Overview of Bridging call 2021 Proposals







Investing in your future European Regional Development Fund

Bridging call Projects - 2021

Project name	Budget in E	UR [*]	Partnership:	Summary
Priority Axis 1 – Innov	vation			
EMS 454 HEALTHRUM Natural bioactive compounds with antiparasitic and anti-methanogenic activity in sheep and reindeer	Total cost Total grant ERDF Norway	88.818,62 54.854,90 45.264,31 9.590,60	Lead Partner: Natural resource centre LUKE (FIN) Partnership: Lantbruksuniversitetet (SE) Norsk Senter för Ekologisk Landbruk (NO)	Sheep and reindeer husbandries are important livelihoods and a part of the cultural heritage in the Northern peripheral areas with low economic diversity. Climate change has endangered their sustainability e.g. by increasing gastrointestinal parasitism. It is a pervasive challenge to production. Parasitism is currently controlled through routine medication, but resistance is limiting the mitigation potential. Bark from the forest industry is rich in bioactive compounds that may prevent and/or treat sheep's and reindeer's gastrointestinal parasitic infections. These compounds also control ruminal methane emissions, which could greatly decrease the environmental load of ruminant production. Currently most bark produced by the forest industry is combusted for energy generation.

^{*} Disclaimer: the final amounts will be established during the contracting phase.

Project name	Budget in EUR [*]	Pai	rtnership:	Summary
EMS 459 Sustainable Arctic and Peripheral Biking Tourism	Total cost 125.64 Total grant 80.49 ERDF 56.85 Iceland 14.04	45,48 Lea 99,56 Feo 53,86 40,00 Par 05,70 The 05,70 The No (IS) The De	ad Partner: The Local deration of East Lapland (FIN) rtnership: e Highlands and Islands ansport Partnership (SCOT) orth West Region Association	The NPA Bridging call project Sustainable Arctic and Peripheral Biking Tourism (SUB) aims to prepare and submit project applications for the main call of the NPA 2021-2027 programme. The tourism industry is a very important sector of the economy for the NPA programme area. Sustainable recovery from the COVID-19 is the key question for the many peripheral regions, municipalities, and communities to survive in the future. Fostering the green and digital transition (twin transition) of the tourism sector with tailored support is more important than ever before. Biking tourism has increased its popularity supporting the industry and all-around year tourism development and can be seen as an emerging industry among the tourism sector. SUB will include partnering regions' state of the art and stakeholder analysis. These will provide the basis for the Innovation camps among the SUB participants to explore the feasibility of the industry and to deliver the main content for the full-scale NPA project plan. During the process, SUB partners will identify and agree on the Project Consortium for the coming full-scale NPA project.
				A Consortium for the SUB project has been gathered in 2021, including partners from Finland, Iceland, Faroe Islands, Ireland and Scotland, and an associated partner from Norway. With the help of the feasibility studies, additional analyses and partner meetings, and contacts to related actors and stakeholders in biking tourism, the selection of core themes as well as the final Project Consortium will be made for the full-scale NPA project.
EMS 466 Arctic Low Carbon Concrete with outstanding Sustainability and Durable Properties	Total grant 35. ERDF 17. Norway 10.	.026,60 The .317,80 (NO .012,00 .696,80 Par Lul (SE Un	rtnership: lea University of Technology E) niversity of Oulu (FI)	This preparatory project aims to develop a full application for submission under the 2021-2027 NPA Calls. The full application will focus on Topic 2.3 - Promoting the transition to a circular and resource efficient economy with particular emphasis on actions facilitating the transfer and development of solutions that promote resource efficiency, end-of-waste, and a better use of by-products in remote, and sparsely populated communities. The development phase facilitated by the Bridging Call application will enable
		Rey	ykjavik University (IS)	development of the partnership and full concept for the full application. Furthermore, consortium partners from four different countries will conduct stakeholder analyses and map in detail the area where Low Carbon Concrete

