



Northern Periphery and  
Arctic Programme  
2014 - 2020



EUROPEAN UNION

Investing in your future  
European Regional Development Fund



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[www.circularocean.eu](http://www.circularocean.eu)

## ENVIRONMENTAL IMPACT

The total economic damage of marine plastic waste is estimated at almost €12 billion per year, including environmental, commercial and clean-up costs

Up to 12.7 million tons of marine plastic waste enters the oceans each year due to poor waste management practices

Over 33 000 nets are estimated to be lost in selected European fisheries annually due to bad weather conditions, gear conflict and ocean currents

By 2025 there could be 155 million tonnes of plastic in the ocean, representing one tonne of plastic for every three tonnes of fish

Experts believe that entanglement by fishing-related gear is the most harmful type of litter to seabirds, turtles and marine mammals

Long term effects on marine life include impacts on marine ecosystems that ultimately leads to loss of biodiversity

Plastic material absorbs persistent organic pollutant from its ambient environment, which if ingested by marine organisms, may enter the food web

Approximately 640,000 tonnes of fishing gear are lost globally each year



Inspiring Communities to realise the hidden economic opportunities of discarded fishing nets and ropes in the Northern Periphery & Arctic region

Circular Ocean is a three year research project, starting October 2015 funded by the **ERDF Interreg VB Northern Periphery and Arctic (NPA)** Programme

**Priority axis 2: Entrepreneurship**

**Objective 2.1: Improved support systems for SMEs**



**Assist** remote and rural coastal regions to develop green economies



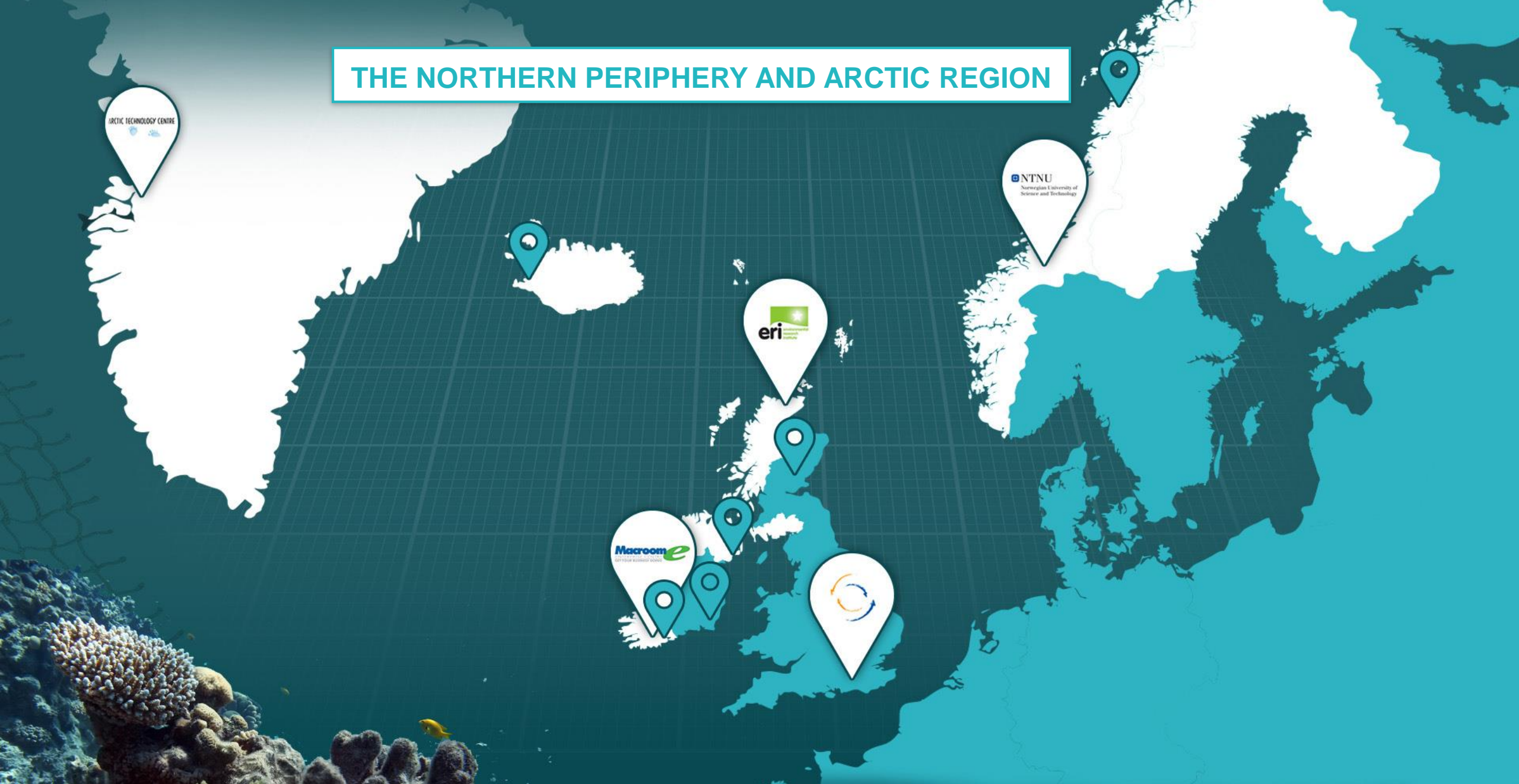
**Develop** and share new sustainable solutions for recycling marine plastic waste



