

Work Package T3 Pathways to Sustainable Development

Deliverable T3.2.1 Coastal Sustainability Action Plans and Integration of Stakeholder Feedback into Final Documents

# Development of Coastal Sustainability Action Plans

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## Project Partners



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## Executive Summary

This report describes how the development of local sustainability action plans has been done in the demo sites (N=4) of the COAST project. A closer look at two examples, i.e., Westfjords in Iceland and Hailuoto in Finland is taken. All local action plans were integrated into the goals of Agenda 2030.

Compiling a local sustainability action plan is rarely a straightforward process. In practice promoting sustainable development is complicated. It is a collection of acts big and small. To reconcile these acts in such a way that advancing one would not harm the other is tricky business. Therefore, various engagement activities in the community have to be planned carefully. It is the only way to support active participation, motivation, and commitment to the process. Firstly, common ground among the participants has to be achieved.

We hope that our experiences collected during the COAST project inspire local coastal communities to strengthen the work of sustainable development. Acknowledging that there are multiple paths to successful sustainability is a good starting point.

## Acknowledgements

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# 1 Introduction

Today the consequences of climate change are faced all over Europe. For instance, summer 2022 showed unexceptional heat waves, drought, and floods throughout Europe. It is expected that extremes of weather due to climate change will increase. Recent research findings show that the Arctic is facing the impacts faster than the globe on average and that the warming rate could be even four times faster (Rantanen, Karpechko, Lipponen, Nordling, Hyvärinen, Ruosteenoja, Vihma & Laaksonen 2022).

Coastal zones are at the front-line of sustainability challenges. In the COAST project ([Sustainable Resilient Coasts](#)) we are concerned about the well-being of coastal areas in Northern Europe (Agricultural University of Iceland 2022). COAST is a collaboration project between partners from Iceland, Finland, Ireland, and Northern Ireland. The project looks to establish the Northern Periphery and Arctic Region as a demonstration of how to deliver Sustainable Development Goals for the coastal areas. The target audience has been local authorities of coastal communities who often work with limited resources. In collaboration with four demo sites tools for local authorities to promote sustainability in the community and find resilient ways to tackle e.g., environmental challenges are found in the [COAST toolbox](#) (Mayo County Council 2022).

A great deal of resources has already been invested in finding solutions to adapting to climate impacts, reducing emissions and financing necessary adjustments (United Nations 2022a). The work continues. Actors across sectors (public, private, non-profit) are committed to the development (see e.g., Baltic Sea Action Group 2022). The commitment is often displayed on the web pages whether it is an enterprise, a municipality, an association. Information about the most recent projects is disseminated. In many cases, short-term or long-term action plans are made, deeds are done and checked, and assessment reports are published.

On a global scale, United Nations' Agenda 2030 with its seventeen sustainable development goals guides the work in parliaments, but also in the grassroots level (United Nations 2022b). Agenda 2030 has been extensively adopted by nations but also acknowledged locally to show the focus of community's attention. Agenda 2030 as well as its preceding action plans call for urgent action from all countries. There is no time to waste. Another established actor highlighting the urgency is the International Panel for Climate Change, which through its reports, has repetitively shown acceleration of global warming. Sea areas and sea ecosystems are particularly sensitive to the change (see e.g., IPCC 2021).

Tools like ISO14001 environmental management system (ISO 2022) or EMAS i.e., Eco-Management and Audit Scheme (European Commission 2022) have been found helpful when continuously improving the organisation's environmental and/or sustainability performance. The first steps in the process could have been taken by evaluating the carbon footprint of the offices (WWF Finland 2022). What fits one organization might not be viable everywhere. Those with limited sources must be resourceful otherwise. The four demo sites of COAST project i.e., Rathlin Island in Northern Ireland with approximately 160 residents; municipality of Hailuoto in Finland with one thousand inhabitants on the island; Westfjords in the northeast of Iceland and County Mayo in Ireland represent diverse examples of coastal regions and communities of Northern Europe. Yet they all actively aim at finding effective and resistant solutions on their way to sustainable living and well-being.