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				can be utilised beneficially.
				The focus of the future application will be enhancing knowledge about local powder materials and waste materials that can become supplementary cementitious materials (SCM) used to reduce/partially replace cement and production of Low Carbon Concrete (LCC). Also, the solutions to the issues created by the freeze-thaw cycle encountered in Arctic conditions will be addressed to achieve a suitable evaluation system for LCC. The frost resistance issue is likely the biggest challenge/obstacle in reducing the carbon footprint of concrete.
EMS 468 DEMONSTRATIONS, SIMULATIONS AND PILOTING OF NEW GENERATION ROBOTICS IN SMES	Total cost Total grant ERDF Norway	91.825,00 55.812,50 42.900,00 12.912,50	Lead Partner: Centria University of Applied Sciences (FI) Partnership: Luleå University of Technology (SE) UiT The Arctic University of Norway (NO)	The aim of the project is to produce information and concrete solutions about the new generation of robotics, as well as its usability for production companies in various sectors in the Interreg Northern Periphery and Arctic Programme area from corona recession recovery and to encourage business development. The current huge boom of robot technology is an enabler to rural area companies for developing their business to be competitive. Also, if these rural companies will not be taking take this technology into use they will be losing lots of possibilities while other companies are developing their productiveness.
				A technology transfer service concept developed by Centria is used as the development tool. It includes rapid technology experiments, demonstrations, and pilot projects with e.g. cobots (collaborative robots) and mobile robots which can be lent to companies for demonstration periods. We create industry-specific reference solutions and provide information on the application possibilities of technology for the use of companies in the region to support technology investment decisions. Different collaborative robots, transport robots and drones suitable for various work tasks are available. Robotization solutions can also be illustrated with the help of simulation software.
EMS 477 Literary Tourism Immersive Technology	Total cost Total grant ERDF	60.000 € 39.000 € 39.000 €	Lead Partner: Western Development Commission (IE)	Post Covid, innovation capacity as a means to adapt, manage and respond to unforeseen circumstances is critical for micro enterprises and SME's in the NPA region to survive, advance and grow. N-LiTe will jointly assess the potential for SME's to uptake existing and advanced technologies to exploit their

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Acceleration			Partnership: Regional Council of Kainuu (FI) Irish Central Border Area Network	communities abundance of literary, cultural and natural resources and further develop and market these assets and grow sustainable LT business.
			(NI)	Working together across transnational borders, initially in the context of literature and cultural tourism,N-LiTe, will explore the feasibility of a range of immersive tech tourism experiences. We seek to develop and grow regional immersive capabilities for use by the literary tourism sector to attract and engage citizens and visitors (e.g. Volumetric Content creation, VR/AR, Projected reality, Virtual Tours, or 360 Deg. experiences as in the Exhibition Hub Van Gogh immersive experience - (https://www.exhibitionhub.com/exhibitions/van-gogh-the-immersive- experience/).
				In adapting existing and emergent immersive digital technologies to the creative capital and stories of our partner regions it is intended to accelerate the sectors SMEs to growth. Note, uniquely literary tech content, artists have built a repository of digital content due to the enforced separation requirements of the pandemic. This digital content bank will be assessed and leveraged for use by the project team in the bridging call. (Spot-lit Literary Framework Models Developed/ 28 New LT Products Delivered to Market.) Immersive technologies (IT) create distinct experiences by merging the physical world with a digital or simulated reality. Augmented reality (AR) and virtual reality (VR) are two principal types of immersive technologies. Technologies to be assessed for implementation will develop sector aspects such as production, marketing, experiential. It will also assess digital approaches to transnational networking and marketing of the sector.
EMS 479 DIGITAL TRANSFORMATION OF MANAGING	Total costs Total grant ERDF ERDF NO	74.990,35 46.343,74 38.343,82 7.999,92	Lead Partner: Lapland University of Applied Sciences (FI)	Wild- or non-cultivated or non-fished products of forests and seas (wild berries, mushrooms, herbs, seaweed, mussels, down feathers, wild bird eggs, etc.) are materials of big commercial potential and high regional cultural value. Despite their importance, management of, for example, harvesting and further
WILD PRODUCTS			Partnership: Natural Resources Institute Finland (FI) Norwegian Institute for	value chains is rather rudimentary. The lack of this governance complicates the development of livelihoods relying on wild products. Governance of wild products can be based on 1) Rule of law or 2) Common
			Bioeconomy Research (NO)	governance in which the stakeholders create rules and practices for utilization

