



# Interreg addressing Climate Change: the power of cooperation for a Greener Europe











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# DAREFFORT

Danube river basin enhanced flood forecasting cooperation

The main objective of DAREFFORT project is a forecasting system based on the cooperation among the Danube Basin countries. The project aims to explore the current status of the national forecasting abilities in order to develop the existing system in an inclusive way, therefore improve the forecasting system of the area. Reliable hydrologic data provides the basis for a dependable flood forecasting system in the Danube Basin. It is important to have a proper emergency plan in the countries most afflicted by the flood risk, but it is fundamental to have a sound forecasting system which can increase the preparation time and therefore save human lives and social estate.









# **FLOOD PROTECTION**

Cross border planning and infrastructure protection measures to fight the flood risks due to the climate change





The main objective of the project is to increase the level of protection against floods in the crossborder area of Greece and Bulgaria and especially in areas with high probability of flood events across the two international river basins of Struma/Strymon and Evros/Maritsa.

The project's main outputs are:

- The enhancement of anti-flood infrastructure in Kerkini Lake. Supply of mobile temporary flood defense equipment for Strymon River and wheeled pumping stations.
- The implementation of small scale interventions to enhance anti-flood infrastructure.
- The elaboration of an impact assessment study.
- The construction and upgrading of 3 security concrete walls along Cherna river, Varbitsa river ans Chepinska river.
- The strengthening of the right bank and cleaning of the Maritsa River.
- The restoration of the protective dike on Krumovitsa river and the construction of a protective dike on Dzhebelska river.
- The construction of protective facilities along the Struma River.
- The Collection of land EO data for modeling sediment transport in Strymon river basin.

After the completion of the project more than 572.000 people will benefit from flood protection measures.

www.greece-bulgaria.eu www.crossborderfloodprotection.eu



# **Felles Fjellrev Nord**

### The arctic fox is considered to be worthy of protection according to the European Union and the Habitats Directive

The arctic fox is among the species destined to be hardest hit by climate change, therefore it has has been named one of ten flagship species for climate change according to IUCN, International Union for Conservation of Nature and Natural Resources.

The arctic fox is an important symbol for the Interreg Nord programme area and the mountains in the northern part of Sweden, Finland and Norway.

The partners in the project Felles Fjellrev Nord works large-scale and coordinated together across borders to create better conditions for the arctic fox. Within the project there is a great support from the participating research institutions with very strong scientific foundation linked specifically to the arctic fox. The project Felles Fjellrev Nord will develop a proposal for a regional management plan based on government guidelines and create favorable conditions for the management of arctic foxes in Sweden, Finland and Norway.





www.interregnord.com www.fellesfjellrev.se





More and more climate change forces us to get together across countries, to effectively face emergencies created by extreme weather conditions, fire, and floods.

The project TO BE READY (The flOod and Big firE foRest, prediction, forecAst anD emergency management) wants to enhance prevention and preparedness measures regarding natural and man-made disasters and improve safety in the programme area. This will be achieved by adopting joint protocols and standards in case of wildfires and floods, and improving operators' knowledge and skills. Main output is the development of a shared model of prevention and intervention to be activated in partners' countries. In addition, TO BE READY will support the creation of a transnational network of institutions active in the field of natural hazards, that will facilitate the easy and safe transfer of facilities, men and materials in case of major events.



4 partners



www.italy-albania-montenegro.eu https://tobeready.italy-albania-montenegro.eu

Campobasso



Interreg - IPA CBC

Podgorica

Tirana



Energy is a gift. We are collecting ideas to reach circular economy and sustainable growth

Half of the electricity in the world is consumed by buildings. But how much energy could we save through more efficient buildings? And how would this slow down climate change?

