)

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## **Sensea**

Marie-Laurence Bazinet, Executive Director

Established in 2023, Sensea Canada is part of the Sensea Group with its sister company Sensea France, a French company founded in 2016. The group employs a team of over 12 professionals and is actively involved in various projects related to underwater acoustics, monitoring of marine protected areas, and the interaction between human activities and the environment. The collaboration between Sensea Canada and Sensea France brings together diverse experts, including Ph.D. and master's degree holders, engineers, data analysis specialists, and technicians. Leveraging the strong expertise of its founders, our company provides services dedicated to evaluating human interactions with the environment, specifically: promoting sustainable development by assessing and limiting the impact of human activities on ecosystems; and anticipating risks associated with natural events by implementing preventive measures and surveillance systems.

» [Skip to Sensea's presentation](#)

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## **Columbi Salmon**

Jean-Noël Calon, Business Development Manager

Columbi Salmon aims to develop Europe's leading sustainable land-based salmon farming company, with improved animal welfare and minimal environmental footprint.

*Columbi Salmon did not provide a presentation, but you can check out their website [here](#).*

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## **Ad mare solutions**

Margarida Soeiro, Consultant

Ad Mare Solutions specializes in integrated environmental solutions, with a focus on the prevention and response to marine and terrestrial pollution. The company also offers consulting and auditing services (internal, client, and supplier).

» [Skip to Ad mare solution's presentation](#)

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## **S2AQUA**

Alexandra Marques, Innovation and projects manager

S2AQUAcoLAB's main objective is to build bridges in the aquaculture sector, promoting advanced science and R&D to foster a more sustainable and innovative sector. The mission of S2AQUAcoLAB is to take aquaculture to another level, with partners from all over the country, representing the biggest players in the sector in Portugal. In addition, a team of nearly 50 researchers from several educational institutions and research centres that integrate the coLAB, together with almost two dozen people that form the team of the S2AQUA will be able to face the challenges that are set in this field.

» [Skip to S2Aqua's presentation](#)

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## **Estação Piloto de Piscicultura de Olhão, Instituto Português do Mar e da Atmosfera (IPMA)**

Pedro Pousao, Researcher, Head of Estação Piloto de piscicultura de Olhão

The Estação Piloto de Piscicultura de Olhão (EPPO), managed by the Portuguese Institute for the Ocean and Atmosphere (IPMA), is a unique aquaculture research facility in the Ria Formosa Natural Park. Spanning 7 hectares, EPPO focuses on developing and demonstrating innovative aquaculture practices, species reproduction, and sustainable polyculture systems. It supports technology transfer, scientific training, and studies on species such as seabream, seabass, and sole, funded by national and international programs.

» [Skip to EPPO's presentation](#)

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# Capacity building workshop: Strategy and tools for Transatlantic Cooperation in the sector of the blue economy (triple and quadruple helix approach)

## Part 1: Introduction | Plenary session

### Introduction to existing collaboration between Atlantic Regions: green shipping and innovation guide of the AAC

Elise Wattrelot, Executive Secretary of CAA-CPMR

[\[See description of AAC-CPMR above\]](#)

» [Skip to AAC-CPMR's other presentation](#)

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### Forum Oceano

Gonçalo Santos, Internationalisation coordinator

Fórum Oceano is the managing body of Portugal's Blue Economy Cluster, certified and recognised by the Ministry of Economy and the Sea. It is a non-profit organisation whose mission is to promote and enhance the economy of the sea in Portugal, supporting the sustainable development of the maritime sector in Portugal, promoting innovation, entrepreneurship and cooperation between entities in the sector. To this end, it develops various initiatives and projects aimed at strengthening the competitiveness of companies and institutions operating in the maritime economy. The main activities of Fórum Oceano include promoting research and development of new technologies, facilitating access to finance and investment, and supporting the internationalisation of companies and institutions in the sector. Fórum Oceano has more than 150 members from different sectors, bringing together companies, associations and institutions in the sector and playing a key role in promoting the country's maritime economy. As an organisation, Fórum Oceano is:

- responsible for creating the global business model for the Hub Azul, a network of innovation infrastructures for the Blue Economy, as part of the European Commission's Recovery and Resilience Plan.
- the leader of the Portugal Blue Digital Hub consortium, a digital innovation centre for the Blue Economy.
- the world headquarters of the BlueTech Cluster Alliance (BTCA), a global network of BlueTech clusters committed to collaborating and developing joint projects and sharing information.

