

# Cohesion Policy and Climate Change

## Annex A



## Regional Development





RESEARCH FOR REGI COMMITTEE

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# Cohesion Policy and Climate Change

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## Annex A

### **Abstract**

This study provides an assessment of how EU Cohesion Policy currently contributes and can contribute in the future to the attainment of the goals of EU Climate Policy. It explains how much of the budget goes to climate action and to what kind of initiatives across EU regions. It also discusses the obligations from the Paris Agreement, the role of Cohesion Policy within the European Green Deal and the impact of phasing out fossil fuels. Policy recommendations for strengthening climate action financed by Cohesion Policy are set out.

This document was requested by the European Parliament's Committee on Regional Development.

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## LIST OF ABBREVIATIONS

<b>CAP</b>	Common Agricultural Policy
<b>CEF</b>	Connecting Europe Facility
<b>CF</b>	Cohesion Fund
<b>CFP</b>	Common Fisheries Policy
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>COP</b>	Conference of the Parties
<b>COVID-19</b>	Coronavirus Disease 2019
<b>EEA</b>	European Environment Agency
<b>EIB</b>	European Investment Bank
<b>ERDF</b>	European Regional Development Fund
<b>ERDF</b>	European Regional Development Fund
<b>ESIF</b>	European Structural and Investment Funds
<b>ETS</b>	Emissions Trading System
<b>EU</b>	European Union
<b>G20</b>	Group of Twenty: the international forum that brings together the world's major economies accounting for more than 80% of world GDP, 75% of global trade and 60% of the world population.
<b>GDP</b>	Gross Domestic Product
<b>GHG</b>	Greenhouse Gases
<b>GtCO<sub>2e</sub></b>	Gigatonnes of carbon dioxide equivalent
<b>GW</b>	Gigawatt
<b>IB</b>	Intermediate Body
<b>INDC</b>	Intended Nationally Determined Contributions

<b>IPCC</b>	United Nations Intergovernmental Panel on Climate Change
<b>JRC</b>	Joint Research Centre
<b>LIFE</b>	EU's funding instrument for the environment and climate action
<b>LUC</b>	Land Use Change
<b>LULUCF</b>	Land Use, Land Use Change and Forestry
<b>MA</b>	Managing Authority
<b>MFF</b>	Multiannual Financial Framework
<b>MtCO<sub>2</sub>e</b>	Million tonnes of carbon dioxide equivalent
<b>MW</b>	Megawatt
<b>NDC</b>	Nationally Determined Contributions
<b>NGEU</b>	Next Generation EU
<b>OP</b>	Operational Programme
<b>PESETA</b>	Projection of Economic impacts of climate change in Sectors of the European Union based on bottom-up Analysis
<b>RIS3</b>	Regional Innovation Strategy for Smart Specialisation
<b>SIDS</b>	Small Island Developing States
<b>SME</b>	Small and Medium-Sized Enterprises
<b>tCO<sub>2</sub>e</b>	Tonnes of carbon dioxide equivalent
<b>TJTP</b>	Territorial Just Transition Plans
<b>UN</b>	United Nations
<b>UNEP</b>	United Nations Environmental Programme
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change



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## 1. METHODOLOGICAL NOTE

The financial figures provided in this study on Cohesion Policy amounts planned, decided (i.e. allocated to selected projects) and spent are calculated on the basis of European Commission ESIF Open Data, as of end of 2019 (<https://cohesiondata.ec.europa.eu/>).

The contribution of EU Cohesion Policy to climate action is estimated on the basis of the European Commission tracking system of climate-related expenditure, which assigns a specific weighting to each intervention field (ANNEX I of Commission Implementing Regulation (EU) No 215/2014 of 7 March 2014).

The analysis of financial data by macro-category of intervention is based on 2014-2020 intervention fields, aggregated as in the following table.

**Table 1: Correspondence between macro-categories of intervention used in the study and 2014-2020 Cohesion Policy intervention fields**

Macro-category of intervention	Intervention fields 2014-2020
Adaptation to climate risks	087 - Adapt to climate change & prevent & manage climate risks
Business support	003 - Productive investments in large enterprises linked to LCE
	068 - Energy efficiency & demonstration projects in SMEs
	069 - Support to enviro-friendly production processes in SMEs
	070 - Promotion of energy efficiency in large enterprises
	071 - Firms specialised in LCE & climate service
Energy efficiency of infrastructure	013 - Energy efficiency renovation of public infrastructure & demonstration projects
	014 - Energy efficiency renovation of housing stock & demonstration projects
Energy systems	015 - Intelligent Energy Distribution Systems (incl. smart grids)
	016 - High efficiency co-generation and district heating
Environmental and natural resource management	021 - Water management & drinking water conservation
	023 - Env. measures aimed to reduce/avoid GHG emissions
	083 - Air quality measures
	084 - Integrated pollution prevention and control (IPPC)
	085 - Biodiversity, nature protection & green infrastructure
	086 - Protect, restoration & sustainable use of Natura 2000 sites
	090 - Cycle tracks and footpaths
Outermost regions compensation	100 - Outermost regions: compensation of climate conditions
Renewable energy	009 - Renewable energy: wind
	010 - Renewable energy: solar
	011 - Renewable energy: biomass
	012 - Other renewable energy (incl. hydroelectric, geothermal and marine energy) & renewable energy integration
Research and innovation	065 - Research and innovation processes, technology transfer & cooperation in firms on LCE
Transport	024 - Railways (TEN-T Core)
	025 - Railways (TEN-T comprehensive)

	026 - Other Railways
	027 - Mobile rail assets
	035 - Multimodal transport (TEN-T)
	036 - Multimodal transport
	039 - Seaports (TEN-T)
	040 - Other seaports
	041 - Inland waterways and ports (TEN-T)
	042 - Inland waterways and ports (regional and local)
	043 - Clean urban transport infrastructure & promotion
	044 - Intelligent transport systems

In order to distinguish between resources allocated to climate change mitigation and climate change adaptation, the 2014-2020 intervention fields were reclassified as in the following table.

**Table 2: Correspondence between 2014-2020 intervention fields and broad objectives of climate action (e.g. adaptation/mitigation)**

Broad objective of intervention	Corresponding intervention fields
Adaptation to climate change	087
Both mitigation and adaptation to climate change	001 021 065 071 085 086 100
Mitigation of climate change	003 009 010 011 012 013 014 015 016 023 024 025 026 027 035 036 039 040 041 042 043 044 068 069 070 083 084 090

The ESIF Open Data were associated to the main EU geoclimatic regions by assigning each Cohesion Policy OP to a certain typology of geoclimatic region, on the basis of the prevailing features of the territories covered by the OP. In total, 388 ERDF, CF and ESF OPs have been assigned to a specific geoclimatic region.

The case study factsheets presented in paragraph 2.2.4 of the final study contain examples of interventions and opinions collected thorough a questionnaire and by telephone from the Managing Authorities of 25 OPs. The OPs were selected on the basis of the following criteria: financial amount allocated to climate action; balanced coverage of all main EU geoclimatic regions; existence of relevant ERDF evaluations and/or other relevant sources of information.

**Table 3: List of OPs covered in the case study factsheets**

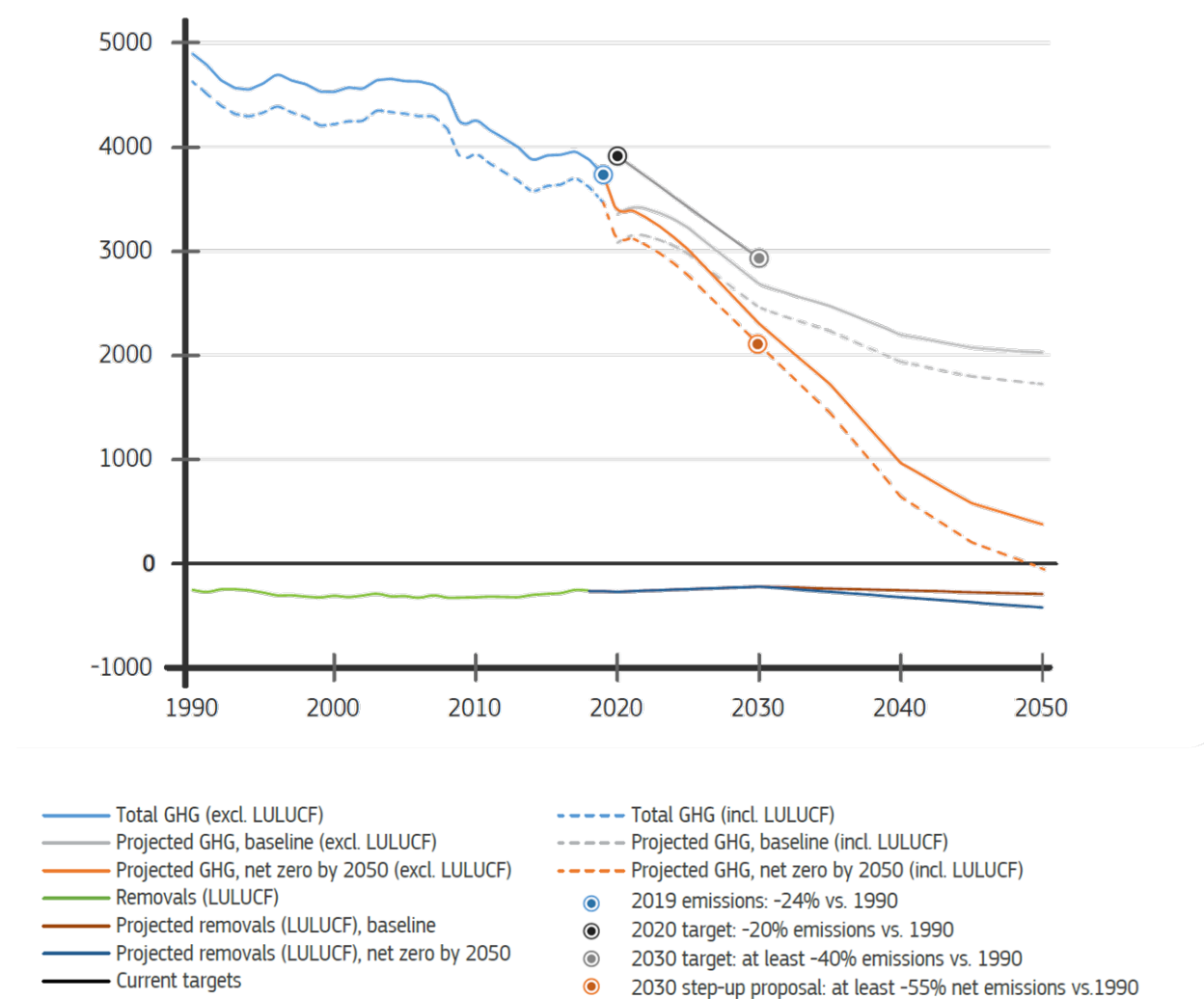
Member State	CCI	Programme Title
PT	2014PT16M2OP004	Azores - ERDF/ESF
PT	2014PT16M2OP006	Madeira - ERDF/ESF
FR	2014FR16M0OP009	Guadeloupe - ERDF/ESF/YEI
NL	2014NL16RFOP003	South Netherlands - ERDF
ES	2014ES16RFOP015	Galicia - ERDF
IE	2014IE16RFOP002	Southern & Eastern Regional Programme - IE - ERDF
ES	2014ES16RFOP021	País Vasco - ERDF
TC*	2014TC16RFTN003	Interreg V-B - Central Europe
DE	2014DE16RFOP015	Thüringen - ERDF
FR	2014FR16M0OP014	Bourgogne - ERDF/ESF/YEI
CZ	2014CZ16M1OP002	Environment - CZ - ERDF/CF
HU	2014HU16M1OP001	Environmental and Energy Efficiency - HU - ERDF/CF
DE	2014DE16RFOP002	Bayern - ERDF
IT	2014IT16RFOP005	Bolzano - ERDF
IT	2014IT16RFOP018	Trento - ERDF
TC*	2014TC16RFCB006	Interreg V-A - Spain-France-Andorra (POCTEFA)
TC*	2014TC16RFTN001	Interreg V-B - Alpine Space
TC*	2014TC16RFTN005	Interreg V-B - North Sea
ES	2014ES16RFOP006	Baleares - ERDF
PT	2014PT16CFOP001	Sustainability and Resource Use Efficiency - PT - CF
GR	2014GR16M1OP001	Transport Infrastructure Environment and Sustainable Development - GR - ERDF/CF
SE	2014SE16RFOP009	National fund for investments in growth and jobs - ERDF
LV	2014LV16MAOP001	Growth and Employment - LV - ERDF/ESF/CF/YEI
LT	2014LT16MAOP001	EU Structural Funds Investments - LT - ERDF/ESF/CF/YEI
TC*	2014TC16RFTN004	Interreg V-B - Northern Periphery and Arctic

\* Territorial cooperation.

## 2. ADDITIONAL FIGURES AND TABLES

### 2.1. Overview of global climate crisis

**Figure 1: Total EU 27 GHG emissions and removals (under different scenarios) and targets**

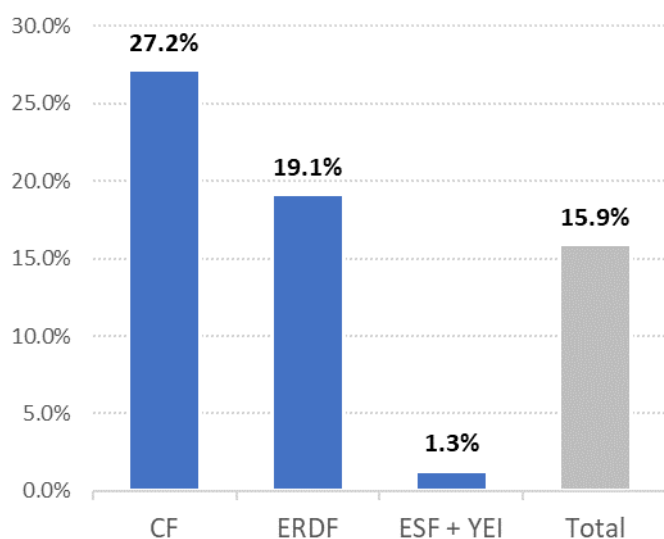


Notes: Due to different scopes used in the quantification of the scenarios 'baseline' and 'net zero' (where international aviation is not in the scope), the two time series presented here as 'baseline' and 'net zero' were calibrated to the EU's current target scope using the historical emissions incl. international aviation in 2019. Furthermore, the 2020 and 2030 reduction targets for the EU (expressed in percent) have been converted into approximate emission limits for the EU-27.

Source: European Commission (2020a).

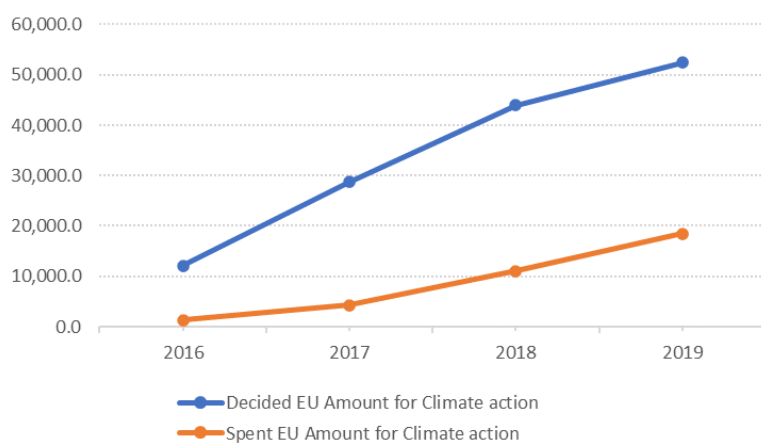
## 2.2. Cohesion Policy support to climate action

**Figure 2: Share of Cohesion Policy planned for climate action as % of total planned funds**

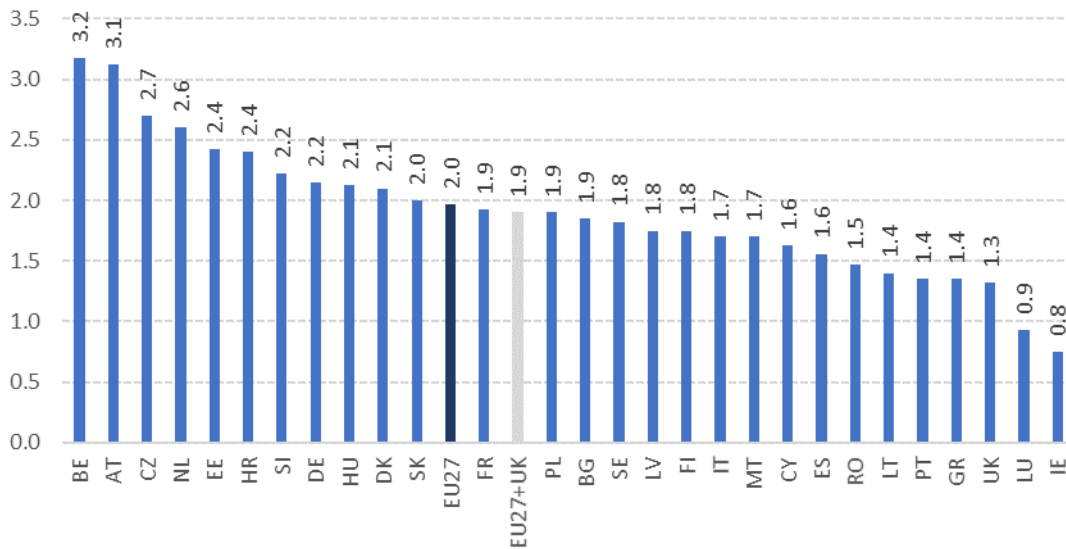


Source: ESIF Open data.