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		BIA Innovator Campus CLG (IE)	of wild products. Currently, common governance (bottom-up concept) is the only possible option as national legislations take very little stand on, for example, wild berries utilized by everyman's rights. On the other hand, due to challenges of NPA region like low population density and low accessability, practical problems of common governance are obvious. However, this obstacle can be tackled by digitalization.
			Digital information and communication technologies – especially mobile ones - offer excellent tools for networking also in sparsely populated areas. In addition, mobile positioning properties of mobile devices offer another tool to manage geographical information about wild product harvests, provenance and quality attributes connected to origin of wild products. Although the first steps of digitalization of wild product governance have already been taken, there is a lot to be done to achieve a digital environment which truly supports wild product governance. However, such a step must be taken to realize the underutilized financial and cultural potential of wild products.
			Preparatory project (NPA/Bridging call dl. 8.10.2021) includes stakeholder mapping and creation of the consortium, feasibility study of the topics chosen and preparation of the main project application with participating areas and organisations.
EMS 451 HIVE Heritage in Virtual Environments	Total cost 121.500,0 Total grant 77.456,2 ERDF 39.487,5 Iceland 18.225,0 ERDF 20. 19.743,7	5 Gunnarsstofnun (IS) 0 0 Partnership:	The HIVE project will build upon digitisation efforts, virtual museums and digital infrastructure developed as part of previous NPA projects. The goal is to form a future project with consortium from all over the NPA-area to reap the benefits of digitisation (1.2).
		University St Andrews UK Mayo County Council IE	In HIVE we will collate and analyse primary research into the heritage response to COVID 19, e.g. there have been questionnaires by ICOM and NEMO and many national questionnaires. In doing so we will identify and understand what worked well, which will enable us to learn from the response and establish a new best practice which addresses resilience and sustainability.
			Advances in cutting edge technologies make new modes of interaction with heritage possible. Through augmented reality, virtual reality, reconstructions and digital restoration, engaging immersive experiences can be accessed, in

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				the museum, in the locality and at home. In HIVE we will evaluate existing tools for the development of AR, VR and cross reality heritage tools and applications. This will enable us to establish road maps for fostering the use of existing, and developing new tools.
EMS 455 HALE Looking to the future of innovation and technology in healthcare	Total cost Total grant ERDF ERDF 20	92.285,04 59.985,27 53.497,72 6.487,55	Lead Partner: NHS Highlands and Islands (UK) Partnership: Ulster University (NI) Uninversity of Oulu (FIN) University of New England (US)	The population of the remote Northern regions is ageing. Together with long distances, this poses challenges for health care and care of the elderly, and increases costs. The pandemic trained people to use remote connections and services, but demonstrated also which new needs and risks health care has to be prepared for. All this has also increased acceptability of new technological solutions amongst health care professionals and customers. Together with experts and stakeholders, the proposed project will identify new needs and technological solutions. In particular, the project will focus on identifying needs that could be met with IoT technology, on developmental needs of IoT technology can be used for versatile, real-time and cost-efficient remote monitoring of both health care clients and their surroundings, and of healthcare functions such as operation & location of devices. The project outputs will be a framework analysis of the results of some previous projects and their current applicability in the changed situation, a feasibility study of the project idea, a stakeholder mapping and securing their commitment. A network with balanced geographical representation and expertise will be assembled and an application for the main project will be written.
EMS 462 Building public sector innovation capacity towards digital-driven NPA communities	Total cost Total grant ERDF ERDF 20	92.250,00 59.962,50 50.992,50 8.970,00	Lead Partner: European Regions Network for the Application of Communications Technology (IE) Partnership: Association of Local Authorities Västernorrland (SE)	Public sector organisations in the NPA area acknowledge the importance of introducing new innovations to meet the increasing demand for quality and sustainable services addressing shared characteristics like long distances, limited resources and skills and low critical mass of consumers for successful market-led operations. Work carried out in projects like DISTINCT shows that, when addressing these challenges, the main factor is not the availability of innovative services,
			University of Helsinki (FI) Province of Newfoundland and Labrador (CA)	products or processes in the area, where SMEs, higher education institutions (HEIs) and research centres present a significant pool of expertise and enough potential to assist public sector in this task, but the lack of awareness by public sector organisations on these innovative solutions.