» [Skip to Fórum Oceano's presentation](#)

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## **CEI·MAR**

Eva Mena Medina, CEO

The International Campus of Excellence of the Sea (CEI·MAR) is a collaborative initiative led by the University of Cádiz, in partnership with the universities of Almería, Granada, Huelva, and Málaga, along with various research institutions. Situated at the confluence of the Atlantic Ocean and the Mediterranean Sea, CEI·MAR focuses on marine science and technology, emphasizing research, education, and knowledge transfer. The campus offers a range of academic programs, including specialized degrees and master's courses in marine-related fields. It also provides access to advanced scientific infrastructures, such as the oceanographic ship UCádiz and specialized laboratories. Through international collaborations and projects, CEI·MAR aims to address global marine challenges and promote sustainable development in coastal regions.

»» [Skip to CEI·MAR's presentation](#)

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## **Bangor University**

Shelagh Malham, Professor of Marine Biology

Bangor University is one of the few universities that covers the full breadth of marine sciences, with a strong focus on addressing urgent global challenges such as climate change, biodiversity, and food and water security. The university's strong points in terms of research and teaching are: marine biology, oceanography, aquaculture, fisheries, and marine renewable energy. The Marine Centre Wales (MCW), part of Bangor University, is a flagship center for applied marine sciences with cutting-edge laboratory and aquarium facilities. It fosters cooperation between researchers, industry, and government, and is integral to the development of sustainable fisheries, aquaculture, and renewable marine energy in Wales. The RV Prince Madog, a joint venture vessel, is a vital resource for marine research and student training. The university plays a significant role in advancing the Blue Economy, promoting sustainable marine activities like aquaculture, fisheries, and renewable energy, while supporting coastal communities.

»» [Skip to Bangor University's presentation](#)

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## **Institut France-Québec maritime**

Vianney Pichereau, Co-director of IFQM & Vice-President of the Ocean Department (UBO)

The Institut France-Québec pour la coopération scientifique en appui au secteur maritime (IFQM) is dedicated to fostering enduring scientific collaborations between France and Quebec in the maritime sector. By uniting researchers, institutions, and industry stakeholders, IFQM aims to position itself as an international leader in maritime science and technology. The institute focuses

on advancing research, education, and innovation to address global maritime challenges and promote sustainable development.

» [Skip to IFQM's presentation](#)

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## Part 2: Thematic sessions: how to strengthen the added value of the transatlantic cooperation

### Group 1: Research (led by CEIMAR)

Case study: Brest-Rimouski cooperation in research

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### SEA.EU - cooperation network between universities

Irene Andres de Marques, project and communication manager

The SEA-EU Alliance brings together nine European coastal universities to form a "supercampus" dedicated to promoting sustainability, mobility, and inclusion in education, research, and governance. Established as a pioneer in the European Commission's "European Universities" initiative, SEA-EU focuses on advancing marine and maritime sciences, fostering multilingualism, and enhancing societal and stakeholder engagement. The alliance supports joint degrees, innovative training programs, and collaborative research to address global challenges such as the blue economy, sustainable development, and digital transformation, while strengthening ties across Europe and beyond.

» [Skip to SEA-EU's presentation](#)

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### ThinkinAzul

Tania Vera Santos, Project manager of Thinkinazul project

ThinkinAzul is a collaborative research and innovation strategy focused on marine sciences. Its primary goals include protecting marine ecosystems from climate change and pollution, advancing sustainable aquaculture, improving marine monitoring and observation, and promoting the blue

economy. The initiative spans seven autonomous communities in Spain, with the Region of Murcia serving as the national coordinator.