One of the main activities of the COAST has been to develop coastal sustainability action plans (CSAP) for each demo site. The bottom-up approach has been favoured. This means that the co-design in the demo sites has resulted in slightly differing outcomes. Each CSAP reflects the current needs, wishes and/or concerns of the people living and working in the area. For instance, in Mayo County Council the prime focus of attention was the marine strategy. Creating the strategy was a multifaceted process engaging various stakeholder

groups. Today, the process and the final strategy are found as beautiful illustration on the web pages of Mayo County Council (Mayo County 2022b). For Rathlin Island in Northern Ireland an interactive map was made (CCGHT 2022). The map helps a traveller explore the island's rich coastal, natural, historic, and cultural heritage. The map has five main themes i.e., coast, walking and cycling trails, visitor information, historical sites, and the environment. By using a filter brief introduction of each particular site is highlighted on the map.

In this report preparation of CSAPs in Westfjords and Hailuoto are elaborated in detail. First the demo sites are introduced. Then stakeholder engagement during the process is depicted. With various engagement activities, including feedback collection, a coastal sustainability action plan has been created. The contents and objectives of both plans are linked to Agenda 2030 goals.

## 2 Examples of the development of coastal sustainability action plans

### 2.1 Hailuoto Sustainability Action Plan, Finland

#### Introduction to the case and community

Municipality of Hailuoto (Hailuoto 2022) has been one of the case study areas in the [COAST project](#) (Agricultural University of Iceland 2022). Hailuoto is the largest island in Bothnian Bay (Figure 1). The current size of the island is about two hundred square kilometres. It has been formed of three separate islands over time. Hailuoto has started to rise from the sea approximately 2,000 years ago and it continues to do so about 1 cm annually (post-glacial rebound).

About one thousand inhabitants live on the island. Distance to Oulu, to the nearest big city, is fifty kilometres. A ferry to the mainland goes several times per day. The length of the ferry route is 6.8 kilometres, and it takes 25 minutes one way. During wintertime, an ice road has been used for locomotion. About one-half of the working-age population in Hailuoto is commuters, who work on the mainland. Fibre-optic cable makes it easy to work from home, from the island. The municipality is an important employer.

The natural and cultural environment in Hailuoto is unique (Figure 2 and 3). The rising shoreline is constantly changing and thus forms a living conservation area. Nature is of great value to the islanders, and it is protected with various conservation programmes, in which birds, shore areas and sandy ridges are of specific interest. In summer life on the island is particularly active and lively, and the population doubles. Sustainable tourism is important for the municipality, where officials are strongly committed to sustainable development, to building a better future for nature and generations to come.



**FIGURE 1. HAILUOTO ISLAND IN THE NORTH OF FINLAND (GOOGLE MAPS).**



**FIGURE 2. A VIEW TOWARDS FISHERMEN'S HUTS IN MARJANIEMI IN HAILUOTO (©KATI TERVO).**



**FIGURE 3. A VIEW OF HAILUOTO (©NORA NURRO).**



## Engagement of stakeholders

Co-operation with Hailuoto municipality meant diverse engagement, e.g., regular meetings face-to-face and in Teams. Key people from Hailuoto were former municipal manager Mr Aki Heiskanen, acting municipal manager Ms Maarit Alikoski and communication specialists Ms Annukka Loukola and Ms Saana Peurasari.

Also, other engagement activities took place:

- A future workshop was organized online for the key municipal officials in November 2020 (Virkkula, Maunumäki, O'Rourke & Tervo 2021).
- Stakeholder mapping was made as part of the preparations for the scenario workshops in February 2021. It was found necessary to define who to reach for the workshops. The mapping was done in close co-operation with the key municipal officials.
- Three scenario workshops were organized in the spring of 2021, the first one for municipal officials and councillors and the second one for entrepreneurs and associations.
- During the workshops, it became clear that there was an important target group missing i.e., the youth. For them, an online event called Climate Coffee Break was organized in September 2021. At the Whitefish Fair in October 2021 special attention was given to young participants (Figures 4 and 5).
- As a final engagement activity, an online survey about the sustainable development work on the Hailuoto municipality was sent via the municipality's web page and Facebook in March 2022.