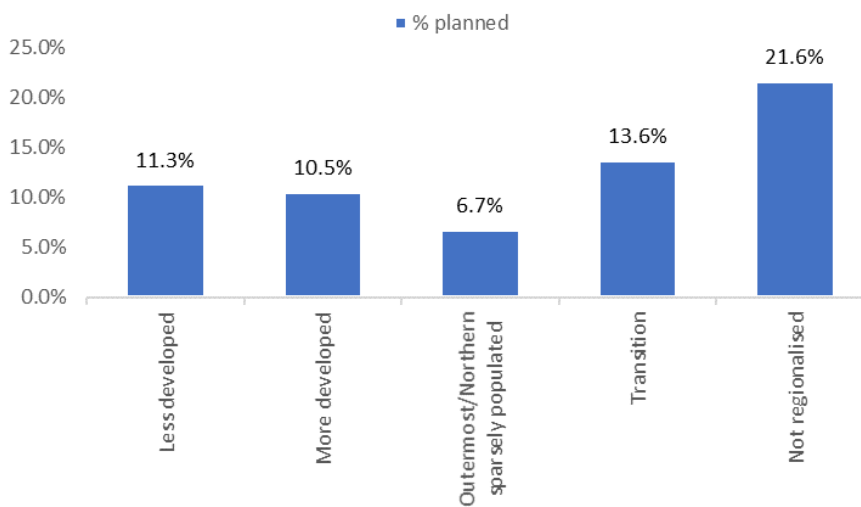
**Figure 3: Amounts decided and spent for climate action across time**



Source: ESIF Open data.

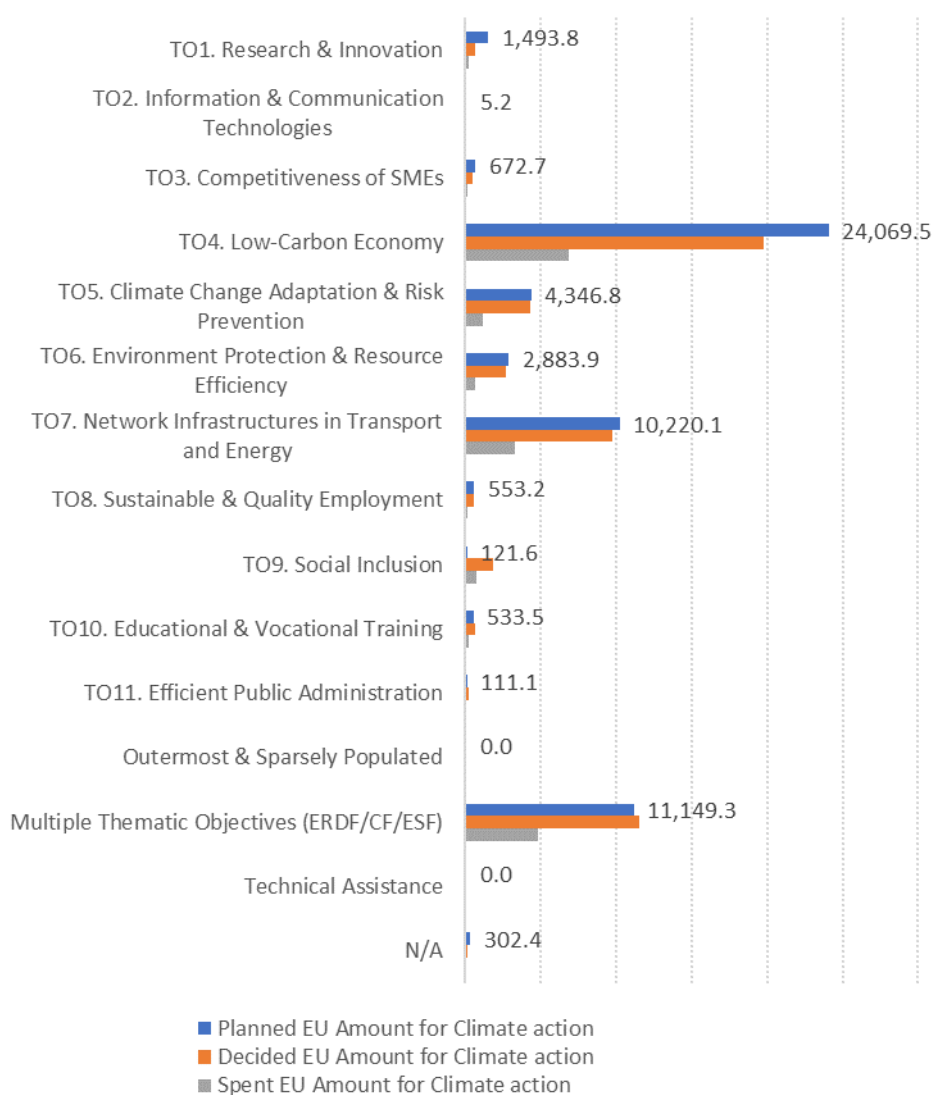
**Figure 4: National expenditure on environmental protection (NEEP) as % of GDP**

Source: Eurostat [TEN00135].

**Figure 5: Amount planned for climate action as % of total planned across types of regions**

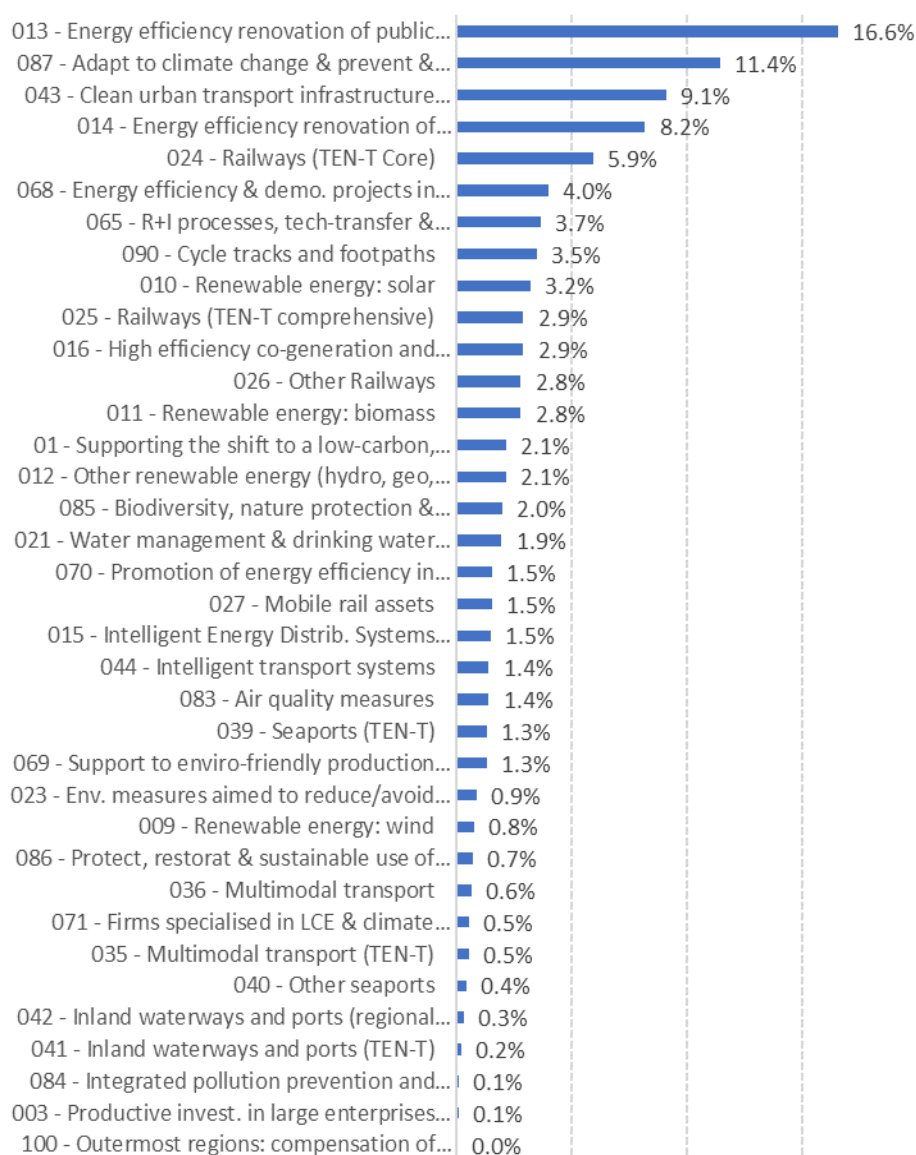
Source: ESIF Open data.

**Figure 6: Amounts planned, decided and spent by Thematic Objective**



Source: ESIF Open data.



**Figure 7: Cohesion Policy amount by intervention fields**

Source: ESIF Open data.

**Table 4: Correspondence between relevant intervention fields in 2014-2020 and 2021-2027**

Macro-category of intervention	Intervention fields 2014-2020	Intervention fields 2021-2027
Adaptation to climate risks	087	36, 37
Business support	003 068 069 070 071	24, 27, 47
Energy efficiency of infrastructure	013 014	25, 26
Energy systems	015 016	33, 34
Environmental and natural resource mgmnt	021 023 083 084 085 086 090	40, 48, 49, 50
Outermost regions compensation	100	138
Renewable energy	009 010 011 012	28, 29, 30, 31, 32
Research and innovation	065	22, 23
Transport	024 025 026 027 035 036 039 040 041 042 043 044	63, 64, 65, 66, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84

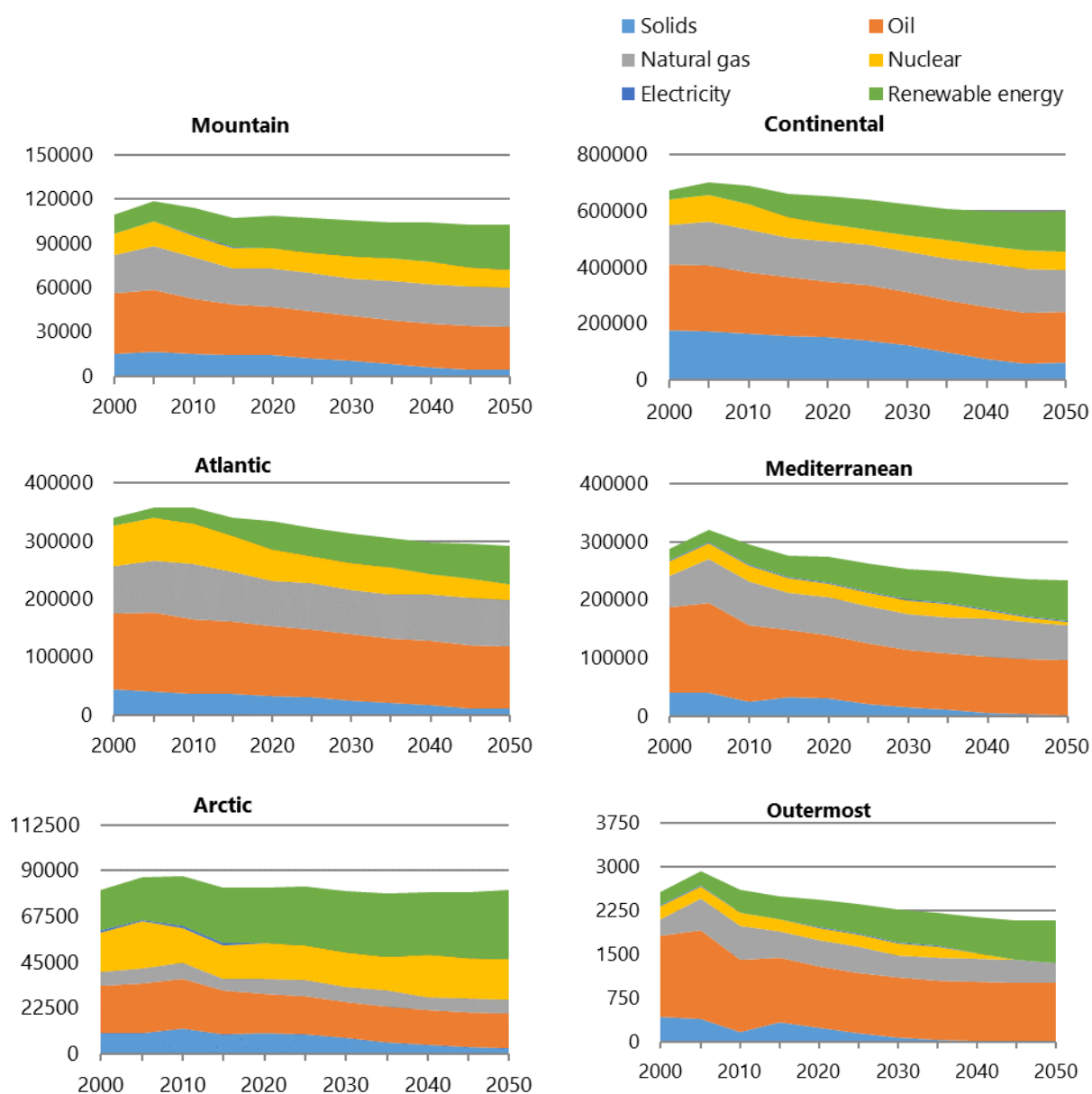
## 2.3. Impact of phasing out of fossil fuels

**Table 5: Key energy indicators in reference (REF), baseline (BSL) and COVID-BSL scenarios (EU27)**

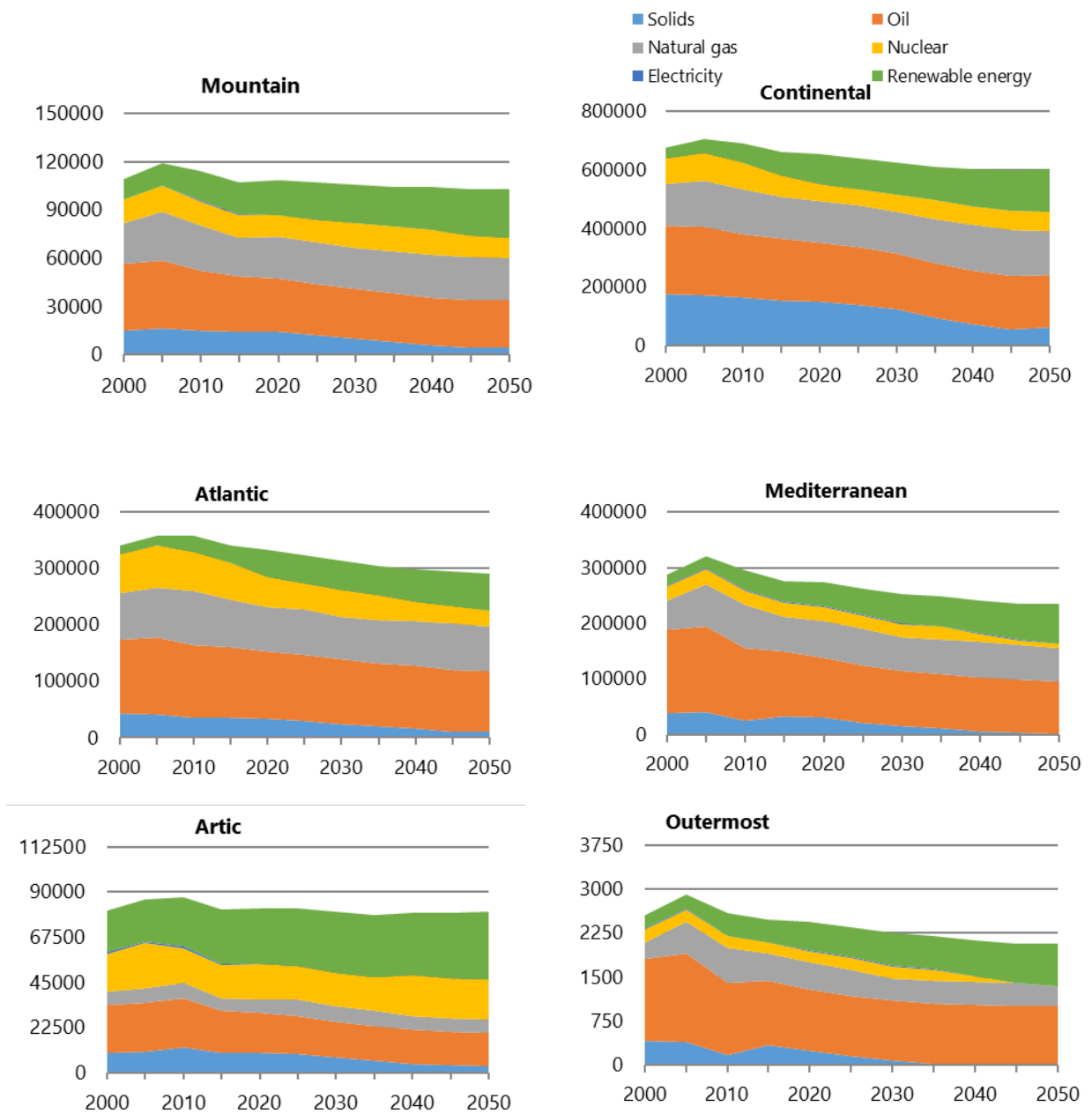
	REF scenario			BSL scenario		COVID BSL Scenario	
	2020	2030	2050	2030	2050	2030	2050
GIC (Mtoe)	1.639	1.554	1.492	1.202	1.078	1.188	1.049
GIC Shares (%) of:							
<i>Solid fuels</i>	16%	13%	6%	8%	3%	9%	3%
<i>Oil</i>	33%	33%	33%	33%	28%	33%	28%
<i>Natural gas</i>	22%	23%	25%	22%	25%	22%	25%
<i>Nuclear</i>	12%	12%	10%	13%	12%	12%	11%
<i>Renewables</i>	17%	19%	26%	24%	33%	25%	33%
Final energy demand (MToe)	628	598	601	795	725	803	721
<i>in residential sector</i>	27%	26%	24%	27%	30%	252%	29%
<i>in residential sector</i>	25%	25%	25%	25%	26%	26%	27%
<i>in tertiary sector</i>	17%	17%	17%	17%	18%	16%	17%
<i>in transport sector*</i>	32%	33%	34%	31%	27%	31%	28%