»» [Skip to ThinkinAzul's presentation](#)

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## Main discussion points and ideas

**On university collaboration**, delegates were able to learn lessons of existing collaboration such as those developed by Institut France Québec maritime, SEA·EU European University, CEI·MAR Foundation. Activities developed under these scopes are mobility of students and researchers, joint courses, summer schools. Delegates discussed opportunities to further develop Universities staff exchanges, Doctoral and Master's degree network, students mobility, in fields related to green shipping and ports, aquaculture and marine data sharing. Horizon and Erasmus support were discussed to carry out these future activities. Participants concluded to work together on a document of intent to refine their future collaboration idea, with the aim to identify the potential Blue Economy sectors of interest for a future and mutual collaboration. This document will be shared among the participant institutions in the months leading up to the next study visit in Wales, in order to present the main ideas of collaboration.

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## Group 2 : Clusters & SMEs (led by Fórum Oceano & TMQ)

### The ambitions of the Andalusian Blue Cluster

Javier Ivan Noriega Hernandez, president of the Maritime and Marine Cluster of Andalusia

The Andalusian Maritime-Marine Cluster (CMMA) is a leading association of over 140 innovative, technological, and sustainable companies in the blue economy sector. Founded in 2013, the CMMA drives economic development, fosters knowledge exchange, and promotes transnational cooperation in areas like maritime tourism, aquaculture, biotechnology, and renewable energy. With a strategic focus on Andalusia's pivotal position as a gateway to the Atlantic and Mediterranean, the CMMA supports initiatives such as decarbonization in ports, international cluster creation, and collaboration with global partners, including Canada, to advance clean maritime technologies and sustainable blue growth.

»» [Skip to CMMA's presentation](#)

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## Main discussion points and ideas

Presentations from both Quebec- and European-based SMEs and clusters garnered great interest on both sides and revealed some prevalent areas of opportunity for transatlantic cooperation.

### 1. Knowledge and expertise sharing

Smaller SMEs in Portugal, Spain, France, Ireland, Quebec, and Wales may not have the financial weight to be able to invest in transatlantic projects, however they would be able to contribute otherwise, mainly by way of sharing knowledge and expertise. This could be done in the form of joining working groups such as consortia, both existing and new, whether or not within the framework of EU and other cooperation programs.

While there is some overlap between Quebec's and Atlantic Europe's knowledge and expertise, there is also a lot of complementary expertise and skills on both sides. For instance, Quebec is more advanced and competitive in terms of Artificial Intelligence and its applications to the marine and maritime sector. On the other hand, Europe is leading in the marine renewable energy sector. Both parties have varying technologies and expertise in terms of aquaculture and fisheries as well, that would benefit from being shared and improved.

It is also important to ensure that the business and industrial sector work hand in hand with the research sector.

There is clearly a need for a virtual platform that would allow to identify and map stakeholders and their services and/or expertise, to make it easier to find relevant partners. There is hope that the *Transatlantic Project Matchmaking Platform* will be able to do this, as well as integrate a shared calendar of activities to allow stakeholders to identify meeting opportunities. The organisation of thematic virtual meetings may be another way to present the results of the researchers and the work of the entrepreneurs within the transatlantic ocean.

### 2. Leveraging cultural similarities

Quebec SMEs and organizations are similar in size and interest as those based in Portugal, Spain, France, Ireland, and Wales. This makes connection and cooperation easier, as partners on an equal footing, compared to establishing links with large corporations, such as those found in the USA for example. A similar approach to business and economic development, on top of historical trade cooperation, is also a facilitating factor.

### 3. Shared infrastructure and financial support

Some ideas were highlighted for further exploration in terms of financial tools for transatlantic cooperation for SMEs and startups. Horizon Europe is one of the key elements that was recurrent during discussions.