Project name	Budget in El	UR [*]	Partnership:	Summary INNOCAP tackles the challenges and leverages the opportunities of the public sector from a new approach: it covers both the demand and the supply sides of public service provision and assesses not only its role as provider but also as promoter and early-adopter of digital innovations available. Public service providers are turned into facilitators that co-create value and take advantage of the current supply capacity in the NPA area. In doing so, focus will be put on how to build the capacity of the public sector and prepare it to play this important role. The main outcome of the project will be the Capacity Building Programme for Innovative Digital Public Services in the NPA regions, including the main aspects identified with key stakeholders from public sector, SMEs and HEIs and using previous experience from partners. The work will be utilised as a main project idea to run and test the effectiveness of the Capacity Building Programme in the coming NPA Programme 2021-2027. The project brings together 4 main partners (university/public sector) from
				Finland, Ireland, Sweden and Canada.
Priority Axis 2 - Entro				
EMS 450 Success for SMEs and Start-ups through better Decision Making	Total cost Total grant ERDF	-	Lead Partner: Munster Technological University (IE) Partnership: Centria University of Applied Sciences Ltd (FIN)	This SSDM proposal focuses on testing the feasibility of providing an innovative Structured Scientific Support Program (SSSP) to improve the decision-making of start-ups, SMEs, and spin-offs. In 2020, SSSP was proven to significantly improve the success rates of start-ups. In this bridging call, we propose informing the adoption of SSSP by business support agencies in the NPA by trialing SSSP with 10 start-ups, SMEs, and spinoffs in the circular economy sector in Ireland and Finland.
				Publicly funded programs commonly use approaches such as Lean Start-Up, Effectuation, and Business Experimentation. These are well described in the academic literature but lack experimental evidence proving improved success rates and business growth. Only recently have Randomised Controlled Trials been published supporting the efficacy of some approaches. Most notably,

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				Camuffo et al., (2020) reported a large impact from teaching start-ups to use a structured approach to assessing their decisions like how a scientist may assess a research question. Example business decisions that could be improved using the SSSP include assessing potential business model changes and investments. Compared to the randomly assigned control group receiving a typical start-up training program, the group that received the SSSP had a higher survival rate and higher revenue in the months after the program. Such robust findings where cause and effect are carefully untangled are unprecedented in the field. For business support providers, the study gives the best evidence yet regarding how to improve client business success. Early adoption of SSSP by business support agencies in the NPA has the potential to improve NPA businesses' success rates.
				It is the feasibility and impact of implementing SSSP that this bridging call proposal will focus on. Subsequently, this will form the basis of an NPA 2021-2027 main project to support broader adoption of SSSP by business support agencies throughout the NPA.
EMS 453 Smart early export ecosystem development for SMEs	Total cost Total grant ERDF	91.992,85 59.795,34 59.795,34	Lead Partner: University of Oulu (FIN) Partnership: Munster Technological University (IE) Luleå University of Technology (SE)	Within Nordic and peripheral areas (NPA), there are substantial differences in the growth and exports of SMEs. These companies have the highest growth and innovation potential and they are crucial to rural regional economies and growth supporting cohesion. Export activities enlargers markets of rural and remote SMEs critically. Particularly in the early growth stage, exports of SMEs have extreme regional disparities, and some regions success exceptionally well as growth platform for companies being able to exports in early growth stage. The phenomenon and reasons to this, however, are not recognised by research literature, policy reports and regional strategies. Thus, best practices in supporting sustainable growth and early-stage exports are needed to be recognised, evaluated and shared within NPA.
				SEED project aims to enhance sustainable growth and competitiveness of SMEs and their job creation by increasing understanding of regional export circumstances and supporting entities within NPA by evidence-based knowledge. Combining and analysing regional growth data of SMEs together with regional economic data and sharing reasons and experiences that are found behind these regional differences, the project creates a strong basement

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				 for the planned main project. SEED project creates path to analyse, co-learn and share knowledge regarding to early export drivers and practices within NPA by: 1) Data survey and preliminary statistical analysis to map exports of SMEs and future project focus regions at NPA. 2) Building regional level co-learning network to recognise, evaluate and share best practices and activities within different profile export regions of SMEs to promote early-stage exports of SMEs in NPA. 3) Grounding a road map work towards smart early export ecosystem development of SMEs within NPA through active collaboration with partners and stakeholders.
				Key stakeholders are business services, regional developers, and ministeries.
EMS 464 Suitable Sustainability Goals for SMEs	Total grant 32	0.065,00 2.542,25 2.542,25	Lead Partner: Karelia UAS (FIN) Partnership: Western Development Commission (IE)	This project will find ways to assist SMEs set and achieve sustainability goals suitable for their enterprise and communicate them as part of their marketing communication. The need for this kind of support emerges from the experience of project partners business development work. Some enterprises have the right intentions, but they are unsure how to proceed in practice. Some need confidence in setting goals and therefore do not take action steps. There are also companies, who do some correct actions and might think that is enough.
				Project will focus on companies that work within circular economy and natural resources, but the project targets to create outputs suitable to support also other fields of businesses in project area. The assistance will include for example mentoring from the local forerunners of sustainability, so the smaller and larger enterprises will network in order to reach common sustainability targets, which will benefit both participants. Also, the project will explore the development of environmental management systems for companies.
				Interviews and workshops in partner areas would determine the content and methods suitable for target groups of main project.
				The main project will also assist SMEs to communicate their sustainability actions with marketing communications aspect, which will benefit the