Source: European Commission, *EU Reference Scenario*, 2016; European Commission, *Impact assessment accompanying the document "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Stepping up Europe's 2030 climate ambition. Investing in a climate-neutral future for the benefit of our people"*, 2020.

**Figure 8: Gross Inland Consumption in the main EU-27 geoclimatic regions (ktoe)**

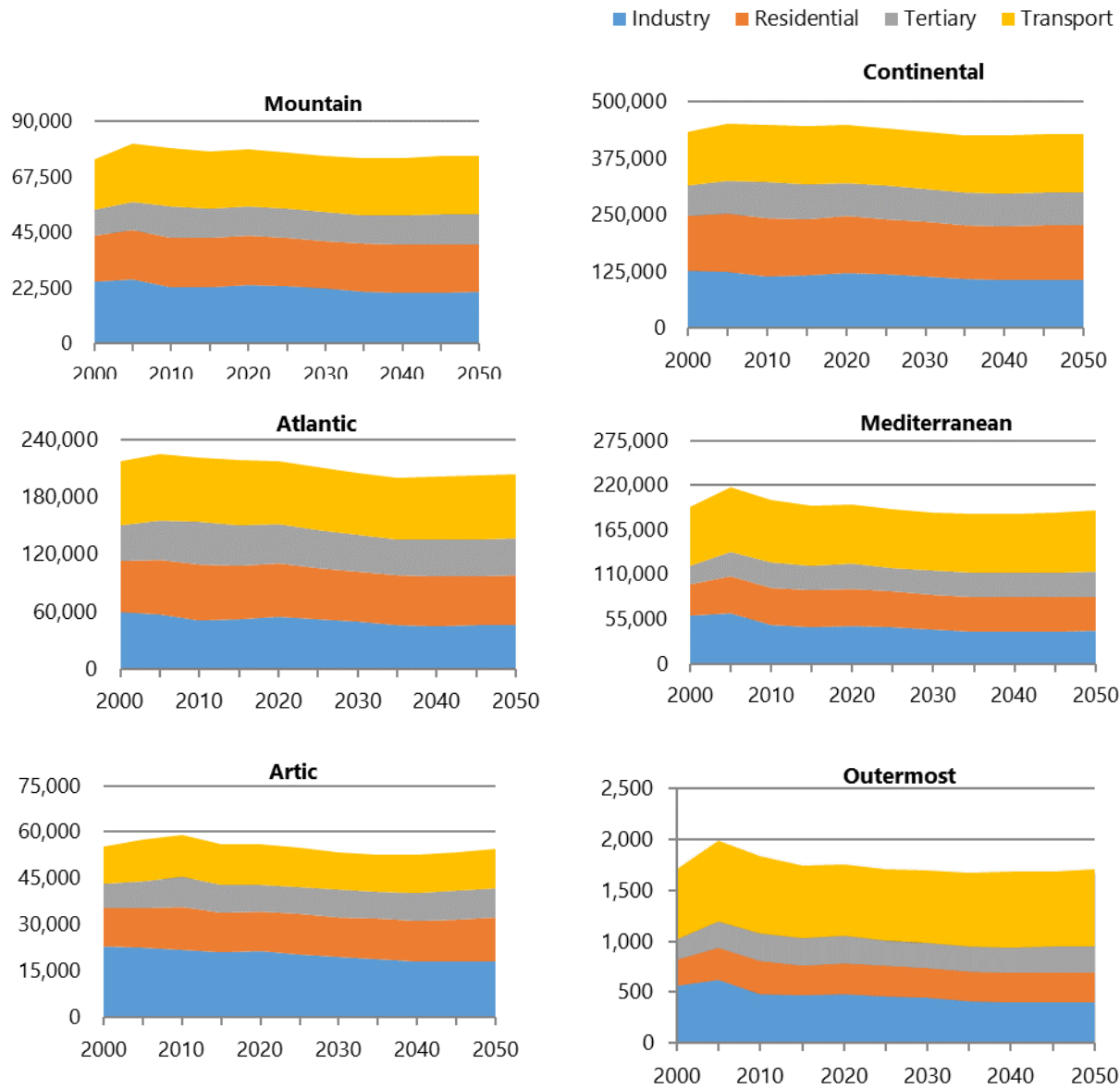


Source: European Commission, EU Reference Scenario, 2016.

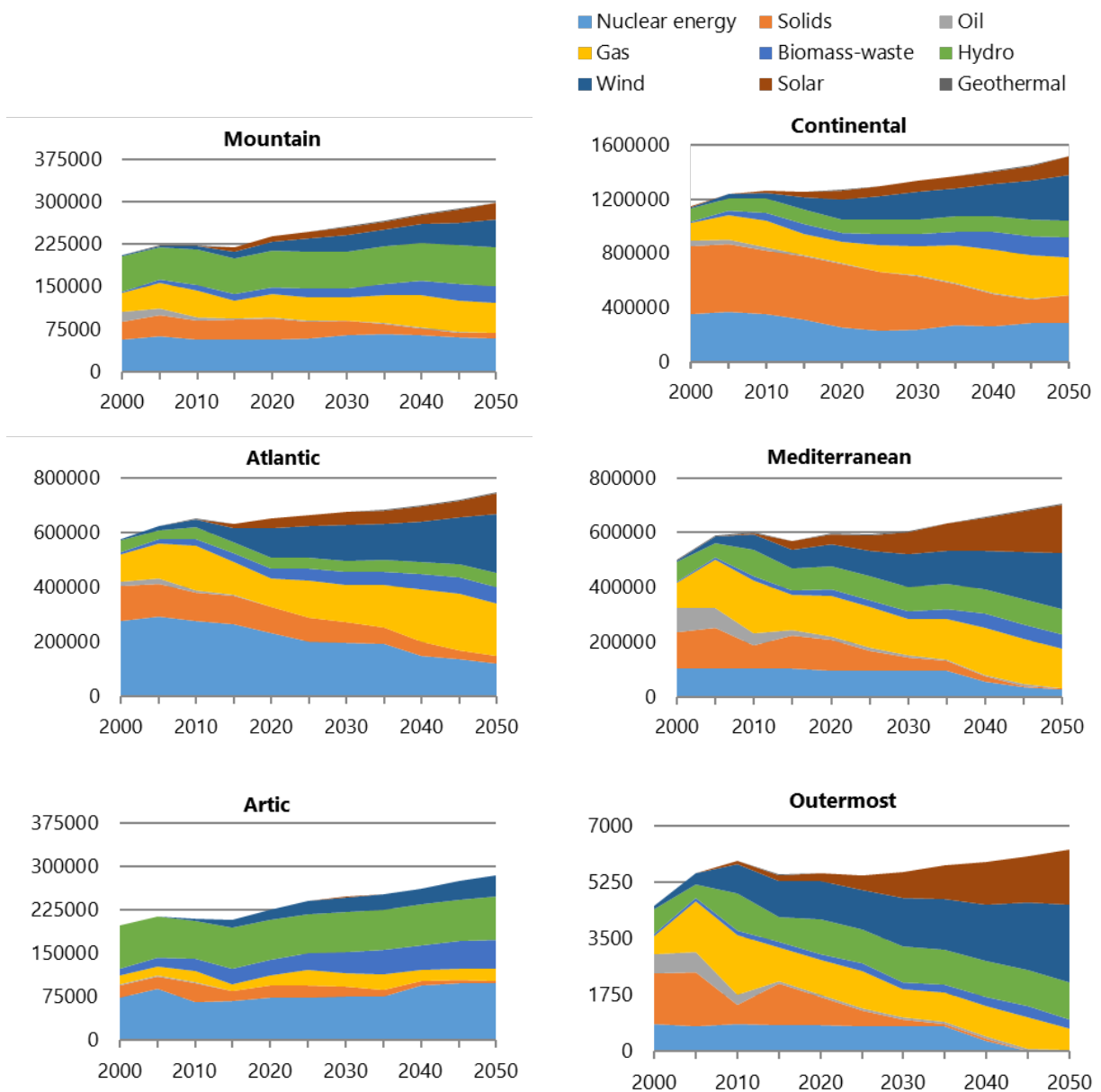
**Figure 9: Final energy consumption by fuel in the main EU-27 geoclimatic regions (ktoe)**

Source: Commission, EU Reference Scenario, 2016.

Figure 10: Final Energy Demand by sector in the main EU-27 geoclimatic regions (Mtoe)

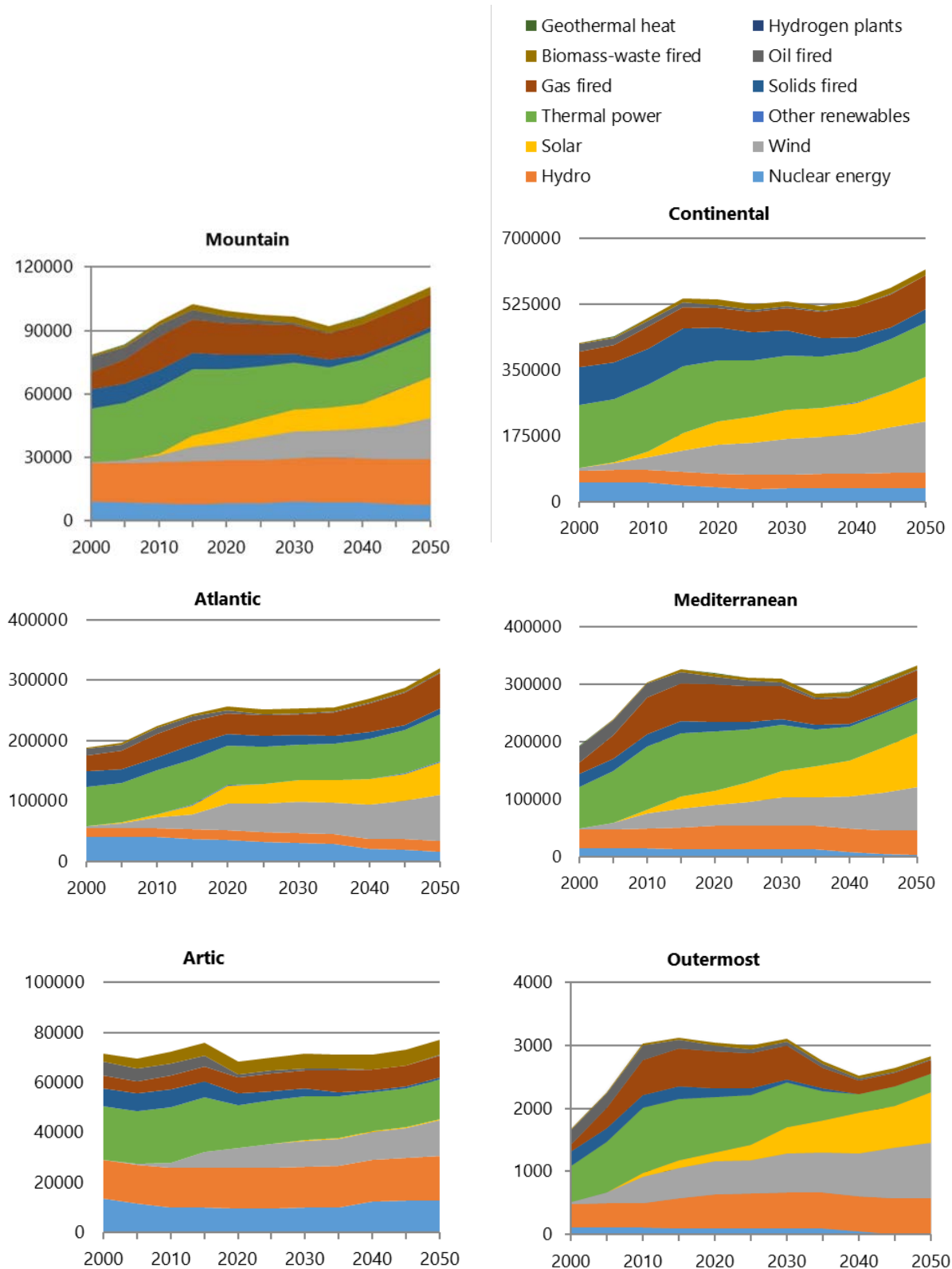


Source: European Commission, EU Reference Scenario, 2016.

**Figure 11: Gross Electricity Generation in the main EU geoclimatic regions (GWh)**

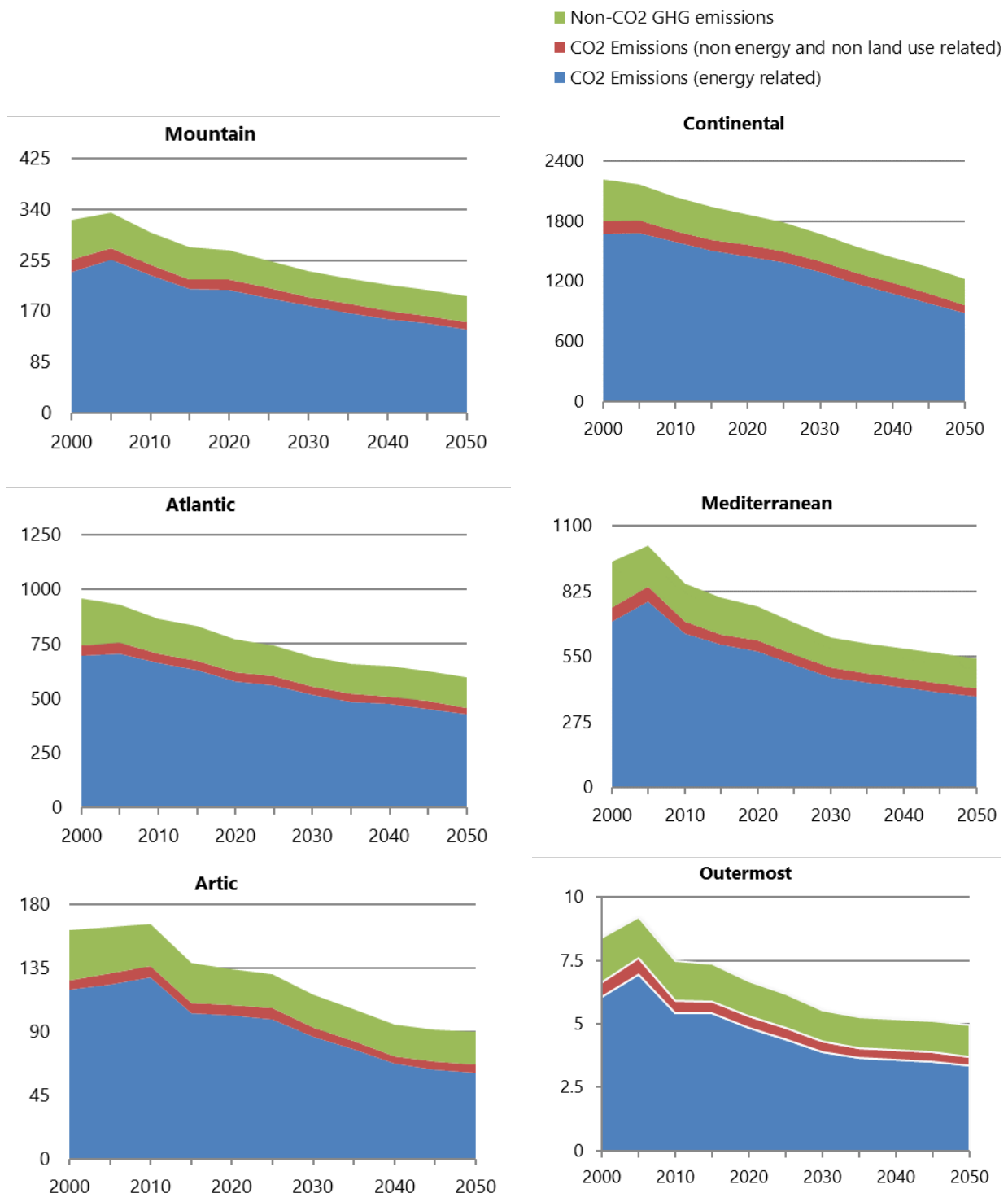
Source: European Commission, EU Reference Scenario, 2016.