Facilitating **access to shared infrastructure** could be an advantage. For example, allowing Quebec-based businesses or researchers to use facilities in Europe during the winter months, where their facilities or infrastructures might be inaccessible due to climate. Similarly, giving European SMEs and researchers access to top notch facilities in Quebec.

Support and accompaniment for startups is a key issue – there was a highly appreciated suggestion to **create an investment support fund** for this. There is a significant lack of information regarding the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), specifically on how it could be used to serve transatlantic opportunities in terms of Blue Economy, as well as cooperation between SMEs.

#### 4. Innovation for ports & Green Corridors

While it is difficult to set up large-scale transformational projects for ports to participate in, due to their inherent operational and logistical needs and obligations, as well as a greatly varying degree of capacity between small and large ports, it is possible to start with **small innovative solutions** that can be punctually tested. Eventually, that could lead to exploring the feasibility of a transatlantic Green Corridor (e.g. case study between the Port of Sines and Brazil, innovation in the Port of Quebec, etc).

#### 5. Follow-up is crucial

It is essential to follow-up on a mission such as this one, to make sure that action points are established, in order to maximise the outputs of the meetings and discussions and bring added value to transatlantic cooperation. This can also be supported by attending key conferences and meetings, so that partners can keep in touch.

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## Day 4 : Rimouski-Lévis-Montreal

Thursday, October 31, 2024

### Lunch & learn : Blue tourism in Quebec and Portugal

#### Cruise the Saint Lawrence Association

René Trépanier, Executive Director

Founded in 2000, Cruise the St. Lawrence brings together the nine Destination St. Lawrence ports of call of Montréal, Trois-Rivières, Québec, Saguenay, Baie-Comeau, Sept-Îles, Havre-Saint-Pierre, Gaspé and the Magdalen Islands. The mission of Cruise the St. Lawrence is to grow cruise market activities in Québec and across Destination Canada New England through the provision of marketing and development services to members. Cruise the Saint Lawrence enjoys the support of partners Tourism Québec, Québec Tourism Industry Alliance and Industry, Science and Economic Development Canada.

» [Skip to Cruise the St. Lawrence's presentation](#)

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## **Blue Tourism and innovation**

Maria de Lurdes Calisto , Professor, Escola Superior de Hotelaria e Turismo de Estoril

The Estoril Higher Institute for Tourism and Hotel Studies (ESHTE) is Portugal's largest higher education institution dedicated to tourism, hospitality, and related fields, offering undergraduate, master's, and doctoral programs. Through its research hub, CiTUR, ESHTE leads multidisciplinary applied research, emphasizing sustainability, innovation, and the development of blue tourism—focused on ocean and coastal ecosystems. With a strong commitment to education, research, and community engagement, ESHTE aims to drive sustainable tourism practices, foster entrepreneurship, and advance the global tourism economy.

»» [Skip to ESHTE's presentation](#)

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## **Day 5 : Montreal**

Friday, November 1, 2024

### **Introduction to AI research centres and SMEs in Montreal**

**Opening remarks by Anne Nguyen, AI Manager at Quebec's Innovation Council**

#### **Réseau de recherche en économie circulaire du Québec (RRECQ)**

Cathy Baptista, Scientific Director

The Québec Circular Economy Research Network (RRECQ) was officially launched in February 2022 during a unifying event with its members and partners. Focused on action research and collaboration with user communities, the RRECQ is a value-added asset in the Québec ecosystem for developing circular economy knowledge, skills, practices and technologies.

»» [Skip to RRECQ's presentation](#)

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## **Mila**

Sophie Le Drew & Allison Meyssonier, Senior Advisors, Partnerhips

Mila - Quebec Artificial Intelligence Institute, is recognized worldwide for its major contributions to AI. Today, the Mila community boasts the largest concentration of deep learning academic researchers globally. The institute is recognized for its expertise and significant contributions in areas such as modeling language, machine translation, object recognition and generative models. Since its inception, Mila focuses its mission on core research areas such as health, environment and climate change, and AI ethics. Mila extends its expertise and leadership in AI to deliver



advances that will benefit all of society. Research carried out at Mila is conducted using an Open Science approach to promote collaboration and foster knowledge transfer.