The project REEHUB (Regional Energy Efficiency HUB) wants to increase energy efficiency of public buildings in the cross-border areas between Italy, Albania and Montenegro, through a network of hubs, enabling the training of building managers on energy-efficiency measures. In addition, the project aims to guarantee suitable and effective communication to consumers and awareness-raising at all levels of society. The idea is to create public venues where all the stakeholders involved can find tangible examples on how citizens can contribute to a sustainable growth, aligned to circular economy principles. The ambitious results is to shift from old buildings to low-energy or zero-energy buildings.











In fighting climate change, it matters what we eat. Our modern food systems make up to 25% - 30% of anthropogenic CO2-emissions, while producing animal-sourced food emits larger amounts of green-house gases than growing crops. The project SB FOOD INNO is working on a change towards more climate-friendly food production in SME's. To achieve a sustainable production of climate-friendly and healthy food products, SB FOOD INNO is working on increasing the capacities in food innovation of SME's in the food sector.

To achieve individual innovation approaches, SB FOOD INNO offers SME's to create their own innovations with the food innovation toolbox, promoting thus a sustainable and durable approach towards more climate-friendly food production.

# **SB FOOD INNO**

2.020.000,29€



7 partners





31.07.2017

30.07.2020

Ships carrying people, products and raw materials lead to a significant risk for maritime accidents resulting in oil spills and severe environmental damage. The project SBOIL is supporting to preserve the Baltic Sea's ecosystem in a cross-border approach.

SBOIL uses the previously developed new spill response technology (BioBind) to train staff across the South Baltic coastal regions on the towing behaviour of the "netboom", a net which recovers the ecologic oil-binder from the surface of the water. For the immediate, coordinated and appropriate reaction to oil spills, spill response managers are being trained, among others on the operational aspects of the BioBind system and natural influences depending on the spill's size and location.







www.southbaltic.eu http://herm.kueste.auf.uni-rostock.de/~msie/sboil/

# SBOIL

The risk of oil spills on the Baltic Sea requires cross-border management and coordination for a successful protection of the maritime environment

# **LCL - Low Carbon Logistics**



Reducing CO2-emissions in city centres by using cargo-bikes for the last-mile-delivery of goods and parcels

Reducing carbon emissions is crucial in the mitigation of climate change. To reduce a considerable amount of CO2-emissions, the density of buildings in city centres can be used to reduce carbon emissions for deliveries. The project LCL is taking the lead towards a more sustainable delivery of goods in city centres, developing a concept for more sustainable urban transport. Instead of using delivery trucks in city centres, the last-mile-delivery of goods and parcels in city centres can be replaced by cargo bikes, micro-depots and electric vehicles. LCL is developing the concept to be used as a model for city centres in the South Baltic area, which can decrease noise and CO2-emissions in city centres in the entire South Baltic region.





www.southbaltic.eu www.lcl-project.eu



# **3 WATCH OUT**

Joining forces in Civil Protection is necessary. The development of a cross-border risk management system will contribute to the Europe 2020 strategy



Natural disasters may affect all of us, wherever we are. Hydrogeological, seismic or fire risks know no borders.

The project 3 WATCH OUT (Trilateral model of civil protection: ways, tools and challenges for our safety) wants to improve the management of natural risks in the cross-border area between Italy, Albania and Montenegro, from risk prevention to cooperation in case of disasters. The main goal is to facilitate an integrated and multi-sectoral approach to environmental resources, strongly anchored to local territories and landscapes, as well as able to carry out joint actions for risk prevention. To achieve these results the project will define a trilateral cooperation model in the field of civil protection, in order to share experiences and skills related to the prevention of hydrogeological, seismic and fire risks.