**FIGURE 4. ENGAGING YOUNG PARTICIPANTS AT THE WHITEFISH FAIR IN HAILUOTO.**



**FIGURE 5. ANOTHER ENGAGEMENT ACTIVITY AT THE FAIR.**

## Stakeholder feedback

Altogether about 150 people were reached during the project. The stakeholders were local authorities, residents, leisure residents, tourists, entrepreneurs, and NGO representatives. Based on the feedback and response the general view was that the Hailuoto municipality operates very responsibly. *The way of life on the island* was identified as a strength. It was stressed that the people on the island have always coped despite various setbacks and challenges in the past (see Sirviö, Savilampi, Posio & O'Rourke 2022). The coping mechanism was defined as Hailuoto's resilience.

The results of the survey indicated a strong commitment to sustainable development in the municipality. Valuable habitats on the island and natural assets, in general, were mentioned as opportunities e.g., for well-being and tourism. It was appreciated that due to digital tools one can live and work in various locations.

## Coastal Sustainability Action Plan of Hailuoto

The CSAP of Hailuoto municipality considers the feedback received in various stakeholder engagement activities mentioned above. The replies of the survey were analysed, and a SWOT analysis was done. It was important to make explicit all that is already in a good state and issues that still need attention. Based on the data the CSAP has been built on four themes that are Sustainable Tourism, Respect for Nature, Responsible Communication, and Participation. In addition, there is one cross-sectional theme, namely Responsible Communication. Under each theme, actions are suggested.

### 1. Respect for Nature

#### Issues:

- Hailuoto has a particularly delicate nature that needs to be cherished.
- The ecosystem and biodiversity on the island are vulnerable.
- The respect for nature should be identified in everyday choices whether big or small.

#### Actions:

- Take sustainable development into account in public decision-making and procurement.
- Protect biodiversity and resilient ecosystems. Decide on the protection actions.
- Promote sustainable land use.
- Join HINKU network (CarboneutralFinland.fi 2022)
- Continue favouring local food in public dining (e.g., schools, kindergartens).



### 2. Sustainable Tourism



#### Issues:

- Tourism has grown in Hailuoto, which causes challenges for nature and people.



- Causeway and two bridges to be built from the mainland to the island will have an impact on the island and tourism.
- The municipality has taken an active role in enhancing sustainable tourism.

#### Actions:

- Continue the important work of making centralized trails to preserve the delicate nature of the island (see Oamk 2022).
- Assess the sufficiency of the routes for people with disabilities.
- Add easily accessible waste disposal points for travellers. Promote sorting of plastic waste.
- Remind leisure residents of their responsibility.
- Support establishing a responsible camping area.

### 3. Participation

#### Issues:

- The starting point for effective sustainability work is engagement and co-operation.
- The decisions regarding sustainable development influence many people and are sometimes tricky.
- The participation especially of the islanders must be ensured.



#### Actions:

- Adopt indicators for participation.
- Do transparent monitoring of the realization of the participation plan.
- Map stakeholders (e.g., residents, leisure residents, companies, partners) and act accordingly.
- Continue excellent work on social sustainability.

### 4. Responsible Communication

#### Issues:

- Communication is an essential part of responsible actions.
- Communication ought to be transparent and up to date.
- Effective communication takes into consideration various target groups.



#### Actions:

- Continue active and agile responsible communication.
- Identify indicators for monitoring and measuring responsible communication.
- Make various language versions of Hailuoto Application.
- Pilot and collect feedback about Hailuoto's image as a responsible cultural and nature tourism location.
- Encourage local companies and associations for sustainability (e.g., through incentives).

## 2.2 Westfjords Sustainability Action Plan, Iceland



FIGURE 4 ÍSAFJÖRÐUR IN THE WESTFJORDS & UN SUSTAINABLE DEVELOPMENT GOALS

### Introduction to the case and community

This Sustainable Action Plan was created for the [COAST project](#) (Sustainable Resilient Coasts), presenting opportunities for future action in the Westfjords of Iceland that can be taken towards fulfilling the [UN Sustainable Development Goals](#).