» [Skip to Mila's presentation](#)

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## **IVADO**

Jean-François Bruneaux

IVADO is an interdisciplinary, cross-sectoral research and knowledge mobilization consortium whose mission is to develop and promote a robust, reasoning and responsible AI. Led by Université de Montréal with four university partners (Polytechnique Montréal, HEC Montréal, Université Laval and McGill University), IVADO brings together research centers, government bodies and industry members to co-build ambitious cross-sectoral initiatives with the goal of fostering a paradigm shift for AI and its adoption.

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## **WhaleSeeker**

Justine Boulent, Lead AI Researcher & Arnaud Pourchez, Data Engineer - MLops

Whale Seeker is a Montreal-based startup that leverages AI to simplify marine mammal monitoring. Founded in 2018 by Emily Charry Tissier, Antoine Gagné-Turcotte and Bertrand Charry, Whale Seeker is bridging the divide between profitability and sustainability by making marine mammal detection fast, accurate, and accessible.

» [Skip to WhaleSeeker's presentation](#)

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## **Oneka**

Daniel O'Brien, Non-Dilutive Investment Manager - Quebec

Wave-Powered Sustainable Desalination Solution. Oneka Technologies turns seawater into fresh water in an innovative and sustainable way by harnessing wave energy. Over the years, we have developed great expertise in the exploitation of wave energy and are now able to offer high-performance and reliable patented solutions to our customers. Oneka's water quality is adjusted to meet the World Health Organization standards and/or local water standards.

»» [Skip to Oneka's presentation](#)

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### **Sines Tecnopolo**

Tiago Santos, CEO

Sines Tecnopolo, based in Portugal, is a dynamic innovation hub dedicated to fostering entrepreneurship and business incubation in the marine and maritime sectors. It provides essential resources and support to startups and established companies, focusing on training, project development, and networking opportunities. With a strong commitment to sustainable development, Sines Tecnopolo aids in the creation of new jobs and supports over 550 companies, contributing significantly to the regional and sectoral growth through various innovative and educational initiatives.

»» [Skip to Sines Tecnopolo's presentation](#)

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### **AI in the Blue Economy and Ports (Europe)**

Alfredo Alcayde Garcia, Professor, Almeria University

Focus on the transformative role of artificial intelligence in enhancing efficiency, sustainability, and innovation across European ports. It highlights specific examples like predictive maintenance, autonomous equipment, and advanced security systems from ports such as Rotterdam, Hamburg, and Valencia. These technologies address challenges such as congestion, environmental impact, and operational costs, demonstrating significant advancements in maritime logistics through AI-driven solutions.

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### **AI & port logistics / shipping in Quebec**

Loubna Benabbou, Researcher and Professor, UQAR

Innovative strategies for reducing carbon emissions in maritime supply chains. This research highlights the application of AI in optimizing port operations and vessel speed predictions, enhancing efficiency and sustainability. The project aligns with global environmental goals by integrating cutting-edge technology and operational research to tackle the challenges of maritime decarbonization effectively.

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### **Intelligent economic corridors**

Jean-François Audy, Researcher and Professor, CIRRELT & UQTR

Research initiatives in smart and sustainable maritime transportation, focusing on the St. Lawrence River corridor in Quebec, Canada. The research covers various aspects of maritime logistics, including vessel routing optimization, pilot dispatching, tidal impact on fuel consumption, and port operations. Key innovations include developing multi-objective models for vessel routing that can save 5-10% on fuel, optimizing pilot assignments, and exploring technologies like electric trucks, autonomous vehicles, and digital port management. The research aims to enhance the efficiency, sustainability, and economic potential of maritime transport, with a particular emphasis on decarbonization

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### **Innofuse Blue Portugal**

Susanne Wedin Schildt, Founder and managing partner

Focus on Portugal's potential as a hub for blue innovation, introducing Innofuse Blue as a global landing pad for blue technology ventures, with a mission to accelerate blue venture growth, create economic opportunities, and build a global ocean innovation community that aims to transform ideas into solutions that protect oceans and support coastal communities.