€ 979.400,00€





Italy - Albania - Montenegro

www.italy-albania-montenegro.eu https://3watchout.italy-albania-montenegro.eu/



# **GLISTT**

An interregional glacier monitoring system for the South Tyrol region



The proposed project offers an innovative concept for operational and supraregional monitoring of glaciers. Special attention will be paid to the needs of stakeholders from the areas of hydrology, natural hazards, water and energy supply, agriculture and tourism. To implement this, existing programs for the monitoring glaciers in the region will be coordinated and continued as consistent as possible. Those programs with detailed measurements on individual glaciers will be complemented with innovative remote sensing data for all glaciers within the study area, which will deliver detailed information on recent glacier changes.







www.interreg.net



www.uibk.ac.at/geographie/projects/glistt/index.html.de

# **GURINIMAS**

The project contributes to the achievement of the EU Strategy for the Baltic Sea Region objective 'Save the Sea'

Estonia and Latvia have a common goal - to reduce the nitrogen input in the Gulf of Riga, due to its extensive pollution impact. The objective of the project was to develop close cooperation between Estonian and Latvian authorities and research institutions for the reduction of the nitrogen load into the Gulf of Riga.

One of the most anticipated results of the project is GURINIMAS virtual tool, that will help entrepreneurs and farmers to understand the nitrogen cycle and nitrogen that is generated in their farm. Another result of the project is jointly developed integrated nitrogen management system for Estonian and Latvian governmental institutions. It includes an integrated approach to reducing nitrogen pollution across sectors.





The paper and the paper with the other





### Integrating nature-based solutions in innovative flood defence systems



Building with Nature explores the role of natural systems – such as dunes, sandy shores, lakes and rivers - in climate resilience. Nature-based solutions complement traditional flood defence systems in tackling the growing frequency and scale of flooding episodes.

Pilots are testing measures like sand nourishment, eelgrass, and re-meandering of rivers to build flood defence whilst creating space for biodiversity and human recreation. Documenting costs and effects will inform climate adaptation strategies.

The project is garnering attention amongst policymakers and was highlighted in the 2018 UN report 'Nature Based Solutions for Water'. The partnership works with the US Army Corps of Engineers on guidance for BwN practitioners.





www.northsearegion.eu
www.northsearegion.eu/building-with-nature
N



# Carbon Smart Communities (CaSCo)

The CaSCo project highlights CO2 reduction potential by showing how regional timber supply chains can contribute to emission reductions in the Alpine Space

Increasingly complex material flows in the timber industry spanning ever greater distances considerably contribute to climate change. CaSCo raises awareness for low carbon timber amongst public authorities, architects and SMEs and makes the case for the role of low carbon timber in Green Public Procurement. While public sector orders result in a large proportion of these flows, public purchasers rarely take the climate impact of their practices into account. In the Alpine Space, timber plays an important role in public procurement but is often associated with long transportation routes. By sourcing timber locally, the public procurement sector can go a long way towards reducing emissions resulting from shipping.





www.alpine-space.eu www.alpine-space.eu/projects/casco/en/home





ESMARTCITY reduces cities' environmental impact transforming them into innovation ecosystems

Cities account for 55% of world population projected to 68% by 2050. Urban areas account for 60% to 80% of global energy consumption / CO2 emissions. It is therefore necessary to make cities more sustainable, "smarter". However, smart cities are far from being the rule in the Mediterranean basin.

Faced with that reality, ESMARTCITY project is working to improve the innovation capacity of the cities in the Mediterranean region by creating innovative ecosystems involving citizens, business, research centres and public authorities.

The project is conducting pilot tests related to intelligent districts, smarter energy and smarter lighting in 7 countries. Lessons learnt result in a Green Paper on Innovation Policy Change creating a long-lasting effect in the Interreg MED area.







www.interreg-med.eu https://esmartcity.interreg-med.eu/



Raising awareness of the effects of climate change in the Pyrenees and improve the territory's resilience

The Pyrenean Climate Change Observatory (OPCC) is an initiative of the Working Community of the Pyrenees that aligns the scientific community with relevant policy makers. Its mission is to become the main reference for Climate Change adaptation in the Pyrenean massif thanks to a cooperation, transparency and transferability policy.