The Westfjords of Iceland are a rugged, remote region to the Northwest of Iceland. They are characterised by deep fjords that cut into steep mountainsides culminating in high mountain plateaus. Settlements are sparse and the population is about 6.000 people altogether. The communities of the Westfjords have traditionally survived on fisheries, but with a change in fisheries quota management and a changing climate, other economic sectors had to be introduced. With a recent tourism boom and the rapidly growing aquaculture industry, even the remote fjords have become under pressure by multiple industries that are not only competing with one another but also impacting the ecosystems they rely on. This has resulted in the launch of marine and coastal planning in an attempt at finding a tool to manage the competing use of the fjords. The [Westfjords case study of the COAST project](#) has investigated the ongoing coastal and marine planning process, specifically in terms of public participation.

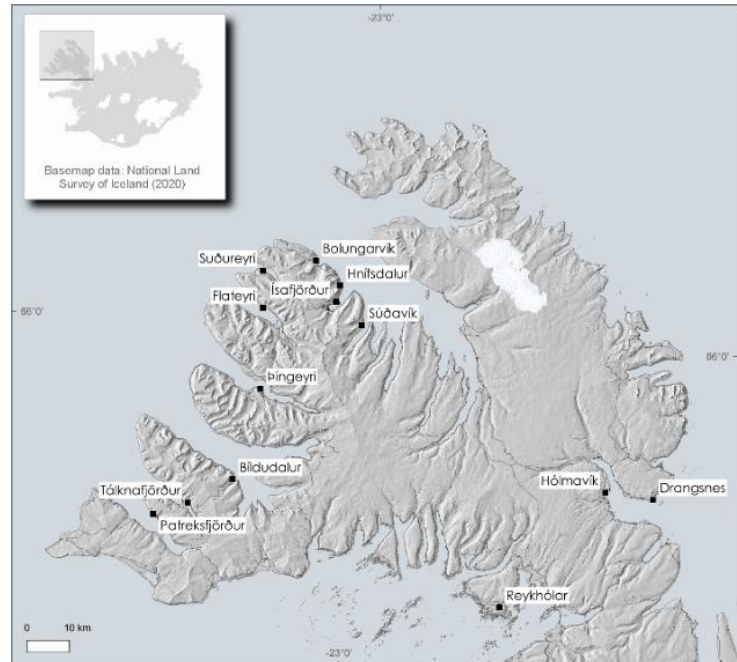


FIGURE 5 MAP OF ICELAND AND WESTFJORDS

This SAP is concerned with the advent of coastal and marine planning of the fjord areas and points towards actions that can be taken in order to increase the sustainability of the communities, the fjords and the planning

process. This SAP and will therefore focus on the UN Sustainable Development Goals No. 14 Life Below Water, No. 13 Climate Action, No. 4 Quality Education, No. 17 Partnership for the Goals and No. 10 Reduced Inequalities.

## Engagement of stakeholders and the community

Stakeholders and the community in the Westfjords have been engaged in the COAST project since the beginning. Specifically, a mixed method approach was taken to engage with different experts and community members. Apart from participant observation in the community, key stakeholder interviews were conducted. The interviews were held for the most part in person with a few online meetings and consisted of semi-structured interviews that were recorded and transcribed. For community engagement, a public workshop was conducted for information and discussion. The workshop had to take place online due to the COVID restrictions at the time. It was broadcasted live on Facebook and is available as a recording [here](#). From all of these engagement activities, field notes and transcripts were made that were subsequently coded.



FIGURE 6. INVITATION FLYER FOR THE PUBLIC MEETING IN THE WESTFJORDS

## Stakeholder feedback

Stakeholders had the opportunity to engage with the project in several ways. They were invited to the public workshop and could leave feedback either in asking their questions or voicing their concerns, writing in the meeting chat as well as filling out a post-meeting feedback survey. Other than that, key stakeholders were personally interviewed. Some individuals even reached out to us and requested an interview. All in all, conversations were held with 53 individuals in the Westfjords.

## Coastal Sustainability Action Plan of Westfjords highlighting opportunities in SMART Blue Growth

The Sustainability Plan is structured according to grouped SDGs (UN Sustainable Development Goals) that each section pertains to. Due to its focus on the coastal and marine field and its sustainable development, some SDGs are more prominent than others.