»» [Skip to Innofuse Blue's presentation](#)

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### **Closing Speech by Geneviève Brisson, Québec Government Office in Brussels**

#### **What's next? Introduction to the mission to Wales in 2025**

Geraint Green, Head of Agile Cymru.

Agile Cymru is a scaleable programme from the Welsh Government that allows coordinated action, an agile tool to deliver greater economic co-operation at speed, guided by the International Strategy and the economic policies. This includes a flexible grant mechanism to support cross-border and international activity that maximises shared opportunities across themes, sectors, and geographies.

»» [Skip to Agile Cymru's presentation](#)

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## Outcomes and Impact

### Delegate feedback

Members of the delegation were given a feedback questionnaire at the end of the mission's program. Participants joined the study visit to explore collaboration opportunities, share knowledge, and connect with stakeholders in the blue economy, aquaculture, and marine research. Most found the mission highly valuable, highlighting the engagement with stakeholders, the collaborative spirit, and the comprehensive overview of Quebec's maritime ecosystem. Many established meaningful new contacts, both with regional stakeholders and with fellow delegates. Recommendations for future visits included more working groups, tailored stakeholder selection, and increased opportunities for interactive discussions and workshops. Overall, the mission was highly rated for its organization, relevance, and networking potential.

### Communication

It was essential to ensure that this mission would reach its target audience, as well as the wider public. To do so, a simple yet effective communication strategy was put in place ahead of the mission. Social media posts were produced across our main organizations' accounts on various platforms (LinkedIn, Instagram, Twitter/X), and a press release resulted in the mission being showcased in a radio interview and news article on one of Canada's main media outlets (Radio-Canada | CBC).

- ▶ [Read the press release](#)
- ▶ [Read the news article](#)

A **photo album** was created for all stakeholders to contribute to and use in their respective communications, [which can be found here](#).

## Key Takeaways

There are two identified areas for potential collaboration between EU Atlantic and non-EU Atlantic stakeholders involved in the study visit:

1. **Green shipping and development of Green Corridors between both sides of the Atlantic**

## 2. Research and Innovation on Sustainable Aquaculture

Additionally, a reflection on the use of **artificial intelligence** to support data gathering and analysis should be included as a transversal theme to those areas.

### 1. Cooperation on Green Shipping and Green corridors

A green shipping corridor is a specific maritime route where decarbonized shipping solutions are implemented to reduce environmental impact. Developing such a corridor between Québec and the EU's Atlantic regions is a promising opportunity for advancing sustainable trade while combating climate change.

The potential of this project is multiple:

- **For EU Atlantic ports:**
  - Access to maritime trade in North America with established ports like Montréal and Québec City ;
  - Benefit from Québec commitment to shipping environmental performance beyond regulations (Green Marine)
- **For Quebec Provincial Ports:**
  - Access to European markets via important ports of the Atlantic façade and diversifying their collaborations ;
  - Adapt to and anticipate EU laws in relation to green shipping, in particular [Fit for 55](#) packages, including alternative fuels infrastructure (AFIR) and [FuelEU Maritime](#) as well as [ETS](#) for maritime transport.

The benefit will be:

- **Environmental** : Green corridors leverage cleaner technologies, including biofuels, and hydrogen. A specific collaboration on AI applied to green shipping could enable route optimization and carbon monitoring.
- **Economic and social**: provide market solutions to on-going EU and Quebec pilot projects across the green shipping value chain (OPS, Hydrogen production, refueling stations). This could enable quicker fleet updates designed to lower emissions, and be synonymous with job creation in green industries.
- **Political**: coordination of policies between Canada and the EU for leadership in green shipping.