The OPCC2 wants to better understand climate in the Pyrenees so as to reduce natural & human ecosystems vulnerabilities and help the territory adapt to its effects. The OPCC2 has 3 objectives: identify and analyse the impacts of climate change in the Pyrenees, develop tools to help decision-making in climate change adaptation measures via the dissemination of research, and raise awareness at international level.





€ 1.173.919,50€

7 partners

3101.06.201630.06.2019

## DriDanube

The project improved drought emergency response and coordination between operational services and different decision making authorities



The main objective of DriDanube project was to increase the capacity of the Danube region to manage drought related risks. The project aimed at helping all stakeholders involved in drought management to become more efficient during drought emergency response and prepare better for the next drought.

One of the main products of the project was Drought User Service, which enabled more accurate and efficient drought monitoring and timely early warning. The service integrates all the available data, including large volume of the most recent remote sensing products.

DriDanube harmonized the currently heterogeneous methodologies for risk and impact assessments, based on the existing achievements in participating countries and on EU guidelines in the frame of the Civil Protection Mechanism.

DriDanube's main expected result was improving drought emergency response and better cooperation among operational services and decision making authorities in a Danube region on national and regional level.

The project improved the management of drought related risks, harmonizing different national and regional operational services and decision making authorities.











www.interreg-danube.eu www.interreg-danube.eu/dridanube



The 21st century has brought unprecedented interest in Arctic resources, turning the region from the world's periphery into the center of global attention. Driven by global climate change and related to it industrial and economic activities, within the next 50 years, Arctic coastal communities, their habitual environment and traditional lifestyle will undergo severe changes.

By 2025, we can see an increase of total activity level in the Arctic. It concerns coastal and intercontinental traffic, the fisheries, oil and gas industry, maritime tourism, research and other governmental activities. These activities are already increasing and they include the following kind of actions:

- · more oil and gas deposit fields opened for licensing,
- more trade and tourism ships crossing the ocean,
- more industrial projects overall in the Northern Periphery and Arctic region.

All these, if we want it or not, will bring new ecological risks to the region. We have currently a great deal of gaps in our preparedness system to accidents at sea.

Among the main project objectives are to:

- · Introduce local coastal authorities to state-of-theart technologies to improve organizational knowledge and operational performance;
- Make sure that internationally/locally discovered know-hows are recognized and used;
- Form a transnational expert pool to share knowledge on oil behaviour on sea, oil spill response methods, experience with tools and models;
- Provide local authorities and communities with an open access knowledge bank;
- · Offer a decision-making tool to aid efficient response, aimed at minimizing ecological risks;
- Offer interactive educational material to educational institutes.



UROPEAN UNION

1.414.143,00€

8 partners

01.05.2017 30.04.2020

www.interreg-npa.eu

£







The goal of ECOnnect is to show how the environment in the Bothnian Bay will be affected by climate change in one hundred years from now











www.botnia-atlantica.eu www.econnect2120.com



**ECOnnect** 

Community planning faces a challenging period due to global warming. Identifying future problems, challenges and changes becomes essential for community planning to come up with effective solutions and adaptations for our society.

Global warming will in different ways affect our society. Today several effects of climate change have already been noticed, but what kind of effects we will see at regional scale, such as changes in ecosystem services, is still unknown. The uncertainty increases pressure on the community planning. To create a sustainable long-term planning, increased knowledge about climate change and its effects on regional scale is needed.

The goal of ECOnnect is to show how the environment in the Bothnian Bay will be affected by climate change in one hundred years from now. The project will also analyze the effects on important ecosystem services in the region. Our goal is that ECOnnect will generate information that can improve the prerequisites for community planning to tackle global warming, the perhaps biggest challenge in human history.

# **Danube Floodplain**

The aim of the project is reducing the flood risk through floodplain restoration along the Danube River and tributaries

The project foresees: updating the floodplain areas inventory and their ranking using the Floodplain Evaluation Matrix-FEM; assessing, by using the pre-selected pilot areas, of the efficiency of floodplain projects in the Danube District and developing tools for increasing the knowledge and cooperation of experts, practitioners, decision makers and stakeholders on floodplain restoration.