Project name	Budget in El	JR [*]	Partnership:	Summary
				marketing of the companies and therefore reach beyond their existing market.
				In the bridging project it is important to work with associated partners,
				stakeholders, and SMEs to commit enterprises to participate in reaching the
				shared sustainability targets. This bridging project will search potential
				partners for main project.
EMS 473	Total cost	129.898,95	Lead Partner:	This bridge project is going to deal with how to develop social
BUSINESS MODELS	Total grant	75.333,06	Mid Sweden University (SE)	entrepreneurship in rural areas in the Northern Periphery.
EMPOWERING	ERDF	44.995,56		It will clarify the approach, methods, and project design for a future project.
RURAL SOCIAL	ERDF 20%	15.000,00	Partnership:	Swedish, Norwegian, Irish, and Scottish partners will map and exchange
ENTREPRENEURSHIP	Norway	15.337,50	Social Enterprise Academy	experiences and knowledge about best practices for social entrepreneurs and
- VOICING THE			Scotland (SC)	how to facilitate start-ups and upscaling in remote communities. The project
RURAL NORM			Coompanion Co-operative	emphasizes a bottom-up approach where social entrepreneurs who have
			Development in Västernorrland (SE)	succeeded themselves play key roles as experts by experience in dialogs and knowledge building.
			(SE) Competence Center for Lived	The project will provide significant added value in form of knowledge that
			Experience and Service	emerges from a collaboration between social entrepreneurs, incubators, and
			Development (NO)	academics across the involved countries. Through comparison of systems and
				structures in different countries, the project will draw lessons from conditions
				that social entrepreneurs must relate to, as well as impacts of appropriate
				facilitation, support measures, and knowledgeable entrepreneurial
				management that improves success. Impacts of collaboration climate between
				local actors, attitudes among inhabitants, and access to local resources is also
				relevant factors to look upon in a pre-study.
				Project meetings will be held both as digital meetings and physical attendance
				and study visits in the various partner countries.
EMS 482	Total cost	67.053,12	Lead Partner:	Throughout the Covid-19 pandemic, the importance of Digital Hubs took on a
SMART MENTORING	Total grant	40.574,81	Western Development	new meaning when the world turned to remote working. They became vital in
PLATFORM	ERDF	24.193,57	Commission (IE)	supporting employment & careers in rural and peripheral areas. Now, looking
CAPABILITY FOR	Iceland	16.381,24		towards the end of the pandemic & reopening of countries, Digital Hubs
REGIONAL HUBS			Partnership:	remain vital as both workers & employers embrace a "hybrid working"
			SCCUL Enterprises CLG (IE)	reality. A balance of hub/home and office working that reduces an individual's
			Association of Municipalities in	commute and carbon footprint but increases footfall in rural locations and
			Northeast Iceland (IS)	more family time is a more appetising reality for many people that positively
			Matis (IS)	impacts their local economy.