**Incentivise** collection and reprocessing of discarded fishing nets and assist the movement towards a more circular economy



## THE NORTHERN PERIPHERY AND ARCTIC REGION



## REGIONAL CHALLENGES



**PERIPHERAL  
LOCATION**



**INCREASE IN SEA  
TRAFFIC**



**NEGATIVE IMPACT  
ON TOURISM**

**LIMITED BUSINESS  
OPPORTUNITIES**



**LOW POPULATION  
DENSITY**



**MANAGING WASTE  
MATERIALS**



## OBJECTIVES



### **Showcase:**

Create a regional showcase for circular economy innovation



### **Support System:**

Provide a sustainable and responsible green business support system to assist remote and rural coastal regions to develop green economies



### **Environment:**

Enhance the environment for green businesses and entrepreneurs through blue growth related opportunities



### **Connect:**

Connect remote communities to a wider network to expand green business opportunities



### **Exchanges:**

Facilitate the transfer of green enterprise best practice and knowledge exchange across the NPA region



### **Solutions:**

Develop sustainable region-specific and novel solutions using resources of the NPA area



## PARTNERS



ARCTIC TECHNOLOGY CENTRE



**Green Economy Business Suite**

- A guide for communities, businesses, entrepreneurs, and residents within the Northern Periphery and Arctic region.

**Handbooks**

- Focused on fishing net reuse options and innovative eco-design companies
- Marine litter environmental impact and life cycle handbook

**Examples of Pilots**

- Examples of pilot work undertaken using fishing nets and ropes within remote regions

**Open source eco-innovation hub**

- For recycling and repurposing marine litter allowing the exchange of ideas and techniques

**Eco-innovation toolkit**

- Publications to support partners and end-users on circular economy innovation (related to discarded fishing nets)

**Eco-innovation training and guidance**

- Range of training and guidance sessions provided to SMEs

**Reports**

- On the environmental impact of discarded fishing nets
- On policy and institutional barrier reports

**Feasibility and cost/ benefit analysis**

- Of fishing net collection for export and recycling

**Guide**

- To supportive policy and regional frameworks regarding innovation within local regional and national levels





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### Lewis Chessmen

- 12<sup>th</sup> Century, from Trondheim, Norway
- Discovered in Lewis, Outer Hebrides, Scotland in 1831
- International exchange of ideas
- Trade and collaboration across the NPA region
- Use of local resources