The Project will develop tools like: Danube basin wide floodplain restoration and preservation manual addressed mainly to practitioners; a DRB Sustainable Floodplain management Strategic Guidance summarizing the key findings of the manual targeting a wider audience; a DRB Roadmap comprising agreed next steps towards realizing floodplain projects.







www.interreg-danube.eu/danube-floodplain







The project aims to valorize and reinforce the civil protection volunteers (CPV) of the cross-border area in order to establish a joint certified, integrated and appropriately equipped framework for their education, training and operational support in matters of wildland fire and flood management. This will lead to the enhancement of the cross-border biodiversity protection against natural hazards and the improvement of the conservation status of cross-border habitats and also to the protection of societies from upcoming natural disasters. The cross-border approach will also address the issues of efficient cross-border cooperation and operational compatibility amongst Greek and Bulgarian CPV which are designed to pertain under a joint transnational umbrella.

The main outputs of eOUTLAND include (a) the creation of a certified integrated joint educational program consisting of specific modules and training material, on-site, video and live streaming trainings and innovative ICT learning tools, (b) the creation of a robust framework to enhance the operational capacity of the cross-border CPV towards environmental/biodiversity protection from natural hazards, (c) the base setting for future sustainability by establishing certification procedures, ensuring the transferability and replicability of the project's results and creating a viable and sustainable cross-border network of structures.

It should be noted that the new common character of the cross-border approach makes the project a pioneer in its field. The added value consists in creating an effective and innovative system for the protection of NATURA 2000 and other protected areas of the cross-border area as well as of civilians and properties while helping towards the sustainable financial management of the central and local government resources.

Additionally, the project will promote the awareness and mobilization into society with benefits in resilience, security and prevention of the adverse effects due to natural hazards. Finally, the project targets in promoting volunteerism and the volunteers' familiarization with new technology tools along with the continuing, evolvement and operational application of an already successful previous project into the current programming period and beyond.

5 partners

1.207.821,83€







ENG

# **Green Public Events**

To facilitate the change in behaviour of participants of public events the awareness raising campaign was organised contributing to the greener and environmentally friendlier events. The digital tool and creative installation 'Save our paradise' were presented in the business conference and music festivals. The green guidelines in Estonian, Latvian and English languages were developed and disseminated among the organisers of the public events in both countries during project lifetime and are available on project website. Media campaign in Latvia and Estonia included outdoors posters with tips for the picnic season and about avoiding single use dishes, as well posts in social media and video competition for youth (age limit: 30).





Interreg Estonia-Latvia



Raising awareness on saving resources and reducing waste at public events

RY ONLY HAVING FULL LOAD

IEW DEVICE

THE HOUSE I LIVE IN IS WELL-INSULATED

NEXT

CHOOSE THE MOST ENERGY EFFICIENT

NCES COMPLETELY WHEN THEY ARE NOT IN

Building resilient water management based on mapping of local groundwater and soil conditions

# TOPSOIL





Rising temperatures and erratic weather patterns do not allow much time for trial and error: Efficient measures to tackle all aspects of the water cycle are urgently needed.

Down to 30 m, the soil and groundwater beneath our feet are responding rapidly to climate change, leading to risks of flooding or drought. TOPSOIL deploys advanced technology to map subsoil structure, predict specific local risk scenarios and develop new solutions and governance models.

TOPSOIL is tackling complex issues that come with a high price tag if left unresolved. Their approach has already been taken up by regional authorities in Denmark, the Netherlands, and the US. Preliminary results are being integrated into land management in Germany and the UK.



24 partners

01.12.20153130.04.2020

www.northsearegion.eu/topsoil





The main objective of the project is to use cross-border cooperation to mark critical areas of landslide hazards in parts of Croatia, Bosnia and Herzegovina and Montenegro by developing an online landslide susceptibility mapping (LSM) system that allows any potential or occurring disasters to be mapped in real time.