**Figure 12: Net installed capacity in the Baseline in the main EU geoclimatic regions (MW)**



Source: European Commission, EU Reference Scenario, 2016.



**Figure 13: Overall CO2 emissions in the main EU geoclimatic regions (MtCO2eq)**

Source: European Commission, EU Reference Scenario, 2016.

**Table 6: Material flow accounts in main EU geoclimatic regions (kt, 2019)**

	Biomass	Metal ores (gross ores)	Non-metallic minerals	Fossil energy materials/carriers	Total
ALP	121.171,998	32.501,003	284.518,663	86.422,972	526.553,613
ARC	103.835,550	72.452,152	229.397,150	50.100,568	458.808,689
ATL	487.339,745	38.274,265	705.506,163	394.631,797	1.637.276,097
CON	718.016,706	99.199,847	1.624.396,779	686.766,569	3.218.123,874
MED	273.909,301	62.216,502	482.240,622	220.217,134	1.015.822,029
OUT	3.026,453	839,957	6.210,600	1.573,915	11.703,643
EU28	1.707.299,752	305.483,727	3.332.269,977	1.439.712,955	6.868.287,944

Source: Eurostat, 2020 (<https://ec.europa.eu/eurostat/web/environment/material-flows-and-resource-productivity>).

**Table 7: Energy subsidies (€2018bn) by energy carrier (EU27)**

	Number of interventions	Distribution	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total 2008/18	2008/18 (%)	2008/18 CAGR (%/y)
All energies	309	17%	7,71	9,25	9,86	10,65	9,78	9,18	10,87	11,88	12,06	12,30	13,16	116,70	+71%	+7%
Fossil fuels	581	32%	51,43	49,58	51,80	51,01	52,74	50,38	48,13	47,24	47,87	50,73	50,24	551,15	-2%	-0%
Coal	113	6%	10,87	10,91	11,49	10,64	10,96	10,16	10,20	10,10	9,89	9,84	9,23	114,29	-15%	-2%
Natural	129	7%	11,56	10,40	11,35	10,78	11,02	10,21	9,25	8,49	9,41	10,27	8,81	111,56	-24%	-3%
Oil	260	14%	18,80	18,36	19,25	19,68	20,27	20,73	20,16	20,22	20,74	21,91	23,46	223,56	+25%	+3%
Heating & cooling	40	2%	0,41	0,71	1,46	1,82	1,90	1,42	1,77	1,72	1,91	2,41	2,43	17,96	+496%	+25%
Nuclear	39	2%	3,33	3,29	3,54	2,90	3,00	3,11	3,34	3,55	3,39	3,21	2,95	35,60	-11%	-1%
Electricity	191	10%	10,65	10,77	12,62	13,93	14,98	15,64	16,22	16,22	16,72	17,69	17,41	162,85	+63%	+6%
Bioenergy	128	7%	2,11	2,33	3,20	2,45	2,43	2,26	2,16	1,99	1,96	2,04	1,97	24,90	-7%	-1%
RES	504	27%	19,64	25,21	33,97	45,01	56,99	62,76	64,96	68,31	69,02	70,52	71,15	587,53	+262%	+17%
Biomass	116	6%	5,79	7,08	8,82	9,83	11,75	12,98	13,23	13,99	14,64	14,43	14,06	126,60	+143%	+12%
Hydropower	54	3%	1,30	1,43	1,95	1,96	1,82	2,36	3,10	2,55	3,07	2,13	2,47	24,16	+90%	+8%
Solar	89	5%	4,01	7,11	10,60	19,16	26,23	28,75	28,48	28,91	27,87	28,40	27,85	237,37	+595%	+27%
Wind	64	3%	6,35	6,40	8,34	9,70	11,79	12,89	13,80	16,74	17,42	19,77	20,47	143,67	+222%	+16%
Others/several RES	181	10%	2,19	3,19	4,25	4,35	5,40	5,77	6,35	6,12	6,02	5,79	6,31	55,73	+188%	+14%
Hydrogen	38	2%	0,04	0,06	0,04	0,05	0,04	0,05	0,05	0,04	0,03	0,04	0,05	0,49	+27%	+3%
Total	1830	100%	95,32	101,20	116,50	127,82	141,85	144,78	147,49	150,95	152,97	158,94	159,37	1.497,18	+67%	+7%

Source: Directorate-General for Energy (European Commission), Trinomics, 2020, *Study on energy costs, taxes and the impact of government interventions on investments. Country subsidy factsheets*.

**Table 8: Support by sector (EU27)**

	Number of interventions	Distribution	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total 2008/18	2008/18 (%)	2008/18 CAGR (%/y)
Energy sector	934	51%	42,60	48,40	58,25	69,44	81,24	84,21	86,62	90,00	90,41	93,95	92,05	837,18	+116%	+10%
Agriculture	73	4%	4,51	4,63	4,70	5,49	5,07	5,13	4,97	4,64	4,83	4,89	4,95	53,81	+10%	+1%
Construction	2	0%	0,42	0,38	0,36	0,56	0,51	0,52	0,45	0,52	0,53	0,48	0,54	5,29	+27%	+3%
Mining	20	1%	0,30	0,27	0,38	0,41	0,39	0,42	0,44	0,54	0,64	0,86	0,59	5,26	+97%	+9%
Industry	151	8%	18,80	18,10	18,73	17,40	19,08	18,93	19,33	18,35	18,40	19,30	20,14	206,55	+7%	+1%
Transport	178	10%	10,52	10,06	10,82	10,58	11,21	11,25	11,05	11,05	11,47	12,14	13,06	123,21	+24%	+3%
Services	6	0%	0,17	0,16	0,16	0,13	0,14	0,14	0,15	0,14	0,14	0,13	0,12	1,59	-28%	-4%
Business	44	2%	1,17	0,98	1,01	1,07	1,07	1,05	1,45	1,29	1,31	1,37	1,45	13,23	+23%	+3%
Households	209	11%	13,22	14,19	16,44	15,61	15,36	15,59	15,94	16,64	17,35	16,42	17,09	173,83	+29%	+3%
Public	65	4%	0,62	0,53	0,77	0,78	0,90	0,79	0,75	0,70	0,70	0,37	0,39	7,30	-38%	-6%
Cross sectors	137	7%	2,59	3,20	4,47	5,92	6,44	6,30	6,15	6,94	7,04	8,90	8,87	66,82	+242%	+17%
Total	3501	191%	94,94	100,89	116,10	127,42	141,41	144,33	147,29	150,80	152,83	158,81	159,26	1.494,07	+68%	+7%

Source: Directorate-General for Energy (European Commission), Trinomics, 2020, *Study on energy costs, taxes and the impact of government interventions on investments. Country subsidy factsheets*.

### 3. EXAMPLES OF INTERVENTIONS FOR CLIMATE FROM SELECTED OPS

#### 3.1. OP Azores ERDF/ESF (2014PT16M2OP004)

##### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	Plano Regional para as Alterações Climáticas. (Regional Plan for Climate Change)
Scope of intervention	Adaptation to climate change measures and prevention and management of climate related risks
Description	The Regional Climate Change Plan develops the Regional Climate Change Strategy and contributes to increasing the training of public officials in preventing, detecting and combating the effects of climate change, through the effective use of up-to-date knowledge and data on climate change. Impact of climate change, especially in terms of land planning and management
Key results achieved so far	The entire regional territory has instruments to identify vulnerabilities and risks
Budget (EUR)	619.498,73€ - 526.573,92€ ERDF
Time (duration of the initiative)	From 10/2015 to 04/2018
Thematic Objectives	TO5 - Promoting climate change adaptation, risk prevention and management
Relevant category of intervention	087 - Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	<a href="https://docs-agric.azores.gov.pt/Portal/file_04-12-2019_10-29-27.0940535.pdf">https://docs-agric.azores.gov.pt/Portal/file_04-12-2019_10-29-27.0940535.pdf</a>
Additional optional comments	No additional comments
Continuity in the next period	Continuity is under evaluation

##### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	Rede de Telecomunicações de Emergência da RAA. (RAA Emergency Telecommunications Network)
Scope of intervention	management of climate related risks
Description	The project aims to improve and maximize the coverage and reliability of the Communications Network in order to coordinate, in real time, the means and resources to assure that the Azores Fire Brigades (privileged force in the Civil Protection System), Municipal Councils, Health Units and Government Organizations, have an integrated and effective performance, either in routine

	situations, in emergency situations or in natural catastrophes of all kinds. The communications network will cover the entire archipelago.
Key results achieved so far	Increased resilience in exceptional situations involving a collective threat
Budget (EUR)	2.180.994,00€ - 1.853.844,90€ ERDF
Time (duration of the initiative)	From 05/2015 to 01/2017
Thematic Objectives	TO5 - Promoting climate change adaptation, risk prevention and management
Relevant category of intervention	087 - Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	<a href="http://poacores2020.azores.gov.pt/candidaturas/rede-de-telecomunicacoes-de-emergencia-da-regiao-autonoma-dos-acoresh/">http://poacores2020.azores.gov.pt/candidaturas/rede-de-telecomunicacoes-de-emergencia-da-regiao-autonoma-dos-acoresh/</a>
Additional optional comments	No additional comments
Continuity in the next period	under evaluation

**Example n. 3 of intervention for climate change mitigation or adaptation**

Name of intervention	PROTEÇÃO DA ORLA COSTEIRA - FAJÃ DOS VIMES (COASTAL SLIDE PROTECTION - FAJÃ DOS VIMES)
Scope of intervention	Adaptation to climate change measures and prevention and management of climate related risks
Description	The main purpose of this operation is to protect from maritime agitation the structures located on the shore of Fajã dos Vimes, namely the marginal road, as well as the adjacent housing, other constructions and land. During periods of strong maritime agitation, the waves overhang the bay's edge, causing overtopping and flooding of the bordering marginal road. The old protection presents damage.
Key results achieved so far	Protection of 200 meters of coastal strip to safeguard people and goods
Budget (EUR)	<b>128.246,66€</b> - 108.844,50€ ERDF
Time (duration of the initiative)	From 11/2014 to 10/2016
Thematic Objectives	TO5 - Promoting climate change adaptation, risk prevention and management
Relevant category of intervention	087 - Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	not available

Additional optional comments	No additional comments
Continuity in the next period	under evaluation

### 3.2. OP Madeira ERDF/ESF (2014PT16M2OP006)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	M1420-04-1407-FEDER-000001: MUSA – Mobilidade Urbana Sustentável e Acessível (EN) Sustainable and Affordable Urban Mobility
Scope of intervention	Climate change mitigation and adaptation
Description	<p>The MUSA project will allow the partial renewal of the fleet of “Horários do Funchal – Transportes Públicos S.A.”, through the acquisition of 5 electric minibuses and 25 EURO VI buses.</p> <p>The main aims of the project are:</p> <ul style="list-style-type: none"> <li>• Reduce the negative externalities of the land transport sector. The renovation of the fleet by less polluting buses will reduce externalities negative, as the reduction in consumption, and it is expected a greater attractiveness of public transport, reducing the use of private transport.</li> <li>• Reduce consumption of primary natural resources (e.g., fossil fuels, use of soil, air quality and noise). Electric minibuses do not consume fossil fuels and noise is very low, increasing air quality in the area from the center of Funchal. The 25 EURO VI buses have a great reduction in fossil fuel compared to the current fleet, leading to better air quality. O wear and tear on the current fleet causes a significant noise that will be tackled with the new buses. The EURO VI buses are considered “Clean Buses”, given that in the technical characteristics of the Specifications, the maximum emissions limit per bus is considered.</li> <li>• Maintain the sustainability of the regional public transport sector. The fleet renewal is essential for the sustainability of public transport, since the current fleet, given its seniority, has high maintenance costs and consumption, as well as breakdowns hampering supply management.</li> <li>• Promote the use of public transport. One of the potential promotion actions of public transport is the renewal of the fleet in order to guarantee greater comfort in the vehicle interior and a better image for non-users.</li> <li>• Ensure accessibility to public transport. The new buses to be purchased will have lowered entrance and wheelchair access, thus increasing accessibility to public transport for the population with reduced mobility.</li> <li>• Monitoring and management of mobility. The new buses will be equipped with technology that will allow for easier and more efficient interconnection with conduction monitoring, and fleet and ticketing management systems, making the entire management of the most efficient public transport service.</li> </ul> <p>In the case of intervention for climate change adaptation, which type of climate hazards it addresses (e.g. sea level rise, river floods, landslides, droughts, heat waves, forest fires, multiple climate risks...).</p> <p>Reduction of greenhouse gas emissions, reducing global warming.</p> <p>instruments used (e.g. grants, loans, provision of services, creation of infrastructure...).</p>

	Non-Refundable Grant main beneficiaries Horários do Funchal – Transportes Públicos S.A.
Key results achieved so far	Summarise here the key outputs and outcomes achieved so far (or expected). Clearly distinguish between achievements and expectations.  We do not have data on the results achieved.  It's expected an annual reduction of 47.7% in diesel consumption, corresponding to a reduction of 412.4 toe and 1,277 t of CO <sub>2</sub> . These are the values directly related to the acquisition of new buses, however it is expected that with a more attractive and comfortable fleet, the use of public transport will be enhanced at the expense of the use of the private car.
Budget (EUR)	Total amount: 9 726 471,00 EUR EU amount (EFDR): 3.953.850,00 EUR
Time (duration of the initiative)	11/2019 to 05/2021
Thematic Objectives	TO4 - Supporting the shift towards a low-carbon economy in all sectors
Relevant category of intervention	043 Clean urban transport infrastructure and promotion
Website or link to relevant material	<a href="http://www.horariosdofunchal.pt/index.php?option=com_content&amp;task=view&amp;id=2342&amp;Itemid=465">http://www.horariosdofunchal.pt/index.php?option=com_content&amp;task=view&amp;id=2342&amp;Itemid=465</a>
Additional optional comments	
Continuity in the next period	no

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	M1420-04-1406-FEDER-000010 - Potenciação da Mobilidade Elétrica Através da Introdução de Rede de Carregamento para Veículos 100% Elétricos (EN) Enhancing Electric Mobility Through the Introduction of a Charging Network for 100% Electric Vehicles
Scope of intervention	Climate change mitigation and Adaptation
Description	This operations consists in introduction of 11 charging points for 100% electric vehicles in surface parking bags, in the municipal public domain, with the aim of promoting electric mobility and consequent decarbonisation.  The promotion of electric mobility by the municipality and consequent decarbonization is also shaped in other European projects like CIVITAS DESTINATIONS and MATCH-UP, that highlight the relevance in the implementation of actions conducive to enhancing the use of less polluting vehicles.  <b>the main aims of the intervention</b>