Project name	Budget in E	JR*	Partnership:	Summary BizMentors International is an online business mentoring initiative that provides community-based peer to peer mentoring support to entrepreneurs and businesses that is structured, free, managed centrally online and transferable across other sectors. It is entirely inclusive, supporting all start up and existing SME's.
				Originally piloted in the agri-food sectors, HubMent would see an extension and scaling of BizMentors Internationals service by building strategic partnerships with regional organisations and hubs to link mentoring and associated capabilities via digital platforms to key communities or groups of SMEs, for example in the areas of the Creative Economy (CREW Galway) and Food Innovation (BIA Innovate) using Digital Hubs both regionally and transnationally as focal points. In Ireland the "connectedhubs.ie" organisation of 400 hubs will be involved in piloting the concept across the diverse range of SMEs located within them. Transnationally, within the NPA region, we have identified possible strategic partnerships in the areas of, for example, Fisheries and Food Innovation (Iceland).
				Additionally, the project shall seek to extend the online mentoring model to the Social Enterprise realm, allowing municipalities and development organisations facilitate and accelerate mentoring in this sector.
EMS 456 Tourism360: A Circular Tourism Approach in Arctic Destinations	Total cost Total grant ERDF Iceland	96.062,90 60.141,57 32.549,82 27.591,75	Lead Partner: University of the Highlands and Islands (SC) Partnership: Karelia University of Applied Sciences (FI) University of Iceland - Hornafjordu Research Center (IS) Icelandic Tourism Research	The purpose of this bridging project is to explore the options and support for a new approach to tourism in the northern periphery and Arctic, that of 'circular tourism' – the creation of tourism products, goods and services without wasting limited resources, and not only limiting the impact of tourism on the environment but to 'leave things better'. The project partners ail to build upon the circular tourism model, however, by exploring the integration of regenerative tourism practices that aim to steward the natural resources on which tourism depends and create a closer match between what the community wants to share and what the visitor values.
			Centre (IS)	Mass tourism, based on a traditional model, is now falling short of its promise. Even pre-COVID it was producing diminishing returns for providers and host communities, overcrowding destinations, commoditizing unique places into homogenised 'products' and placing excessive pressure on scarce resources.

Project name	Budget in EU	R*	Partnership:	Summary
				The impact of the pandemic has served to underline the fragility of many tourism businesses and the economies of the communities which are dependent on it. What is now needed is a form of tourism that is more resilient and enables both the planet and all those involved to flourish.
				The aim of Tourism360 is to undertake four case studies, to a) develop a high- level understanding of what elements of circular, and regenerative, tourism are already being implemented, with a recognition of good practice; b) engage with end-users – tourism SMEs, DMOs and key stakeholders – in four regional case studies through workshops, surveys and interviews; and c) synthesise the outputs to develop a circular tourism model for destinations, which also draws in elements of regenerative tourism. The deliverable will be a final report that combines the first two reports and presents a model for circular tourism which would be developed, pilot tested and promoted in a consequent main NPA project.
EMS 465 BLUE CIRCULAR TECH	Total cost Total grant ERDF ERDF 20% Norway	59.925,25 35.952,91 13.000,00 12.957,94 9.994,97	Lead Partner: Norwegian University of Science and Technology (NO) Partnership: Western Development Commission (IE) University for the Creative Arts (EN)	Due to the ongoing degradation of ocean health caused by emissions of waste plastics, marine plastic pollution is high on the global agenda where targets to abolish marine litter feature in international policy frameworks such as the Ocean Decade and the SDGs. Though figures vary, it is clear that a large proportion of marine plastic is composed of abandoned, lost, and discarded fishing gear (ALDFGs). Achieving these targets will require a systemic shift from linear to circular value chains for plastic, and a shift in the current perception of single-use or discarded plastics from waste to resource among businesses, consumers, and communities. Another impetus comes from the incoming Extended Producer Responsibility (EPR) scheme for fishing gear (2024) and emerging CEN standards for the design of gear (also 2024) which will have major implications for gear design, manufacture, marketing, and disposal or reuse. Following the NPA projects Circular Ocean (2016 Regiostars Public Choice Award winner) and Blue Circular Economy (2020 Regiostars Awards finalist), there is a continued need to engage SMEs and other stakeholders in the marine sector to develop solutions for ALDFGs while also generating new opportunities in the circular economy. Using lessons from these and other initiatives, BCT will seek to accelerate the ability of peripheral communities and SMEs to create these solutions. It will connect SMEs interested in generating resources from waste gear, and give them greater insight into