The project mapped 11.145 km<sup>2</sup> in the cross-border region, and marked all existing and at-risk areas. From this data, the project developed a transnational guide that has helped improve risk prevention systems. The information gathered is available to the public online. The maps can be used as a point of reference for decisions about infrastructure investments and to optimise spatial planning, to prevent loss of life and better protect biodiversity and nature.

To widen the scope of the project beyond its partners, a real-time interactive geographic information system was developed that can be used by anyone with an internet connection. The online portal allows users to report potential threats of landslides or floods with descriptive data and images. Since its launch, the report a landslide system has received over 230 reports of landslides. By promoting the portal during dedicated project events, it is now being used by institutions and companies outside the project and its operational area.





# **UBIS - Urban Baltic Industrial Symbiosis**



Reducing industrial emissions by sharing resources — industrial symbiosis fosters the re-use of industrial emissions and by-products

Industrial emissions don't have to pollute the environment, they can be used and reduced. Symbioses can be an economic and ecological benefit.

In symbioses between different enterprises residual energy, emissions and by-products are re-used for different purposes. The project UBIS (Urban Baltic Industrial Symbiosis) is developing tools for potential industrial symbioses in the South Baltic area, where four pilot models are being developed and tested. One of the pilot models, implemented in Gdańsk, is re-using residual energy of the local Spinning Fluid Reactor for public objects, e.g. to heat the sidewalks near bus stations to remove the glaze in winter.

Industrial symbioses are economically attractive, can influence regional growth and support mitigating climate change.



www.southbaltic.eu https://ubis.nu/



# **MPA-ADAPT**

MPA-ADAPT is helping Mediterranean Marine Protected Areas develop ways to improve the resilience of biodiversity and safeguard ecosystems against the effects of climate change

The climate will change rapidly over the next decades in the Mediterranean basin. Direct evidence of climate change is already being observed on the coast, including in marine protected areas (MPAs).

The need to build resilience in both social and ecological aspects of MPAs by adopting adaptive management plans thus becomes an essential element to adjust and mitigate against the rapid changes to maintain and protect healthy ecosystems.

However, climate change is not explicitly integrated in most management plans. Information to assist MPA decision making is both limited and fragmented. MPA-ADAPT therefore aims at developing collaborative and site-specific adaptation plans to increase the resilience of MPAs to climate change impacts.

MPA-ADAPT will live on through MPA-engage which will continue the project's work and tackle a Mediterranean Policy Dialogue.



mares



# C.L.I.M.A.T.E

The project will tackle climate change on local and regional levels using models of best practice to develop climate adaptation plans for local authorities





The main project objective is 'Promote and improve climate change awareness in European peripheral rural communities through a knowledge based approach and community led sustainable resource planning that will mitigate against future climate impact and incorporating transnational collaboration through a best practice model which will improve preparedness for sustainable environmental management in future years'.

Involved UK and Irish partners' will learn significantly from the climate adaptation expertise of Scandinavian & Faroes partners whilst UK and Irish partners' will share their knowledge & experience of effectively utilising a 'bottom-up' community led approach to achieving desired results.

The project partners have come together to analyse and evaluate climate change issues and to use best practice models to develop a method for development of a Climate Adaptation Plan and Preparedness Scale matrix for local authorities. This project provides an opportunity for significant delivery of change on a transnational basis, the project will explore possibilities and practical solutions across the regions. This includes opportunities to explore what works in one region and how this can be transferred - particularly from a policy and implementation point of view.

The project will create new environmental management solutions such as a model for development of a Climate Adaptation Plan for local and central government that can be modified and adopted across the NPA region. The Preparedness Scale and Risk Register will also be innovative developments which will build on and adapt the baseline risk assessments carried out to date by Swedish municipalities.