	<ul style="list-style-type: none"> <li>• promoting electric mobility and consequent decarbonisation of the transport sector;</li> <li>• promotion of multimodality and consequently the reduction of externalities, especially, reduction of CO2 emissions</li> <li>• reduce energy dependence on fossil fuels</li> </ul> <p><b>in the case of intervention for climate change adaptation, which type of climate hazards it addresses (e.g. sea level rise, river floods, landslides, droughts, heat waves, forest fires, multiple climate risks...)</b></p> <p>Reduction of greenhouse gas emissions, reducing global warming</p> <p><b><i>instruments used (e.g. grants, loans, provision of services, creation of infrastructure...)</i></b></p> <p>Non-Refundable Grant</p> <p><b><i>main beneficiaries</i></b></p> <p>Município do Funchal</p> <p>(EN) Municipality of Funchal</p>
Key results achieved so far	It is expected that the dependence on fossil fuels will be reduced, as well as the prolongation of effects resulting from negative externalities, namely emissions of pollutants and noise, thus contributing to the achievement of the objectives recommended in the instruments of municipal, regional, national, European references in the fields of transport, climate and energy.
Budget (EUR)	<p><i>Total amount: 91 843,41 EUR</i></p> <p><i>EU amount (EFDR): 78 066,90EUR</i></p>
Time (duration of the initiative)	11/2019 to 10/2020
Thematic Objectives	TO4 - Supporting the shift towards a low-carbon economy in all sectors
Relevant category of intervention	043 Clean urban transport infrastructure and promotion
Website or link to relevant material	<a href="http://cm-funchal.pt/pt/projetos-financiados-2/6315.html">http://cm-funchal.pt/pt/projetos-financiados-2/6315.html</a>
Additional optional comments	
Continuity in the next period	<i>no</i>

### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	<p>M1420-04-1204-FEDER-000002 - Eficiência Energética no Empreendimento de Habitação Social Romeiras I</p> <p>(EN) Energy Efficiency in the Romeiras Social Housing Project</p>
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Scope of intervention	Climate change mitigation and Adaptacion
Description	<p>This operation, will provide an improved energy performance in housing and common areas of buildings (5 buildings in a total of 88 fractions) of the Romeiras Social neighbourhood, in Madeira.</p> <p>the main aims of the intervention</p> <p>The project aims to reduce primary energy from fossil sources and CO2 emissions and, consequently, reduce regional energy dependence from abroad, through the implementation of energy efficiency measures and the use of renewable energy for self-consumption in social housing buildings that together, jointly and severally, they contribute to the reduction of expenditure, of low-income families, with energy consumption.</p> <p>in the case of intervention for climate change adaptation, which type of climate hazards it addresses (e.g. sea level rise, river floods, landslides, droughts, heat waves, forest fires, multiple climate risks...)</p> <p>Reduction of greenhouse gas emissions, reducing global warming</p> <p>instruments used (e.g. grants, loans, provision of services, creation of infrastructure...)</p> <p>Non-Refundable Grant</p> <p>main beneficiaries</p> <p>IHM - Investimentos Habitacionais da Madeira, EPERAM</p>
Key results achieved so far	<p>We do not have data on the results achieved, because the operation is not completed</p> <p>It is expected to improve the energy consumption and performance and conditions of habitability, comfort and well-being of residents of the social neighbourhood.</p>
Budget (EUR)	<p>Total amount: 844 909,24 EUR</p> <p>EU amount (EFDR): 633 681,93EUR</p>
Time (duration of the initiative)	11/2018 to 12/2020
Thematic Objectives	TO4 - Supporting the shift towards a low-carbon economy in all sectors
Relevant category of intervention	014 Energy efficiency renovation of existing housing stock, demo
Website or link to relevant material	<a href="http://www.ihm.pt/index.php/publicacoes/projetos-cofinanciados#efici%C3%A2ncia-energ%C3%A9tica-nos-edif%C3%ADcios-de-habita%C3%A7%C3%A3o-social-do-conjunto-habitacional-romeiras-i">http://www.ihm.pt/index.php/publicacoes/projetos-cofinanciados#efici%C3%A2ncia-energ%C3%A9tica-nos-edif%C3%ADcios-de-habita%C3%A7%C3%A3o-social-do-conjunto-habitacional-romeiras-i</a>
Additional optional comments	
Continuity in the next period	No



### 3.3. OP Guadeloupe - ERDF/ESF/YEI (2014FR16M0OP009)

#### Example No. 1 of Response to Climate Change Mitigation or Adaptation to Climate Change

<b>Name of intervention</b>	<i>Construction of the Calvaire School Group – BAIE-Mahault</i>
<b>Scope of intervention</b>	<p><i>AP04 – Priority area: Promoting adaptation to climate change and risk prevention</i></p> <p><i>OT05 – Thematic objective: Promoting adaptation to climate change and risk prevention and management</i></p> <p><i>PI05b – Investment Priority: Encourage investments to take into account specific risks, ensure resilience to disasters and develop disaster management systems</i></p> <p><i>OS11 – Specific objective: Reducing the vulnerability of strategic public buildings and schools to seismic risk and extreme weather events</i></p> <p><i>OS11-17 – Action: Reducing the vulnerability of strategic public buildings and schools to seismic risk and extreme weather events</i></p>
<b>Description</b>	<p><i>Following the seismic diagnosis carried out by the Association of Mayors of Guadeloupe in 2009, the city of Baie-Mahault has embarked on a programme of work aimed at making the maximum number of children safe. The delivery in 2010 of the Pierre Mathieu school group at Convenance, with a capacity of 25 classes, allowed, among other things, to accommodate, among other things, the entire pupils of the elementary and kindergarten schools of Calvaire, classified as a priority 1 for the elementary and 2 for the kindergarten, with the need for reconstruction. The ERDF funding will enable the demolition and reconstruction of the Calvaire school group to be completed.</i></p>
<b>Main results achieved to date</b>	<p><i>The operation will restore nursery and elementary schools, to seismic standards, to the district of Calvaire. Thus, the children of Calvaire will no longer have to take the bus to the school group of Convenance. The Pierre Mathieu Elementary School of Convenance, today overloaded, will be defrosted</i></p> <p><i>16 classes/400 pupils (forecast)//Entry 2020-2021: 273 students</i></p>
<b>Budget (in euros)</b>	<p><i>Total cost/5 EUR 200 904,56</i></p> <p><i>EU/2 EUR 800 904,56</i></p>
<b>Time (duration of initiative)</b>	<i>01/01/2014 to 31/12/2021</i>
<b>Thematic objectives</b>	<i>OT05 – Thematic objective: Promoting adaptation to climate change and risk prevention and management</i>
<b>Relevant category of intervention</b>	<i>05 Promoting climate change adaptation and risk prevention and management</i>
<b>Website or link to relevant documents</b>	
<b>Additional optional observations</b>	<i>Financing State of EUR 2 400 000</i>
<b>Continuity over the next period</b>	

**Example No. 2 of Response to Climate Change Mitigation or Adaptation to Climate Change**

Name of intervention	<i>Flood Prevention Action Programme (PAPI) – City of Abymes</i>
Scope of intervention	<p><i>AP04 – Priority area: Promoting adaptation to climate change and risk prevention</i></p> <p><i>OT05 – Thematic objective: Promoting adaptation to climate change and risk prevention and management</i></p> <p><i>PI05b – Investment Priority: Encourage investments to take into account specific risks, ensure resilience to disasters and develop disaster management systems</i></p> <p><i>OS11 – Specific objective: Reducing the vulnerability of strategic public buildings and schools to seismic risk and extreme weather events</i></p> <p><i>OS11-17 – Action: Reducing the vulnerability of strategic public buildings and schools to seismic risk and extreme weather events</i></p>
Description	<p><i>The PAPI is a tool to engage several partners, in their fields of competence, with a common objective of reducing the risk to floods. The perimeter of the PAPI consists of the watersheds of the Grands-Fonds and covers an area of about 350 km<sup>2</sup>. Six adjacent communes are involved, all partners in the process: Cities of Abymes, Pointe-à-Pitre, Morne-à-l'Eau, Gosier, Sainte-Anne and Moule. This territory is subject to two types of floods: The so-called “terrestrial” floods linked to intense rainfall and so-called “marine” floods linked to cyclonic sea conditions. These two phenomena may also be concomitant. Are located on the perimeter of the PAPI: Almost half of the population flooded by “terrestrial” flooding in Guadeloupe (29 000 hab); —Nearly three quarters <math>\frac{3}{4}</math> of the population flooded by “marine” flood of Guadeloupe (31 000 hab) The PAPI of intent of the catchment areas of the Grands-Fonds is implemented for a forecast period of three years from May 2016* It is intended to: —Prepare the implementation of a complete PAPI; Mobilising, organising and coordinating the various actors in the field; To carry out preventive information, communication and study activities. The final objective is the implementation of a so-called “complete” PAPI, i.e. a multiannual action programme including structural operations.</i></p>
Main results achieved to date	<p><i>Below are the expected results of each PAPI action under the control of Ville des Abymes Flood Risk Prevention Scheme (SPRI)</i></p> <p><i>The Floods Prevention Scheme (SPRI) targets 100 % of the population living in potentially flooded areas (Earth and Marine) of the PAPI perimeter.</i></p> <p><i>The expected results of SPRI are as follows:</i></p> <p style="padding-left: 40px;"><i>Proposal for at least one action (synonym: measurement) of IRS for 100 % of the population living in potentially flooded areas;</i></p> <p style="padding-left: 40px;"><i>Proposal of at least 20 % of the financial volume dedicated to non-structural actions (intervention corresponding mainly to measures to reduce vulnerability with reference to axes 1 to 5 of risk prevention Floods);</i></p> <p><i>Please note: The objective here is to get out of a “all work” programming.</i></p> <p><i>The SPRI must also provide for the following:</i></p> <p style="padding-left: 20px;"><i>Thorough diagnosis of the territory;</i></p> <p style="padding-left: 20px;"><i>Shared and adapted flood risk management strategy;</i></p> <p style="padding-left: 20px;"><i>Programme of actions (synonyms: Measures) operational to be deployed under the Complete PAPI.</i></p> <p><i>In more detail, the SPRI is expected to:</i></p> <p style="padding-left: 20px;"><i>Historical study of floods over 2 centuries;</i></p> <p style="padding-left: 40px;"><i>— Seizure of 5 events in the Historical Database of Floods;</i></p> <p style="padding-left: 40px;"><i>— Maintenance of 25 people among the population with knowledge of the floods for a written capitalisation of memory;</i></p> <p style="padding-left: 40px;"><i>Recognition of 60 PHEC sites (Higher Known Waters);</i></p> <p style="padding-left: 40px;"><i>Identification of 15 sites for the laying of flood markers;</i></p> <p style="padding-left: 40px;"><i>Sampling of 250 ha of homogeneous sectors to qualify the stakes;</i></p> <p style="padding-left: 40px;"><i>Study of hydrological functioning;</i></p> <p style="padding-left: 40px;"><i>Study of the hydraulic operation of 150 km of water network for Tier 1 watersheds (priority) and 100 km of water network for Tier 2 watersheds (see Figure 3);</i></p> <p style="padding-left: 40px;"><i>Characterisation of flood hazards and risk mapping;</i></p>

	<p>— <i>Diagnosis of the vulnerability of the territory;</i>  <i>Definition of the Flood Risk Management Strategy;</i>  <i>Study of solutions and comparison, unlimited for non-structural measures and limited to 30 for structural measures;</i>  <i>Unlimited pre-operational study for non-structural measures and limited to 15 for structural measures;</i></p> <p><i>Multi</i> — <i>criteria analyses of 15 structural measures;</i>  <i>Drafting of the Programme of Action of the Complete PAPI;</i></p> <p><i>Land</i> and <i>environmental analysis of each action;</i></p> <p>— <i>15 bi-lateral interviews with the actors of the territory;</i>  <i>5 technical committees and 5 steering committees;</i></p> <p>— <i>20 working meetings.</i></p> <p><i>Study on the governance of the PAPI Complete</i>  <i>Lot 1: Governance of the PAPI Complete</i>  <i>The comprehensive PAPI governance study targets 100 % of the population living in potentially flooded areas (Terrestre and Marine) of the PAPI perimeter.</i>  <i>This study is expected to:</i>  <i>A diagnosis of the existing</i></p> <p>— <i>Census of actors and assessment of competences</i>  — <i>Status of works and environments</i>  — <i>Financial and legal organizational diagnosis</i></p> <p><i>The study of governance solutions</i></p> <p>— <i>Concertation with local actors</i>  — <i>Definition of an Organizational Scheme of Local Water Competence</i></p> <p><i>The modalities for implementing the method of governance chosen</i></p> <p>— <i>Definition of the necessary human and financial resources</i>  — <i>Legal translation of the organisation selected</i>  — <i>Identification of transfers to be provided</i></p> <p><i>This study should consider all possible forms of cooperation to coordinate the actions of the future PAPI Complete (creation or modification of a trade union, public interest grouping, service and equipment management agreement, public/public cooperation agreement, Command grouping...)</i></p> <p><i>Lot 2: Diagnosis of coastal structures</i>  <i>The diagnosis of the coastal structures concerns the entire coastline of the 6 PAPI partner communes or about 60 works for a total linear of about 23 km. It also affects 100 % of the population protected or influenced by a coastal line protection structure, the fight against marine erosion and flooding by marine submersion.</i></p> <p><i>Total Linear (km)</i>  <i>Tip-à-Pitre 1310,8</i>  <i>Gosier 183,7</i>  <i>Sainte-Anne 133</i>  <i>Mould 144,4</i>  <i>Morne-à-l'Eau 21,2</i>  <i>The Abymes 00</i>  <i>Total 6023</i></p> <p><i>Research study of sites for the implementation of flow slowdown works.</i>  <i>The site search study for the implementation of flow slowdown works targets more than 90 % of the population living in potentially flooded areas (Terrestre) of the PAPI perimeter.</i>  <i>This study is an aid to the decision to pre-identify potential sites for the installation of future flow slowdown works and to initiate a reflection for the associated land mastery.</i></p>
Budget (in euros)	<p><i>Total cost/EUR 925,180.00</i>  <i>EU/EUR 513 530,00</i></p>

Time (duration of initiative)	01/01/2014 to 31/12/2023
Thematic objectives	OT05 – Thematic objective: Promoting adaptation to climate change and risk prevention and management
Relevant category of intervention	05 Promoting climate change adaptation and risk prevention and management
Website or link to relevant documents	<a href="https://www.ville-sainteanne.fr/citoyennete/prevention-des-risques/article/connaissiez-vous-le-papi-des-grands-fonds">https://www.ville-sainteanne.fr/citoyennete/prevention-des-risques/article/connaissiez-vous-le-papi-des-grands-fonds</a> <a href="https://papidesgrandsfonds.fr/">https://papidesgrandsfonds.fr/</a>
Additional optional observations	
Continuity over the next period	Yes the operation will be financed on 2021-2027.

### Example No. 3 of Response to Climate Change Mitigation or Adaptation to Climate Change

Name of intervention	Earthquake reinforcement of the BAIMBRIDGE School City – Part LGT
Scope of intervention	AP08 – Priority area: Allocation of compensation for additional costs OT05 – Thematic objective: Promoting adaptation to climate change and risk prevention and management PI05b – Investment Priority: Encourage investments to take into account specific risks, ensure resilience to disasters and develop disaster management systems RUPsq – Specific objective: Reducing the vulnerability of high schools and colleges to seismic risk RUPsq-29 – Action: Seismic investments
Description	The Cité scolaire de Baimbridge, located in Les Abymes, is composed of three institutions: the Lycée Général et Technologique (LGT), the Collège Chevalier de Saint-Georges, and the GRETA. The Regional Council has decided to start restructuring this whole, diagnosed as highly vulnerable to earthquakes. The project co-financed by the ERDF concerns the seismic standards of the LGT. Through reconstruction, rehabilitation and reinforcement operations, it will ensure the safety of the 1730 students in the general and technological sections of this institution, as well as post-bac students from the BTS and CPGE sections.
Main results achieved to date	The programme of operation LGT provides for the reconstruction/rehabilitation/seismic reinforcement of the set described above allowing for the reconfiguration of the high school reception for 1,730 pupils in the general and technological sections of the second degree (second to terminal classes) and post-bace students in the sections BTS and Classe Préparatoires aux Grandes Ecoles. The programme's useful surface area for built-up areas is approximately 24000 m <sup>2</sup> .
Budget (in euros)	Total cost/44 EUR 828 468,74 EU/20 EUR 000 000,00
Time (duration of initiative)	01/01/2014 to 31/12/2023
Thematic objectives	OT05 – Thematic objective: Promoting adaptation to climate change and risk prevention and management
Relevant category of intervention	05 Promoting climate change adaptation and risk prevention and management
Website or link to relevant documents	<a href="https://www.europe-en-france.gouv.fr/en/projets/renovation-de-la-cite-scolaire-de-baimbridge-en-guadeloupe">https://www.europe-en-france.gouv.fr/en/projets/renovation-de-la-cite-scolaire-de-baimbridge-en-guadeloupe</a>
Additional optional observations	
Continuity over the next period	Yes, several high schools identified.