Collaboration will be essential to face some of the challenges of green shipping:

- **High Initial Costs** can be mitigated with Joint investment initiatives, public-private partnerships, and international grants
- **Technological Readiness** can be leveraged with joint pilot projects
- **Policy discrepancies** can be limited with cooperation to streamline regulations and certifications (Green Marine and its equivalent in Europe).

## 2. R&I in Smart and Sustainable Aquaculture

Green aquaculture refers to environmentally sustainable fish and seafood farming practices that minimize ecological impact while meeting growing global food demands. Quebec and the EU Atlantic regions share strong commitments to sustainable fisheries and marine ecosystems, presenting several opportunities for collaboration in this area:

- **Quebec** benefits from extensive freshwater and marine resources along the St. Lawrence River. It is also active in developing sustainable aquaculture practices, focusing on species like mussels, oysters, and Atlantic salmon. Its research and start-up ecosystems are strong.
- **EU Atlantic Regions** are world leaders in aquaculture, particularly in mussels, oysters, seaweed, and high-value fish species like turbot and cod. They have strong capacities in integrated multi-trophic aquaculture (IMTA), combining different species to recycle nutrients.

Possible collaboration could relate to **Research and Innovation** to support an environmentally friendly and smart aquaculture:

- **Ecosystem-Based Aquaculture:** Studying and implementing practices that enhance biodiversity and reduce nutrient pollution.
- **Disease Management:** Researching solutions for biosecurity and disease prevention through eco-friendly methods, such as probiotics and better farm designs.
- **Automated monitoring,** AI-driven farming, and low-impact feed solutions (e.g., algae-based feeds).

The collaboration could focus on **Cold-Water Species** with joint development of new techniques for farming species suited to Quebec's climate and EU Atlantic conditions. Collaborations could also relate to **Skills Development** with workforce training programs to develop skills in green aquaculture practices, exchange of students, researchers, and professionals to build capacity.

The benefit will be:

- **Environmental :** Reduction of aquaculture's carbon footprint and preservation of marine biodiversity by adopting sustainable practices
- **Economic and social:** Increased trade of sustainable aquaculture products, implantation of companies specialized in sustainable aquaculture on both sides of the Atlantic with creation of jobs (e.g. Columbi Salmon's interest in the port of Cacouna)
- **Political:** Harmonization of regulations to simplify exports and imports of aquaculture products, promotion of joint certification programs for green aquaculture practices

The mission enabled delegates to identify sources of funding to support collaboration. Given the Research and Innovation dimension of collaboration on sustainable aquaculture explored by the delegation, it seems that the most promising source of funding is **Horizon Europe**, to which Canada participates as a third country.

On Green Shipping, the **Green Marine Certification** and **INTERREG Atlantic Area programme** could have interesting potential to pilot some green corridor lines. On INTERREG Atlantic Area programme, the SMARTDEC project for which non-EU regions can be associated partners, could boost the adoption of technology to support the ships' reduction of greenhouse gas.

## Other recommendations

1. **Follow-up actions to strengthen partnerships such as webinar on funding opportunities to support emerging ideas of cooperation.**
  2. **Encourage participants to sign up to the *Transatlantic Project's* matchmaking platform, which will soon be up and running - more info to come.**
  3. **Create a shared calendar of activities, so that transatlantic stakeholders can be made aware of major events either side of the Atlantic, and participate.**
  4. **Given more time, establish a more elaborate and comprehensive communication strategy and plan**
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## Next steps

Ahead of the next *Transatlantic* mission to Wales, there will be a webinar on December 17th, 2024, focused on funding opportunities and mechanisms for transatlantic cooperation, which all delegates and Quebec stakeholders are encouraged to attend.

**[Sign up to the webinar here.](#)**