The transnational partners bring a blend of practitioners, policy makers, statutory agencies as well as academia together to develop an approach to specific issues which each impacts upon the other and which offers the opportunity for shared learning and knowledge transfer.

www.interreg-npa.eu http://climate.interreg-npa.eu



FUROPEAN UNIO



When it rains heavily, it can flood almost anywhere, and landslides can occur. The solution lies in risk management planning, a particular need of the cross-border areas between Italy, Albania and Montenegro.

The project FLAT (Flood and Landslide Assistance and Training) wants to improve institutional capacity and create conditions to establish an efficient flood and landslide management system. Specifically, the project intends to improve cross border structures for responding in case of floods and landslides, strengthen the capacity of Rescue Services, create integrated initiatives and multilevel plans and tools for improving protection and risk management in flood-prone and landslide areas. As a result of project activities, a Regional Resource Training Centre will be set up, and a joint web platform will be created, to share data and real time information.









Innovative Greenhouses, Sustainable Agriculture, Energy & Water efficiency, Adaptation to Climate Change



## **MED Greenhouses**

MED GREENHOUSES has been promoting and disseminating the use of innovative greenhouses that minimize water and energy demand in the Mediterranean region. The project also raised awareness on issues related to energy and water efficiency as well as sustainable production.

To this end, MED GREENHOUSES created an agricultural Mediterranean cluster through a memorandum of agreement. They developed tailored policy recommendations favouring collaboration between the stakeholders of the 4-helix, improving existing framework for eco-innovation investments. They organised and designed workshops/webinars and training course materials on eco-innovative greenhouse technologies. The main beneficiaries were namely greenhouse farmers, businesses specialised in Agro-food and greenhouse industry, policy makers, Research Institutes.





www.interreg-med.eu https://medgreenhouses.interreg-med.eu/



# CATCH

Helping midsize cities and their citizens to cope with flood risk and extreme weather

In the North Sea Region, 80% of the population live in urban areas – most of them in midsize cities. Climate impacts may affect millions of people living there, but cities often lack resources to cope with climate change.

CATCH helps midsize cities to deal with flood risk and engage local citizens in the process. Its pilots are testing measures from ditches to flood risk alarms in traffic systems. Citizen engagement tools include free rainwater butts, serious gaming, and 3D city models.





www.northsearegion.eu www.northsearegion.eu/catch





Wastewater treatment plants (WWTPs) present one of the major energy consumers of municipalities. However, WWTPs are also capable of supplying energy by on-site methane production. The progressing worldwide energy transition faces unsolved issues in terms of fossil fuels. Great amounts of crude oil and carbon natural gas can be replaced by electricity and heat. However, the non-substitutable part exceeds the capacity of recent technology by far. WWTPs as an existing, ubiquitous and comparable infrastructure could contribute value in this matter. Wastewater associations do not identify themselves with this responsibility since their major task remains the efficient purification of water.



8 partners



Innsbruck Bozen



# GoApply

GoApply project facilitates multi-level and transnational governance of climate change adaptation in policy-making and practice in the Alpine Space

Adaptation strategies are a highly necessary policy response to climate change in the Alpine area. GoApply tackled multi-level and cross-sector climate adaptation challenges and addressed the issue by mapping, analysing and comparing relevant governance systems of different Alpine countries. The project thus worked on joint key challenges of adaptation governance: vertical implementation across territorial levels; horizontal mainstreaming into sector policies; active involvement of local, regional and non-governmental actors. GoApply also encouraged long-term transnational cooperation structures and set up exchange mechanisms with relevant institutional bodies (EUSALP - AG8 and Alpine Climate Board of the Alpine Convention).





01.11.2016

30.04.2019

5 partners

> BATELOOE

ENTER

OPLY

NTOLPHET

INVALID

JOUD



www.alpine-space.eu www.alpine-space.eu/projects/goapply/en/home €

734.331,10€







Municipalities are at the center of the debate on climate protection: within this process, many of them in Italy and Austria have decided to use an energy accounting system in order to monitor their consumption. However, the used systems are not uniform and the comparison is neither immediate nor easy.