### 3.4. OP South Netherlands ERDF (2014NL16RFOP003)

#### Example of intervention for climate change mitigation or adaptation

Name of intervention	<i>Koolstofarme economie (low carbon economy)</i>
Scope of intervention	<i>Innovation in the building economy, new initiatives, products and processes to contribute to the low carbon economy.</i>
Description	<ul style="list-style-type: none"> <li>- <i>Main aim of intervention was to stimulate innovations in the building environment. The innovations came from SMEs. Also an important intervention was the adoption of such an innovation and demonstrate the innovation in a real life environment. Innovations were aimed at TRL 6-8.</i></li> <li>- <i>All interventions consist of grants</i></li> <li>- <i>Beneficiaries were SMEs, knowledge institutes and other organisations.</i></li> <li>- <i>The intervention was repeated 4 times.</i></li> </ul>
Key results achieved so far	<i>78 projects submitted of which 42 committed, 5 projects already ended and met their results. These projects are running right now,</i>
Budget (EUR)	<i>€ 34.088.117 just EFRO with an intervention rate of 35%, total cost appr. € 130 million.</i>
Time (duration of the initiative)	<i>First tender in q2 2015 and last tender in q2 2020</i>
Thematic Objectives	<i>TO4</i>
Relevant category of intervention	<i>013 Energy efficiency renovation of public infrastructure and 065 Research and innovation infrastructure</i>
Website or link to relevant material	<i><a href="http://www.stimulus.nl">www.stimulus.nl</a></i>
Additional optional comments	<p><i>On <a href="https://www.stimulus.nl/opzuid/projecten/">https://www.stimulus.nl/opzuid/projecten/</a> the projects in these tenders are named with their specific goals.</i></p> <p><i>An evaluation was carried out, available in Dutch (<a href="https://www.stimulus.nl/opzuid/wp-content/uploads/sites/4/2019/06/OPZuid_evaluatie-4f_eindrapport_180830.pdf">https://www.stimulus.nl/opzuid/wp-content/uploads/sites/4/2019/06/OPZuid_evaluatie-4f_eindrapport_180830.pdf</a>)</i></p>
Continuity in the next period	<i>In the new period, the MA intends to finance innovative projects in energy efficiency and energy systems (PO2, SO ii and iii)</i>

### 3.5. OP Galicia ERDF (2014ES16RFOP015)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<p><i>Coordinación y gestión en Galicia del Pacto de los Alcaldes para el Clima y la Energía como mejor iniciativa de gobernanza multinivel de la Acción Climática</i></p> <p><i>Coordination and management in Galicia of the Covenant of Mayors for Climate and Energy as the best example of multilevel governance.</i></p>
Scope of intervention	<i>Multi-level governance for the implementation of mitigation and adaptation measures to climate change at the local level.</i>

Description	<p><i>Xunta de Galicia (Government of the Autonomous Community) recently approved the Galician Strategy for Climate Change and Energy 2050 with the aim of achieving climate neutrality in Galicia by 2050.</i></p> <p><i>The Galician Strategy, in its eminently participatory nature, has integrated the priorities of the different key agents, including those of local governments.</i></p> <p><i>Xunta de Galicia considers that the initiative of the Covenant of Mayors for Climate and Energy is the best instrument to involve local entities in the achievement of European objectives in terms of mitigation and adaptation to climate change.</i></p> <p><i>For this reason, the regional government assumed the coordination of this initiative in Galicia, with the aim of promoting and supporting the accession of the municipalities of Galicia to the Covenant of Mayors, and ensuring that by 2020 there would be at least 100, of the 313 municipalities of Galicia, joined to the Covenant, an objective that has already been more than met.</i></p> <p><i>For this, it was created the Technical Office of the Covenant of Mayors for Climate and Energy in compliance with the adherence commitments.</i></p> <p><i>This Office assumes the tasks of informing and advising local entities on the Covenant initiative, promoting their joining and assisting them in complying with the commitments acquired with accession, offering administrative support, guidance and technical assistance for the drafting of documents, facilitating networking among stakeholders and ensuring the promotion of their activities. It also participates as a support and support structure in the search for financing for local entities.</i></p> <p><i>The instruments used in this initiative are:</i></p> <p style="padding-left: 40px;"><i>Communication</i></p> <p><i>8 sessions have been held to present the Covenant initiative, which was attended by 238 mayors and municipal technicians.</i></p> <p><i>Creation of a website of the Covenant in Galicia, as a focal point for information and documentation, which local entities can also use as a support tool to share experiences and documentation.</i></p> <p style="padding-left: 40px;"><i>Training</i></p> <p><i>On-line training aimed at members of the covenant with the aim of providing practical knowledge on the elaboration of the Action Plan for Climate and Sustainable Energy SECAP.</i></p> <p style="padding-left: 40px;"><i>Financing</i></p> <p><i>The government of Galicia established the regulatory bases for the granting of aid to local entities signatories of the covenant for the preparation to SECAP.</i></p> <p><i>This initiative also includes support actions not financed with ERDF funds but that constitute part of the initiative, such as the climate projection service for municipalities, basic information for the preparation of Climate Change Adaptation Plans.</i></p>
Key results achieved so far	<p><i>The objective pursued with its creation was to promote and support the municipalities of Galicia in their joining to the Covenant and ensure that by the year 2020 there would be at least 100 joined municipalities, an objective that has already been more than met.</i></p> <p><i>Prior to the assumption of the role of Coordinator of the Pact by the Xunta de Galicia, the region had 22 municipalities joined to the initiative. After assuming that role and starting the corresponding work, this number has increased to 230 members and continues to</i></p>



	<p>expand. We hope that this figure will continue to grow throughout 2021 and reach at least 250 member municipalities.</p> <p>Thanks to this project 171 municipalities have already presented their Sustainable Energy and Climate Action Plans.</p>
Budget (EUR)	<p>Energy in Galicia: 690.000 €</p> <p>Grants 2020: 1.000.000 €</p> <p>Grants 2021: 580.000 €</p> <p>A new granting order will be published in 2021 with the aim of supporting local entities in the execution of the actions established in their SECAP in terms of mitigation and adaptation to climate change.</p>
Time (duration of the initiative)	<p>Processing started on 11/28/2017</p> <p>Contract signed on August 22<sup>nd</sup> 2018, valid until August 21<sup>st</sup> 2021, extendable for another 12 months.</p>
Thematic Objectives	Thematic objective 05, investment priority 05.01, specific objective 05.01.01
Relevant category of intervention	CE087 Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	<a href="https://pactodosalcaldes.gal/gl">https://pactodosalcaldes.gal/gl</a>
Additional optional comments	
Continuity in the next period	<p>The continuity of the action will materialize through the Technical Office for the Promotion of Sustainable Development and Adaptation to Climate Change of the Local Entities of the Rural Environment of Galicia.</p> <p>Climate change and the circular economy are cross-cutting aspects that affect different areas of competence and at all levels of governance. The objectives established by the EU for the 2050 time horizon mark the path of a transition that has to be assumed, in multilevel governance, from now on to successfully focus on planning.</p> <p>As indicated in Policy Line 1, of the urban and rural agenda, the fight against depopulation and the development of agriculture, along with metropolitan areas, the population living in other environments, such as rural areas, should be taken into account, seeking to improve population's well being.</p> <p>In this sense, it is necessary to create a Technical Office that guarantees communication and direct advice to local entities. This action is intended to strengthen climate resilience, as well as to promote the circular economy and other aspects of the ecological transition and the 2030 Agenda in the municipalities of Galicia with regional coordination to ensure an effective and equitable response in all of them.</p> <p>The technical office will execute the following functions:</p> <ul style="list-style-type: none"> <li>• Technical assistance to the 313 municipalities of Galicia for the development and execution of Action Plans for Climate, Energy and Sustainable Development</li> <li>• Advice to municipalities in the search for financing for the development of projects for mitigation and adaptation to Climate Change and sustainable development</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Development of informative sessions, preferably telematics to ensure understanding and dimension of the action</i></li> <li>• <i>Dissemination and awareness on Climate Change and sustainable development and the local role for the achievement of objectives in this area</i></li> </ul>
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## Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<p>Elaboración de la Estrategia Gallega de Cambio Climático y Energía 2050</p> <p><i>Development of Galician Strategy for Climate Change and Energy 2050</i></p>
Scope of intervention	<p><i>The intervention includes both mitigation and adaptation to climate change, as two of the fundamental areas of action, in addition to research and social dimension - governance – awareness areas.</i></p>
Description	<p><i>The strategy was approved on October 3<sup>rd</sup> 2019. It is a cross-cutting instrument, the result of a participatory process open to all sectors, public and private, of society.</i></p> <ul style="list-style-type: none"> <li>– <i>The objective of this strategy is that Galicia reaches climate neutrality as soon as possible, and always before 2050,</i></li> </ul> <p><i>In order to be an emissions-neutral region, it is necessary to reduce GHG emissions and enhance the sink effect of our natural systems in Galicia through the conservation of our natural heritage and proper management of land use.</i></p> <p><i>The Galician Strategy for Climate Change and Energy 2050 defines the way forward in the proposed time horizon 2050 through:</i></p> <ul style="list-style-type: none"> <li>✓ <i>4 four fundamental areas in which to focus action on climate change (mitigation, adaptation, research and social dimension-governance-awareness).</i></li> <li>✓ <i>10 objectives defined for each of these areas, which will require 34 lines of action to achieve them.</i></li> </ul> <p><i>It is clearly transversal in nature, affecting practically all sectoral policies and levels of the Administration, so its development and implementation must incorporate all sectoral actions that contribute to the fulfilment of the defined objectives. For this reason, the process of implementation and development of the strategy will be implemented through the Interdepartmental Commission for the Promotion and Coordination of the Galician Strategy for Climate Change and Energy 2050, which will be the body for coordination and collaboration on climate change.</i></p> <p><i>On the other hand, the development and implementation of the strategic objectives will be carried out through Integrated Regional Energy and Climate Plans with shorter time horizons. These programming frameworks will make it possible to develop the lines of action established to achieve the objectives of the Strategy through specific measures. This implantation formula is aimed at facilitating a continuous evaluation and the introduction of the necessary adjustments to make the Strategy more effective in achieving its objectives.</i></p>
Key results achieved so far	<p><i>Have a roadmap to achieve climate neutrality in Galicia before 2050, which establishes a multi-level governance system to achieve this objective.</i></p> <p><i>Have a procedure for implementing this Strategy through Integrated Regional Energy and Climate Plans with shorter time horizons. The first of them was approved with the Strategy and defines 170 measures to be executed in the 2019-2023 period with a budget of € 1,250,117,706.66.</i></p>



	<p><i>The budget to execute these measures is framed within the different priority axes of the ERDF Operational Program 2014-2020 through:</i></p> <p><i>Priority axis 1. Promote research, technological development and innovation</i></p> <p><i>Priority axis 4. Favouring the transition to a low-carbon economy</i></p> <p><i>Priority axis 5. Promote adaptation to climate change and risk prevention and management</i></p> <p><i>Priority axis 6. Conserve and protect the environment and promote resource efficiency</i></p> <p><i>Priority axis 13. Technical assistance</i></p>
Budget (EUR)	<p><i>The preparation of the Galician Strategy for Climate Change and Energy 2050 involved an investment of 152,000 euros.</i></p> <p><i>The development and implementation of the Galician Strategy for Climate Change and Energy 2050 will be carried out through Integrated Regional Plans with shorter time horizons. These programming frameworks will make it possible to develop the lines of action established to achieve the objectives of the Strategy through specific measures.</i></p> <p><i>This implantation formula is aimed at facilitating continuous evaluation and the introduction of the necessary adjustments to make the Strategy more effective in achieving its objectives.</i></p> <p><i>For its implementation, a first time horizon 2019-2023 is set out, implemented through the Integrated Regional Plan 2019-2023 for the development and implementation of the Galician Climate Change and Energy Strategy 2050.</i></p> <p><i>This Regional Plan includes 170 specific measures with a budget of € 1,250,117,706.66.</i></p> <p><i>The economic cost associated with the execution of the different measures is framed within the different priority axes of the ERDF Operational Program 2014-2020 through:</i></p> <p><i>Priority axis 1. Promote research, technological development and innovation</i></p> <p><i>Priority axis 4. Favouring the transition to a low-carbon economy</i></p> <p><i>Priority axis 5. Promote adaptation to climate change and risk prevention and management</i></p> <p><i>Priority axis 6. Conserve and protect the environment and promote resource efficiency</i></p> <p><i>Priority axis 13. Technical assistance</i></p>
Time (duration of the initiative)	<i>From the moment of approval in 2019 (October 3) until the time horizon defined in 2050, through plans with shorter time frames</i>
Thematic Objectives	<i>The preparation of the strategic document has been financed through thematic objective 05, investment priority 05.01, specific objective 05.01.01</i>
Relevant category of intervention	<i>CE087 Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures</i>
Website or link to relevant material	<a href="https://cambioclimatico.xunta.gal/estratexia-cambio-climatico">https://cambioclimatico.xunta.gal/estratexia-cambio-climatico</a>
Additional optional comments	

Continuity in the next period	<p><i>The development and implementation of the Galician Climate Change and Energy Strategy 2050 will be carried out through Integrated Regional Plans with shorter time horizons.</i></p> <p><i>The first of them covered the period 2019-2023 and the following are planned for successive periods:</i></p> <p><i>2024-2030</i></p> <p><i>2030-2040</i></p> <p><i>2040-2050</i></p>
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### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	<p><i>Cobertura LIDAR del ámbito del litoral de Galicia en el marco de la adaptación de la costa española al cambio climático.</i></p> <p><i>LIDAR coverage of the Galician coastline within the framework of the adaptation of the Spanish coast to climate change.</i></p>
Scope of intervention	<i>Climate Change Adaptation Intervention</i>
Description	<p><i>The main objective of this action is to have Digital Models of the Terrain and Surfaces (the latter with buildings and vegetation) current.</i></p> <p><i>The intervention consists of carrying out the LiDAR flight with a density of 3 points / m2, within the scope of the Coastal Management Plan (POL) of the Community of Galicia plus a strip facing the interior of at least 1,000 meters from the limit of the POL, which in practice means taking data from an area of approximately 3,006 km2. Due to the constant changes in urban and land features (urban planning, land use, vegetation, new infrastructures) experienced in the territory, especially on the Galician coast, it is advisable to have updated data on the elevation of the terrain, obtained with a LIDAR device, as a support for the different environmental studies to be carried out in this area.</i></p> <p><i>This intervention will ensure the collection of useful information for the evaluation of the effects of climate change due to the rise in sea level, waves, meteorological tide, sediment transport, erosion ...) on the Galician coast, in order to do a detailed analysis and assessment of the risks associated with these phenomena, and adopt appropriate adaptation measures.</i></p>
Key results achieved so far	<p><i>Having Digital Terrain and Surface Models (the latter with buildings and vegetation) have multiple derived applications, such as: flood zone studies, automatic detection of new buildings, visibility studies, obtaining fuel models.</i></p> <p><i>Having a three-dimensional model from a cloud of millions of points with known coordinates in the coastal areas helps to draw up an inventory of the uses and land cover at the time of capture. Furthermore, in the future by comparing LiDAR data obtained in different periods of time, we will be able to evaluate changes in coastal dynamics, determine those human activities affected or determine altered natural spaces due to climate change.</i></p> <p><i>This DTM has been incorporated into the cartographic view of the Coast of Galicia (financed with the budget of the Plan for the Promotion of the Environment) as one more layer of georeferenced information. Currently this cartographic view already has 26 layers of information about the Galician coastline</i></p>
Budget (EUR)	150.038,97€
Time (duration of the initiative)	5 months