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				emerging technologies, upcycling opportunities, and product development strategies including product sustainability narratives centred on the circular economy. Drawing on the expert connections developed during Circular Ocean and BCE, the BCT project will also inform and engage SMEs, marine stakeholders, and marine communities about the relevant legislation and policies which are taking shape around gear design, EPR, and national and transnational circular economy initiatives.
EMS# 471 Sustainable Green energy technoLogy solutions for	Total cost Total grant ERDF Iceland	81.833,82 52.191,98 40.191,98 12.000,00	Lead Partner: Ulster University (NI) Partnership:	This project will apply a Green Business Model to pilot/learn how to develop sustainability methodologies in SMEs with a focus on companies and social enterprises serving the Dark Nights Tourism Economy.
tOurism groWth		12.000,00	The Gaeltacht Authority (IE) Karelia University of Applied Sciences (FI) North West Regional Association (IS)	The project will support enterprises and social organisations in developing tourism flow during the dark winter months by enabling the application of immersive technologies at an enterprise level and developing common use applications presenting the night sky (developed during the project). These will be integrated into existing tourism strategies and offers on natural and cultural heritage to develop a marketing platform, which will enable the enterprises to reach beyond their existing markets. These will enable the enterprises to develop their own green business models. Green business can grow economically and reduce use of resources. The project will integrate mentoring techniques for green business with immersive technologies for maximum impact.
				To ensure buy in from enterprises, this bridging study will involve them in workshops to determine their priorities and what they can absorb. This will largely determine the service offer. However, there will also be workshops with other stakeholders, tourism and local authorities and community groups, to determine how synergies can be developed in the quadruple helix and what are the limits to feasibility. The project offer will be aligned with regional and local project strategies and actors.
				There will be technical and financial feasibility studies done to ensure that the immersive technologies developed reach their objectives, The immersive technologies will include those aimed at enterprises (e.g. 360 degree photography) and the design of a virtual planetarium for application in all

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				northern regions as a common resource.				
				The full project plan will take account of enterprise and community needs, technological and financial feasibility.				
Priority Axis 3 – Energ	Priority Axis 3 – Energy efficiency							
EMS 467 Sustainable Marine Energy Communities in the Northern and Periphery Regions	Total cost Total grant ERDF ERDF 20% Norway	96.129,80 58.924,12 31.794,23 15.262,39 11.867,50	Lead Partner: The Gaeltacht Authority (IE) Partnership: Centria University of Applied Sciences(FI) Waterford Institute of Technology (UiT the Arctic University of Norway (NO)					

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EMS 470 HYBES Hybrid energy solution for buildings, transportation, mobility, and infrastructure	Total cost Total grant ERDF Norway	100.000,00 59.599,99 41.599,99 18.000,00	Lead Partner: Nordland Research Institute (NO) Partnership: Cork County Council (IE) NCE Insulation (IE) Municipality of Umeå (SE)	How urban and rural areas in the northern periphery and arctic can implement more energy efficient solutions to obtain substantial reduction of greenhouse gas emissions, is the focus of this project: "Hybrid energy solutionS for buildings, transportation, mobility, and infrastructure (Hybes)". We need to rethink and develop energy efficient solutions and combine different renewable energy carriers for buildings and transportation. To reach the EU goal to make buildings energy- and CO2-neutral it is important to take into use and combine different energy technologies like solar, hydrothermal, wind, district heating etc. To build in this flexibility and capacity will make the energy infrastructure less vulnerable and reduce future infrastructure cost substantial. A key objective of this proposal is to provide a future project proposal which will facilitate the delivery of pilot decarbonisation zones (DZ's) in urban and rural settlements across the NPA region. These DZ's will combine differing techniques in delivering CO2 neutrality. To build capacity is also essential to make transportation and mobility sustainable and to promote the transformation of transportation towards using electricity and hydrogen for transportation. The preparatory project Hybes, as part of Bridging Call for Main Project Applications, consists of a consortium of local authorities, social housing organizations, and research institutions and will engage stakeholders and communities. Hybes pre-project aims to develop a high-quality proposal of the forthcoming NPA 2021 2027 programme.
Priority Axis 4 – Natu		-		
EMS 460 ENHANCING LOW- CARBON SOLUTIONS FOR ARCTIC MOBILITIES IN LOCAL AND TOURISM CONTEXTS	Total cost Total grant ERDF ERDF 20% Greenland	95.818,98 62.282,33 46.681,37 10.400,96 5.200,00	Lead Partner: Natural Resources Institute Finland (FI) Partnership: University of Lapland (FI) National University of Ireland, Galwa (IE) University of Linköping (SE) Roskilde University (DK) University of Greenland (GL)	 Achieving the global aim of low-carbon mobility will require changing behavioural habits, reducing transport use, promoting energy efficiency and enhancing the use of renewable energy sources. While these aims can be partly addressed through administrative decisions and implementing regional and national strategies, changing people's habits and routines is much more challenging and demands change in broader social practices. This project will examine social practices of mobility and socially sustainable mobility transformations in the Northern Peripheries. In these regions, with sparse populations, cold climates, and long distances, achieving low-carbon mobility is societally important, but especially challenging for the future development of remote, peripheral