The project TUNE aims to be a valuable support for local governments that already work in these fields. The objectives of the project are twofold: on the one hand to provide employees with new skills, on the other to allow cities to compare their energy performance across borders. This will lead to a more efficient and harmonized energy management and it will allow better planning on investments.







IDEE project will capitalize on the results of the Urban Energy Web project (Interreg IVA Italy-Austria) and go beyond it creating a cross-border research network on "integrative system analysis on urban energy systems".

Such a research nucleus will combine the complementary competencies of 4 partner research centers and one public authority to develop an integrated bottom-up assessment framework on urban energy systems. A new integrative model framework will be elaborated, interpreting energy, environmental, building, economic

and geographic information data will be jointly elaborated to support local authorities and other key stakeholders to plan energy investments in urban areas, giving strategic inputs on available potentials.





www.interreg.net www.interreg-idee.eu



# **CISKA**

The CISKA project developes a circular, Scandinavian business models in the innovative symbiosis green business parks, GreenLab Skive and Esval Miljøpark



The main goals of the CISKA project is:

- to achieve storage of surplus renewable energy (by converting electricity into gas, or converting hydrogen into ammonia or methanol),
- to develop and test circular business models in practice and
- increase cooperation across boundaries within the field of energy integration and storage.



4 partners



https://interreg-oks.eu
www.energibyenskive.dk/projekterne/ciska



# BEGIN

BEGIN reduces urban flood risk by substituting traditional grey infrastructure such as concrete for blue-green infrastructure (BGI) like parks, rivers, and lakes. BGI can bolster cities against extreme weather events whilst enhancing liveability.

Project partners in BEGIN are implementing BGI in 28 pilots in Germany, UK, Belgium, The Netherlands, Sweden and Norway. To enhance social benefits of blue-green infrastructure, BEGIN is involving thousands of citizens and stakeholders in the design of new parks and water bodies in their local area.

Preliminary results indicate a flood risk reduction of over 30%. BEGIN's partner cities expect to generate long-term benefits worth over  $\leq$ 430 million.



Using blue-green infrastructure to help cities adapt to climate change whilst boosting public health and liveability





8.800.000,00€



01.09.2016 31.07.2021



www.northsearegion.eu www.northsearegion.eu/begin



The Spain-Portugal border has a long experience in fighting forest fires: the CILIFO center wants to be a reference at European level

Both climate change and the abandonment of the rural world are two challenges that increase the risk of fire and affect the Spain-Portugal border, a European area that has a long experience in fighting forest fires.

In this context, with a total investment of more than 24 million euros, the Iberian Center for Research and Fight against Forest Fires (CILIFO), financed with FEDER funds through the Interreg Spain-Portugal Program (POCTEP), wants to be a reference space at European level.

With a partnership of 15 entities, it unifies operational protocols and procedures, training of the personnel of the extinguishing operation of forest fighting and launches a Technological Center based on innovation and dissemination, aimed at raising awareness among society in general



http://poctep.eu https://bit.ly/2ZrXnLy



# MARRISK

The northern coasts of Spain and Portugal face diverse challenges accentuated by climate change; based on past experiences, the MARRISK observatory projects future scenarios and develops climate services and a network of early warnings

Climate is a science, and thus it needs data and measurements. Based on this idea, the MARRISK project responds to the growing challenges of climate change.

The coastal communities of the northern Spain-Portugal border face diverse challenges. On the one hand, Galicia (Spain) suffers from storms and the affectation of its living resources. Meanwhile, the Portuguese coasts are strongly affected by erosion.

In this context, the MARRISK project, with a total investment of 3 million euros and co-financed by the European Regional Development Fund (ERDF) through the Interreg Spain-Portugal (POCTEP), capitalizes on past POCTEP projects and experiences, projecting future scenarios to develop climate services and an early warning network





http://poctep.eu http://www.poctep.eu/es/2014-2020/marrisk