Thematic Objectives	<i>The preparation of the strategic document has been financed through thematic objective 05, investment priority 05.01, specific objective 05.01.01, action 05.01.01.01</i>
Relevant category of intervention	<i>CE087. Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures</i>
Website or link to relevant material	<a href="https://experience.arcgis.com/experience/b5625a0f102649f1a44a6d28b9fbbbed3/page/page_12/">https://experience.arcgis.com/experience/b5625a0f102649f1a44a6d28b9fbbbed3/page/page_12/</a>
Additional optional comments	
Continuity in the next period	<p><i>This cartographic viewer is one of the basic tools for the analysis and evaluation of risks derived from climate change on the coasts of Galicia and, therefore, an instrument to increase the resilience of Galicia to Climate Change.</i></p> <p><i>The maintenance and improvement of this cartographic viewer is part of the Lines of Action LA11: consolidating a structure of observation networks as a monitoring instrument and LA12: having climate models as a tool to support planning, within the scope of Adaptation to Climatic Change, and LA26: Improve the systems for monitoring and tracking the effects of climate change, so that the maintenance and improvement of this cartographic viewer will continue in the next period, with the idea of extending it to the entire Galician territory.</i></p> <p><i>On the other hand, it is planned the creation of a Galician Resilience Center, which arises from the need to strengthen the resilience of the Galician territory in the face of global and regional environmental challenges such as climate change, loss of biodiversity, conservation of ecosystem values and improvement of the management of natural risks through the search for alliances for resilience, the generation and exchange of knowledge and training that fosters innovation and competitiveness in the territory.</i></p> <p><i>The generation and exchange of knowledge and promotion of research to ensure ecosystem services and resilience for long-term sustainability is essential and is intended to be achieved through:</i></p> <ul style="list-style-type: none"> <li><i>– The promotion of research on resilience and ecological transition: Compilation and dissemination of research projects and publications in the following fields: Climate change, landscapes, water resources, land use, food security, marine systems and urban systems. Also on custody, the impact of the behaviour of society in the different ecosystems and the socio-ecological transformations for the well-being of the human being.</i></li> <li><i>– Resilience training for researchers and citizens: Create a platform for knowledge and training on resilience</i></li> <li><i>– Alliances for resilience: Search and carry out public-private, multilevel and multisectoral collaboration agreements to provide the center with content resilience, seek synergies in innovation and research, being able to focus resources on lines of research most necessary to promote resilience and competitiveness of the territory</i></li> <li><i>– Citizen awareness</i></li> <li><i>– Based on the successful experience of the Stockholm Resilience Center. Pilot project in Galicia to export to other CCAA, with a view to creating a network of resilience centres</i></li> </ul> <p><i>The objectives to be achieved through this action are:</i></p>

	<ul style="list-style-type: none"> <li>– <i>Have an environmental information system useful for the identification and management of environmental risks and effective for the relationship with the recipients of environmental assessment processes</i></li> <li>– <i>Improve the involvement of companies and entities in Galicia with environmental sustainability and protection of the environment.</i></li> <li>– <i>More eco-labelled products on the market</i></li> <li>– <i>Protection of the Galician territory against possible accidental pollution events, including maritime and air pollution</i></li> <li>– <i>Protection and restoration of degraded spaces</i></li> </ul>
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### 3.6. OP Southern & Eastern Regional Programme ERDF (2014IE16RFOP002)

#### Example of intervention for climate change mitigation or adaptation

Name of intervention	<i>Better Energy Warmer Homes (BEWH) Scheme</i>
Scope of intervention	<i>Climate change mitigation</i>
Description	<p><i>The Better Energy Warmer Homes scheme ("the Scheme") is run by the Sustainable Energy Authority of Ireland on behalf of the Department of the Environment, Climate and Communications. The Scheme is targeted at low-income households at risk of energy poverty. The Scheme delivers a range of energy efficiency measures to households that are vulnerable to energy poverty.</i></p> <p><i>The intervention is in the form of a direct grant (annual budget allocation) from the Department of the Environment, Climate and Communications (Intermediary Body) to a single Beneficiary – the Sustainable Energy Authority of Ireland (Beneficiary). The beneficiary in turn procures the services of private contractors and Community Based Organisations (CBOs) to carry out the energy efficiency measures in eligible households. These measures may include dry lining, draught proofing, attic insulation, cavity wall insulation, floor insulation, external wall insulation and boiler replacement.</i></p> <p><i>The objectives of the Scheme are to improve the energy efficiency of the household at risk and in the process reduce the amount of expenditure that is required to be spent on energy. Other secondary objectives are to improve health and well-being, while reducing the amount of disposal income spent on energy. A reduction in spend on energy will also make a positive contribution to reducing poverty in at-risk households.</i></p>
Key results achieved so far	<i>In the period 2014 to 2019, the scheme has delivered energy efficiency improvement measures to 20,713 households resulting in an improved energy consumption classification in 12,214 households. It is estimated that this is yielding an annual decrease of 10,787 Tonnes of CO2 equivalent.</i>
Budget (EUR)	<p><i>Total Public Expenditure €57,160,664</i></p> <p><i>Co-financing Rate 50%</i></p> <p><i>ERDF Amount= €28,580,332</i></p>
Time (duration of the initiative)	<i>01/01/2014 – 31/12/2019</i>
Thematic Objectives	<i>TO4</i>
Relevant category of intervention	<i>014.Energy efficiency renovation of existing housing stock, demonstration projects and supporting measures</i>
Website or link to relevant material	<i><a href="https://www.seai.ie/grants/home-energy-grants/free-upgrades-for-eligible-homes/">https://www.seai.ie/grants/home-energy-grants/free-upgrades-for-eligible-homes/</a></i>
Additional optional comments	
Continuity in the next period	<i>Yet to be confirmed</i>

**Note:** The Operational Programme also included a Social Housing Retrofit scheme under Priority 4 but all funding for this scheme was reallocated to a new Coronavirus Response priority under CRII and CRII+.

### 3.7. OP País Vasco – ERDF (2014ES16RFOP021)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Desarrollo de la tecnología de un convertidor undimotriz flotante offshore de aprovechamiento de energía de las olas apto para las costas vascas que dé respuesta a la estrategia Energibasque tanto en su vertiente energética como industrial</i> <i>Development of the technology of an offshore floating wave inverter for the use of wave energy suitable for Basque coasts that responds to the Energibasque strategy, both in its energy sector and industry</i>
Scope of intervention	<i>It is about climate change mitigation</i>
Description	<p>The Energy Agency of the Basque Government (EVE – Ente Vasco de la Energía) is the agency in charge of developing projects and initiatives in line with the energy policies defined by the Basque Government. EVE's actions are fundamentally oriented to certain areas such as energy efficiency, diversification of energy sources and the promotion of renewable energies. Due to the main energy sources available in the Basque Country, among the strategic projects of the EVE, those related to marine energy stand out, mainly wave energy.</p> <p>The Basque Country has "Biscay Marine Energy Platform" or "BIMEP", a testing and demonstration infrastructure for marine energy converters, located off the coast of Armintza (in Bizkaia). It has 20MW of capacity and is intended to demonstrate the technical and economic feasibility of the converters, as well as their safety, before moving to full-scale commercial status.</p> <p>The project had to start from sufficiently advanced previous research, being necessary a minimum technological level of a TR4-TR5, having developed the basic principle of operation, the numerical modelling of the same and having carried out at least some tests in a test channel or tank with at least one prototype to scale</p> <p>Innovative public purchase tender: Pre-commercial Public Purchase of the converter</p> <p>Beneficiary: Basque Energy Agency (EVE)</p>
Key results achieved so far	<p><i>This new or improved technological concept had to advance in its technological development by installing a prototype of a converter in BIMEP, demonstrating its connectivity. Although it could be of less power and dimension than the marketable product, it had to have all its functional characteristics. At the end of the contract, the technological development achieved corresponded to a TR6-TR7 level.</i></p> <p><i>With this vision, the long-term objectives seek to achieve an energy system that is increasingly low in carbon while being competitive. The general objectives are those reflected below:</i></p> <ul style="list-style-type: none"> <li><i>• Intensify energy efficiency actions in all sectors to limit the level of energy consumption.</i></li> <li><i>• Contribute to maintaining a competitive and sustainable energy system and increasing the use of renewable energies.</i></li> <li><i>• Establish priority areas for research, identification of resources, technological and industrial development in the energy field</i></li> </ul>
Budget (EUR)	<i>Total amount certified in the POPV ERDF 1420 = € 1,900,000 (€ 950,000 ERDF)</i>
Time (duration of the initiative)	<i>November 2014 - April 2018</i>
Thematic Objectives	<i>Thematic Objective 4</i>
Relevant category of intervention	<i>012 Other renewable energies (including hydroelectric, geothermal and marine) and integration of renewable energies (including storage, conversion of electricity to gas and renewable hydrogen infrastructure).</i>

Website or link to relevant material	<a href="https://eve.eus/Conoce-la-Energia/Multimedia/Infografias/BIMEP#slide=1">https://eve.eus/Conoce-la-Energia/Multimedia/Infografias/BIMEP#slide=1</a> <a href="https://eve.eus/Conoce-la-Energia/Multimedia/Infografias?lang=en-gb">https://eve.eus/Conoce-la-Energia/Multimedia/Infografias?lang=en-gb</a> <a href="https://eve.eus/Actuaciones/Marina?lang=es-es">https://eve.eus/Actuaciones/Marina?lang=es-es</a>
Additional optional comments	<i>The primary purpose of the collector, which has remained at anchor for more than 2 years, was not energy production, but its technological development, since these are technologies that are not yet mature enough for commercial exploitation.</i>
Continuity in the next period	<i>In the 2021-2027 programming period, an attempt will be made to co-finance similar initiatives with the ERDF, which may be prototypes of different configurations that present alternatives to wave energy, such as offshore wind or tests and components thereof.</i>

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Programa de ayudas a comunidades de propietarios para la rehabilitación de edificios y viviendas (Program 1)</i> <i>Y programa de ayudas en materia de rehabilitación eficiente de viviendas y edificios para la elaboración de proyectos de intervención en el patrimonio edificado (Program 4)</i> <i>Aid program for communities of owners for the rehabilitation of buildings and homes (Program 1)</i> <i>And aid program in the field of efficient rehabilitation of homes and buildings for the development of intervention projects in the built heritage (Program 4)</i>
Scope of intervention	<i>It is about climate change mitigation</i>
Description	Within the framework of the strategic action in urban rehabilitation in the Basque country, in the Plan Renove-Rehabilitation 2013-2016, it had 5 programs or lines of aid, among which are the two lines of aid co-financed in the Operational Program ERDF of the Basque country 2014-2020: The Aid program for communities of owners for the rehabilitation of buildings and houses (program 1) and the Aid program in the matter of efficient rehabilitation of houses and buildings for the development of intervention projects in the built heritage (program 4) The operations proposed in line of action or program 1 refer exclusively to the part related to promoting energy efficiency (through actions in the building envelope), intended for communities of owners under horizontal property, with their own legal personality (not to individuals). The protectable actions had to suppose a thermal improvement in the building envelope, as specified in the Technical Building Code. The operations proposed in the line of action or program 4, can be beneficiaries the communities of owners of buildings grouped until configuring blocks or blocks with a construction date before 1980, supporting a set of actions in order to achieve an improvement in energy performance of the building to achieve, after the renovation, at least an energy rating C (passive and active actions), with energy monitoring actions (indoor thermal comfort and energy consumption in heating) in a representative sample of homes, and additionally incorporating improvements in accessibility. instruments used: grants
Key results achieved so far	<i>Achievements Program 1:</i> <i>number of homes improved: 1,320, and reduction of tons of CO2: 2,086 tons</i> <i>Achievements Program 4:</i> <i>number of homes improved: 106, and reduction of tons of CO2: 221 tons</i> <i>Initially, many more actions in energy efficiency of homes were scheduled, but the emergence of COVID has made us deprogram everything that is not certified and allocate it to face the pandemic.</i>
Budget (EUR)	<i>Program 1: Certified amount: € 2,631,610.30 (€ 1,315,805.15 ERDF)</i> <i>Program 4: Certified amount: € 690,944.70 (€ 345,472.35 ERDF)</i>



Time (duration of the initiative)	<i>Program 1: 1/1/2014 – 31/12/2016 open convocatory Program 4: only 2015 convocatory (1/1/2015 – 31/12/2017)</i>
Thematic Objectives	<i>Thematic Objective 4</i>
Relevant category of intervention	<i>014 - renovation of the energy improvement of existing buildings, demonstration projects and support measures.</i>
Website or link to relevant material	<a href="https://www.etxebide.euskadi.eus/x39-contgen/es/contenidos/informacion/renove_rehabilitacion/es_def/index.shtml">https://www.etxebide.euskadi.eus/x39-contgen/es/contenidos/informacion/renove_rehabilitacion/es_def/index.shtml</a>
Additional optional comments	<i>Initially, many more actions in energy efficiency of homes were scheduled, but the emergence of COVID has made us deprogram everything that is not certified and allocate it to face the pandemic.</i>
Continuity in the next period	<i>In the 2021-2027 programming period, an attempt will be made to continue supporting this type of intervention, in order to continue promoting energy efficiency in the existing housing stock</i>

### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	<p><i>Defence works against floods to reduce the risk of flooding in urban areas or areas with economic activity, which in the event of floods (increased flow) may lead to significant human or economic losses:</i></p> <p><i>Works corresponding to the Project for the defence against floods of the <u>Urumea</u> river as it passes through Donostia-San Sebastian (Gipuzkoa) phase 1.</i></p> <p><i>Works corresponding to the project for the defence against floods of the <u>Kadagua</u> river as it passes through the Mimetiz neighbourhood, in the municipality of Zalla (Bizkaia)</i></p>
Scope of intervention	<i>It is about climate change adaptation: river floods</i>
Description	<p>Defence works against floods to reduce the risk of flooding in urban areas or areas with economic activity, which in the event of floods (increased flow) may lead to significant human or economic losses.</p> <p><u>Urumea</u>: Channelling of 850 meters of river, doubling its width (from 25 to 50 meters); replacement of the Pilar pedestrian walkway and the Martutene bridge, with more than 50 meters of span adjusted to the new width of the Urumea river as it passes through the San Sebastian neighbourhood, and building a new network of rainwater collectors and a storm tank that will collect the waters that precipitate in the neighbourhood in episodes of intense rain and will return them to the river, saving the difference in elevation with the plate of the upper waters of the Urumea.</p> <p><u>Kadagua</u>: Improvement of the hydraulic behaviour in front of the Kadagua river floods as it passes through Mimetiz (Zalla), to avoid the floods that frequently occur. To this end, the entire hydraulic solution includes the following milestones:</p> <p>Replacement of the Puente del Charco by another with a larger hydraulic section, without affecting the adjoining building. Specifically, a new bridge with a span of 41 meters, without supports in the channel.</p> <p>Creation of a dry cut or diversion channel between the sports facilities and the Aretxaga sector, occupying the velodrome in order to function as a double channel in high water episodes. It is a trapezoidal channel that will generate a green leisure space in low waters and that will host a good part of the flow of high waters.</p> <p>Expansion of the upstream drainage section of the Charco bridge, without significantly affecting the banks of the river in good condition and thus allowing high water to drain to the surroundings of the bridge.</p> <p>Investments are carried out by URA - The Basque Water Agency, and "green" infrastructures are prioritized over "grey" ones</p> <p>Beneficiaries: the entire population residing in the area of action and downstream, including the industrial estates and companies located therein.</p>
Key results achieved so far	<p><u>Urumea</u>: 2,518 people (1,224 men and 1,294 women)</p> <p><u>Kadagua</u>: 3,053 people (1,455 men and 1,598 women)</p>
Budget (EUR)	<p><u>Urumea</u>: Certified amount: € 8,163,580 (€ 4,081,790 ERDF)</p> <p><u>Kadagua</u>: Certified amount € 2,361,979.50 (€ 1,180,989.75 ERDF)</p>



Time (duration of the initiative)	<i>Urumea: March 2015 - September 2017</i> <i>Kadagua: April 2017 - November 2020</i>
Thematic Objectives	<i>Thematic Objective 5</i>
Relevant category of intervention	<i>087 - Measures for adaptation to climate change and prevention and management of climate-related risks, such as erosion, fires, floods, storms and droughts, including awareness raising, civil protection and disaster management systems and infrastructures</i>
Website or link to relevant material	<i>Urumea:</i> <a href="https://www.uragentzia.euskadi.eus/informacion/obras/martutene/u81-0003771/es/">https://www.uragentzia.euskadi.eus/informacion/obras/martutene/u81-0003771/es/</a> <i>Kadagua:</i> <a href="https://www.uragentzia.euskadi.eus/informacion/informacion-publica-proyecto-de-defensa-contrainundaciones-del-rio-cadagua-a-su-paso-por-mimetiz-en-el-municipio-de-zalla-bizkaia/u81-000351/es/">https://www.uragentzia.euskadi.eus/informacion/informacion-publica-proyecto-de-defensa-contrainundaciones-del-rio-cadagua-a-su-paso-por-mimetiz-en-el-municipio-de-zalla-bizkaia/u81-000351/es/</a>
Additional optional comments	<i>The entire investment has not been certified in the operational program, only some of the phases, or even part of the action, as the entire uncertified programmed amount has been allocated to health spending to face the COVID-19 pandemic.</i>
Continuity in the next period	<i>An attempt will be made to continue programming actions of this type in the ERDF 2021-2027 operational program, in coordination with the actions assigned to the Euskadi Next (NGEU) program, based on the strategic planning carried out by URA - Basque Water Agency</i>