Project name	Budget in E	UR [*]	Partnership:	Summary
				rural areas and their communities that depend on natural resources and their extraction. Instead of a sectoral approach to mobility, typical in climate change strategies, this project has a comprehensive approach to the social practices of mobility. Our main task will be one of enhancing the implementation of current regional and national strategies around climate-change mitigation and adaptation efforts that support innovative low-carbon social practices of mobility and immobility in Arctic and northern peripheral areas. In this preparatory project all relevant strategies will be evaluated and both public and private stakeholders contacted. The project will use a selection of case studies in different mobility contexts. The consortium has a wide array of expertise and also geographical outreach from Greenland to Ireland and Scandinavia. With the lead of Luke we will make a full proposal which addresses current practices and the societal preconditions of mobilities, the most important obstacles to change, and most significantly, important local solutions and best practices. Overall the project supports the implementation of UN SDGs 2030.
EMS 461 SWATCH Smart Water Management Against the Threats of Climate Change	Total cost Total grant ERDF ERDF 20 Norway	95.022,61 55.764,69 32.750,00 13.014,69 10.000.00	Lead Partner: Savonia UAS (FIN) Partnership: Bodö Kommune (NO) Central Solutions (IE) Herriot Watt University (UK)	 The objective of the SWATCH-project is to develop a project application between the partners focusing on strengthening resiliency against weather extremes threatening surface water management and water supply in communities and municipalities in the NPA-region. The SWATCH-project has three main goals: To form a project group with the required skills and knowledge, and involve potential associate partners in the project. To identify the scope of the main project and clarify the roles of the partners. To develop the application for the main project. Weather extremes due to climate change are adversely challenging water management across many areas of Northern Europe. Threats such as extreme rainfall events are difficult to manage, especially in coastal areas, mountainous regions, and those areas predicted to experience significant increases in frequency and intensity of rainfall. Ireland, Scotland, Norway, and Finland are amongst those countries in Northern Europe that are expected to experience more uncertain and extreme rainfall events in the near future.

Project name	Budget in El	JR [*]	Partnership:	Summary
EMS 475 Living on the Edge Transformative strategies for coastal ecosystem mFanagement	Total cost Total grant ERDF 20% Norway Iceland	100.490,00 56.245.00 15.600,00 26.245,00 14.400,00	Partnership: Lead Partner: Museum Nord (NO) Partnership: The Arctic University of Norway (NO Trinity College Dublin (IE) Stefansson Arctic Institute (IS)	 Then focus of the main project will be to develop and deploy digital tools for smart water management for use by municipalities and regional authorities within the NPA-region in responding to climate change impacts. The main project will develop and pilot digital tools for modelling the effects of heavy rainfall, as well as new monitoring systems to manage surface water reservoirs, water distribution networks, and sewage systems in real time for different weather conditions. Selected models will be piloted in case studies for selected partner regions. Best practices identified can be transferred to other NPA-region. Living on the Edge is a collaborative and interdisciplinary research project between research institutions, universities, museums, cultural organisations and coastal communities to better understand the ecological shifts that have happened in the North Atlantic over time, and
				 management in inter-municipal coastal planning) and ecosystem-based fisheries management (management plans for marine areas). Equally important to addressing these issues on policy level, we will disseminate learning to a broad public through an online platform and through the dissemination practices of the participating museums and cultural centres. This preparatory bridging project will facilitate partner meetings, a feasibility study, a partner search including a workshop and a new application to the NPA's programme 2021-27 in order to realise our project idea. The application is situated in programme objective 4 with a view to bridge towards NPA 2021-2027 specific objective 2.2.

Project name	Budget in EUR [*]	Partnership:	Summary	
Total 22 projects		Explanation country co	Explanation country codes	
		FI — Finland	CA – Canada	
		FO – Faroe Islands	EN - England	
		GL – Greenland	DK – Denmark	
		IE – Ireland	USA	
		IS – Iceland	Russia	
		NI – Northern Ireland		
		NO – Norway		
		SC – Scotland		
		SE – Sweden		