## 1. The Coastal and Marine Environment

SDGs No. 14 Life under Water & 13 Climate Action

### Issues:

- Fragile coastal and marine environment is vital habitat
- Many local industries and communities depend on marine resources, it is vitally important to safeguard them
- Sewage disposal into the sea, pollution from shipping (cruises, touristic shipping, fisheries, commercial), fish farms, waste like ghost fishing gear
- Shifting species: puffins decrease (food shortage?), fish species changed, invasive species impacts (flounder etc.) not only on marine but also freshwater and terrestrial ecosystems
- Industries based on extraction, little restoration

### Actions:

- Improve marine environment: more protection/balanced use
- Environmental factors need to be the basis for decision-making on human action
- Marine issues and climate action need a bigger profile in community, public debate, media, and education



## 2. SMART Blue Growth and Sustainable Industries

SDGs No. 9 Industry, Innovation and Infrastructure, No. 11 Sustainable Cities and Communities & No. 12 Responsible Consumption and Production

### Issues & Actions:

- Re-think development strategies: relying on a few industries at a time (before fisheries, now aquaculture and tourism) has led to boom-and-bust phases and debt
- Recovery from Covid economic losses – perhaps not just with cruise ships
- Re-think future harbour extensions – at what price to society?
- Diversity in industries and sectors needed
- Local consumption of produced goods needs to be considered



## 3. Cooperation

SDG No. 17 Partnership for the Goals

### Issues:

- Lack of cooperation for sustainable development
- Industry, education, and municipality/governance acting in silos
- No platform for cross-disciplinary discussion although many ideas present

### Actions:



- Municipality to work with school & university centre: many emerging ideas for creativity, engagement in environmental stewardship etc.: planting of trees, beach cleaning, voluntourism
- Reach out to: sustainability working group, library, tourism board, community garden etc. to find common objectives and create projects

#### 4. Meaningful community engagement and ocean literacy

*SDGs No. 10 Reduced Inequalities, No. 4 Quality Education & No. 16 Peace, Justice and strong Institutions*

##### Issues:

- Corruption and nepotism
- In transparency of decision-making
- Role of few powerful individuals – needs balance
- Election year – suddenly things get done/happen, i.e., student housing building etc.
- Depopulation/brain drain: how to keep and attract qualified young people & women (Westfjords are male dominated)
- Public participation in governance often a “check-box” activity, in general public often not seen as helpful or important
- Lack of marine environmental education in national curriculum
- Lack of marine education in public sphere
- Lack of agency and ocean & environmental stewardship in local communities



##### Actions:

- Need for democratisation of decision-making processes in municipalities, communities, and planning
- Re-shape marine planning process to be more inclusive, participatory, i.e., democratically legitimate
- Re-structure planning processes and decision-making processes with input from community members from the beginning
- Ocean literacy programmes
- Include and engage women, youth, and foreign nationals – targeted and differentiated engagement channels
- How to get there: Develop discussion platforms within the community
- Employ a community engagement officer
- Create various engagement and discussion opportunities, future workshops, field days etc. To engage large range of groups of inhabitants



### 3 Concluding remarks

The world changes fast. The shift is ongoing. Climate change and the decay of species cause a lot of concern. Both are somewhat complex to deal with and control. The means and resources a small-scale community has for addressing the issues are limited. At the same time, both issues require innovative and quick solutions that have resistance. From the point of view of the COAST project, coastal communities must be proactive, awake and alert in order to survive.

Both detailed descriptions from Westfjords and Hailuoto show the potential these communities have in overcoming the obstacles. Perhaps both examples show nothing drastically new. Rather, these examples emphasize the capability the communities possess to adapt to the ever-changing times. It is characteristic in Westfjords and in Hailuoto and is one essential dimension of their resilience.

It is important to notice that the planned actions are not something separate. They are intertwined with other development work taking place in the community. Preserving the environment benefits economical growth. This is particularly valid in the four communities represented in the COAST project. They all are popular holiday resorts. Nine of the seventeen goals of Agenda 2030 are promoted in the coastal sustainability action plans. Issues and actions vary in size and scale. Some take more time and others are achieved easily. The solution is to act instead of doing nothing.



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