### 3.8. OP Interreg V-B - Central Europe (2014TC16RFTN003)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<i>ENERGY@SCHOOL - ENERGY OPTIMIZATION AND BEHAVIOUR CHANGE INTO SCHOOLS OF CENTRAL EUROPE</i>
Scope of intervention	<i>Climate change mitigation – energy efficiency and youth education</i>
Description	<p><i>The ENERGY@SCHOOL project aimed at improving energy efficiency in schools by educating energy guardians to monitor energy consumption. School students and teachers were educated and trained to become junior and senior energy guardians, respectively, and were given the responsibility of reducing their schools' energy consumption.</i></p> <p><i>The ENERGY@SCHOOL's integrated approach ensured the engagement of all stakeholders, from families and students to schools, experts and municipalities. The educational and training schemes were tailored to enhance understanding and lead to behavioural change of students and school staff.</i></p> <p><i>In addition to the educational activities, concrete pilot investments in smart meters, apps and other tools to monitor energy consumption were done in the involved schools.</i></p> <p><i>The project was implemented by eight local public authorities, two universities and two energy agencies from seven countries: Austria, Croatia, Germany, Hungary, Italy, Poland and Slovenia.</i></p>
Key results achieved so far	<i>Within the project duration (36 months), 24 training programmes were conducted, three digital learning applications created and 241 energy guardians were trained. These measures contributed to the reduction of energy consumption in 48 participating schools. All participating schools adopted energy management plans that define actions for energy efficiency improvements and steps towards energy sustainability and efficient</i>

	<p>energy management. The project has already leveraged substantial investments. For example, with about 184 kEUR invested by the transnational EU funding programme Interreg CENTRAL EUROPE in Croatia, more than 4,5 mil. EUR of further investments were mobilised for energy efficiency measures in schools and public buildings in the City of Karlovac (HR).</p> <p>The project is expected to have a long lasting effect achieved via successful behavioural change of students and staff from the involved schools. This will result in both improved energy efficiency and reduced energy expenses. In addition, it is expected that schools will take into consideration measures proposed within the adopted energy plans and leverage additional funds for their implementation.</p>
Budget (EUR)	Total budget: EUR 2.581.379 (European Regional Development Fund/ERDF: EUR 2.127.776)
Time (duration of the initiative)	Project duration: 01/07/2016 – 30/06/2019
Thematic Objectives	TO4 - Supporting the shift towards a low-carbon economy in all sectors
Relevant category of intervention	013 - Energy efficiency renovation of public infrastructure, demonstration projects and supporting measures
Website or link to relevant material	<a href="https://www.interreg-central.eu/energyatschool">https://www.interreg-central.eu/energyatschool</a>
Additional optional comments	<p>In 2018 the project was covered by Euronews: <a href="https://www.youtube.com/watch?v=AJya7Ab-LvI">https://www.youtube.com/watch?v=AJya7Ab-LvI</a></p> <p>In 2020 it was awarded with the REGIOSTARS Award under the category "Youth empowerment for cooperation across border - 30 years of Interreg": <a href="https://ec.europa.eu/regional_policy/en/information/videos/regiostars-2020-energy-school">https://ec.europa.eu/regional_policy/en/information/videos/regiostars-2020-energy-school</a></p>
Continuity in the next period	<p>Similar actions will be supported by the Interreg CE Programme also in the 2021-2027 programming period under the programme specific objective (SO) 2.1 - Supporting the energy transition to a climate-neutral central Europe (corresponding to the ERDF SO 2.1). This programme SO will address actions for improving energy efficiency of buildings and public infrastructures as well as energy demand management and behavioural change. For more information on the new Interreg CE Programme 2021-2027 please visit <a href="http://www.interreg-central.eu/2021-27">www.interreg-central.eu/2021-27</a>.</p>

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	ProteCHt2save - Risk assessment and sustainable protection of Cultural Heritage in changing environment
Scope of intervention	Climate change adaptation - Risk assessment and sustainable protection of Cultural Heritage
Description	<p>The ProteCHt2save project aimed at an improved protection and management of cultural heritage by strengthening its resilience to flood, heavy rain and droughts impacts linked to climate change.</p> <p>As starting point, risk areas for an improved protection were identified, notably through the development of a Web GIS tool for risk mapping. The tool then supported policy and decision makers in setting up preparedness measures and strategies for the protection of</p>

	<p>cultural heritage in central Europe exposed to extreme events linked to climate change (particularly heavy rains, flood and fire due to drought periods).</p> <p>In addition, a decision support tool for the analysis of the criticalities (physical and managerial) determining the vulnerability of cultural heritage (particularly monumental complexes and museums in historic centres) was produced. Based on this information, 7 local emergency plans for an improved risk management and protection of cultural heritage were set up and tested in the frame of pilot actions.</p> <p>The project involved 3 research institutions, 6 local and regional public authorities and 1 regional development agency from 7 countries – Austria, Croatia, Czech Republic, Hungary, Italy, Poland and Slovenia.</p>
Key results achieved so far	<p>ProteCHt2save resulted in an improvement of the capacities of central European municipalities in strengthening the resilience of cultural heritage to flood, heavy rain, and droughts impact linked to climate change. This has been achieved by the implementation of innovative tools (e.g. Web GIS tool for Risk Mapping, Decision Support Tool for criticalities identification - <a href="https://www.protecht2save-wgt.eu">https://www.protecht2save-wgt.eu</a>) as well as strategies and action plans (e.g. Transnational strategy for cultural heritage protection in emergency situations, local emergency plans) for the management of cultural heritage at risk, based on a deep understanding at local level of the environmental, cultural and managerial context of the heritage sites under analysis.</p> <p>The target groups (such as policy and decision makers responsible for disaster mitigation and safeguarding of cultural heritage assets, public authorities, scientific community, citizens and local communities) benefited of:</p> <ul style="list-style-type: none"> <li>i) an increased awareness of the still existing gaps in the protection of cultural heritage,</li> <li>ii) tools for its management in emergency situations, and</li> <li>iii) preparedness measures and evacuation plans specifically dedicated to its safeguarding when exposed to extreme climate conditions (flood, drought, heavy rain).</li> </ul> <p>The project is expected to have long-lasting effects as particularly the municipalities involved in the project have committed to integrate the transnational strategies developed and tested at the pilot sites and specifically dedicated to the protection of cultural heritage in their local plans of risk management.</p>
Budget (EUR)	Total budget: EUR 2.150.549,00 (European Regional Development Fund/ERDF: EUR 1.787.109,90)
Time (duration of the initiative)	01.07.2017 - 30.06.2020
Thematic Objectives	TO6 - Protecting the environment and promoting resource efficiency
Relevant category of intervention	094 - Protection, development and promotion of public cultural and heritage assets
Website or link to relevant material	<a href="https://www.interreg-central.eu/ProteCHt2save">https://www.interreg-central.eu/ProteCHt2save</a>
Additional optional comments	
Continuity in the next period	Similar actions will be supported by the Interreg CE programme also in the 2021-2027 programming period under the programme SO 2.2 - Increasing the resilience to climate change risks in central Europe (corresponding to the ERDF SO 2.4).

**Example n. 3 of intervention for climate change mitigation or adaptation**

Name of intervention	<i>RAINMAN - Integrated Heavy Rain Risk Management</i>
Scope of intervention	<i>Climate change adaptation – management of extreme weather events and risks</i>
Description	<p><i>The main objective of the RAINMAN project is to improve integrated management capacities of public authorities for climate change adaptation, in particular for mitigation of heavy rain risks and coping with hazards of flash floods.</i></p> <p><i>This objective was achieved through the development of practice-oriented risk prevention strategies and innovative tools enabling assessment, mapping, forecasting and better emergency responsiveness. This enables the reduction of heavy rain risks caused by flash floods or erosion of sediment due to uncontrolled surface runoff.</i></p> <p><i>The project developed various tools and methods for emergency response and warning infrastructure, – which were compiled in the RAINMAN-Toolbox, an online information platform (<a href="https://rainman-toolbox.eu">https://rainman-toolbox.eu</a>). It contains guidance on who and how should take action, a collection of methods for assessment and mapping of heavy rain risks, recommendations on risk communication but also a catalogue of “Our stories” - good practice examples for the integrated reduction of heavy rain risks.</i></p> <p><i>The project contributed to the transformation of the involved regions into a safer place to live and work for its main target groups: local and regional authorities, inhabitants and businesses.</i></p> <p><i>The project was implemented by four local public authorities, three research institutes, two water management companies and a sectoral agency from six countries – Austria, Croatia, Czech Republic, Germany, Hungary and Poland.</i></p>
Key results achieved so far	<p><i>Within the project, customised hazard and risk maps have been elaborated for 25 pilot municipalities located in the participating countries, which allow them to plan risk prevention measures in detail. Compared to the initial situation, the involved public authorities now understand their specific risk situation better and can or have already taken prevention measures (according to an online survey more than 67 % already have implemented the developed measures).</i></p> <p><i>Furthermore, improved warning systems and emergency response strategies as developed by the project have been implemented in the Federal State of Saxony, DE and the cities of Graz (AT), Zagreb and Umag (both HR) and Middle Tisza Water Directorate (HU). Specific risk reduction measures have been integrated into the regional spatial planning in the Regions of South Bohemia (CZ), Upper Austria (AT) and Lower Silesia (PL).</i></p> <p><i>Ultimately, the pilot investment in Hungary aimed at the creation of the water reservoir on the Tisza River has increased flood protection of the Municipality of Kunhegyes and management of heavy rain events.</i></p> <p><i>The project partners also conducted 33 trainings in 22 pilot regions and contributed to the increase of knowledge of 672 persons on heavy rain risks and tools developed by the project.</i></p> <p><i>The project is expected to have long-lasting effects since the local and regional administrations gain knowledge and tools to assess the risks of heavy rain in involved territories, which can be used for integrated territorial management and decision making processes as well as urban planning.</i></p>

Budget (EUR)	<i>Total budget: EUR 3.045.286,89 (European Regional Development Fund/ERDF: EUR 2.488.510,22)</i>
Time (duration of the initiative)	<i>01.07.2017 - 30.06.2020</i>
Thematic Objectives	<i>TO 6 - Protecting the environment and promoting resource efficiency</i>
Relevant category of intervention	<i>35 - Adaptation to climate change measures and prevention and management of climate related risks: floods (including awareness raising, civil protection and disaster management systems and infrastructures).</i>
Website or link to relevant material	<a href="https://www.interreg-central.eu/rainman">https://www.interreg-central.eu/rainman</a>
Additional optional comments	
Continuity in the next period	<i>Similar actions will be supported by the Interreg CE also in the 2021-2027 programming period under the programme SO 2.2 - Increasing the resilience to climate change risks in central Europe (corresponding to the ERDF SO 2.4).</i>

### 3.9. OP Thüringen - ERDF (2014DE16RFOP015)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	Schwimmhalle Ilmenau, Energieversorgung (indoor swimming pool Ilmenau, energy supply) Project number 2017 IGS 0390
Scope of intervention	climate change mitigation
Description	Main aim: Reduction of CO <sub>2</sub> -emissions Instruments used: Grants Main Beneficiary: Stadt Ilmenau
Key results achieved so far	Expected: <ul style="list-style-type: none"> <li>• Additional capacity for energy generation from renewable energy sources: 296 kWp</li> <li>• Reduction in yearly primary energy consumption in public buildings: 470.280 kWh/year</li> <li>• Reduction in yearly primary energy consumption in energetically optimised technical infrastructures: 829.006 kWh/year</li> <li>• Reduction in the yearly emission of greenhouse gases (CO<sub>2</sub>-equivalents): 700 t/year</li> </ul> The project has not been completed sufficiently long to observe results.
Budget (EUR)	Total project value: ca. 12.000.000 Total public investment approved (from operational programme): 3.483.168 Total EU investment committed: 2.786.500
Time (duration of the initiative)	08/2017 - 10/2020

Thematic Objectives	TO4
Relevant category of intervention	013 Energy efficiency renovation of public infrastructure
Website or link to relevant material	<a href="https://www.ilmenau.de/4091-0-EFRE+Neubau+Schwimmhalle+Ilmenau.html">https://www.ilmenau.de/4091-0-EFRE+Neubau+Schwimmhalle+Ilmenau.html</a>
Additional optional comments	-
Continuity in the next period	Yes, interventions similar to this one will also be financed in the next programming period (technical interventions for reduction of CO2-emissions). This specific intervention will be finished in the current programming period.

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	Energetische Nutzung von Grünabfällen für die Wärmegewinnung (energetic usage of green waste for heat generation) Project number 2019 ESK 0193
Scope of intervention	climate change mitigation
Description	Main aim: Reduction of CO2-emissions Instruments used: Grants Main Beneficiary: Stadt Nordhausen
Key results achieved so far	Expected: <ul style="list-style-type: none"> <li>Reduction in yearly energy consumption: 1.050.000 kWh/year</li> </ul> The project has not been completed sufficiently long to observe results.
Budget (EUR)	Total project value: 1.874.200 Total public investment approved (from operational programme): 1.163.692 Total EU investment committed: 930.953
Time (duration of the initiative)	10/2019 – 12/2020
Thematic Objectives	TO4
Relevant category of intervention	013 Energy efficiency renovation of public infrastructure
Website or link to relevant material	013 Energy efficiency renovation of public infrastructure <a href="https://www.nordhausen.de/news/news_lang.php?ArtNr=27188">https://www.nordhausen.de/news/news_lang.php?ArtNr=27188</a> <a href="https://www.stadtwerke-nordhausen.de/detailansicht/news/uebergabe-des-efre-bescheids-fuer-das-vorhaben-energetische-nutzung-von-gruenabfaellen-fuer-die-alternat/?tx_news_pi1%5Bcontroller%5D=News&amp;tx_news_pi1%5Baction%5D=detail&amp;cHash=c7870c3227c790b665678cdae0cdf40e">https://www.stadtwerke-nordhausen.de/detailansicht/news/uebergabe-des-efre-bescheids-fuer-das-vorhaben-energetische-nutzung-von-gruenabfaellen-fuer-die-alternat/?tx_news_pi1%5Bcontroller%5D=News&amp;tx_news_pi1%5Baction%5D=detail&amp;cHash=c7870c3227c790b665678cdae0cdf40e</a>
Additional optional comments	-

Continuity in the next period	<p>Yes, interventions similar to this one will also be financed in the next programming period (interventions for reduction of CO<sub>2</sub>-emissions in energy systems).</p> <p>This specific intervention will be finished in the current programming period.</p>
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### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	<p>Errichtung eines Demonstrators zur Reduzierung von energiebedingten CO<sub>2</sub>-Emissionen unter Anwendung neuer Energie- und Energieeinspartechnologien mit Multiplikationseffekt</p> <p>(Construction of a demonstrator for reducing energy-induced CO<sub>2</sub>-emissions utilising new energy and energy saving technologies with multiplication effects)</p> <p>Project number: 2016 DMO 0014</p>
Scope of intervention	Climate change mitigation
Description	<p>Main aim: Reduction of CO<sub>2</sub>-emissions</p> <p>Instruments used: Grants</p> <p>Main Beneficiary: Institut für Angewandte Bauforschung Weimar gGmbH (IAB)</p>
Key results achieved so far	<p>Expected:</p> <ul style="list-style-type: none"> <li>Reduction in yearly energy consumption: 419.760 kWh/year</li> <li>Reduction in the yearly emission of greenhouse gases (CO<sub>2</sub>-equivalents): 98,3 t/year</li> </ul> <p>Achieved:</p> <ul style="list-style-type: none"> <li>Reduction in yearly energy consumption: 356.050 kWh/year</li> <li>Reduction in the yearly emission of greenhouse gases (CO<sub>2</sub>-equivalents): 86,4 t/year</li> </ul>
Budget (EUR)	<p>Total project value: ca. 472.031</p> <p>Total public investment approved (from operational programme): 212.235</p> <p>Total EU investment committed: 212.235</p>
Time (duration of the initiative)	04/2017 – 06/2018
Thematic Objectives	TO4
Relevant category of intervention	068 Energy efficiency and demonstration projects in SMEs and supporting measures
Website or link to relevant material	<a href="https://www.iab-weimar.de/errichtung-eines-demonstrators-zur-reduzierung-energiebedingter-co2-emissionen/">https://www.iab-weimar.de/errichtung-eines-demonstrators-zur-reduzierung-energiebedingter-co2-emissionen/</a>
Additional optional comments	-
Continuity in the next period	<p>Yes, interventions similar to this one will also be financed in the next programming period (technical interventions for reduction of CO<sub>2</sub>-emissions).</p> <p>This specific intervention is already finished.</p>



### 3.10. OP Bourgogne - ERDF/ESF/YEI (2014FR16M0OP014)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Augmenter la part des énergies renouvelables dans la production d'énergie régionale</i> <i>Increase the use of renewable energy in the local area</i>
Scope of intervention	<i>Change mitigation</i>
Description	<ul style="list-style-type: none"> <li>the main aims of the intervention : increase the use of renewable energy by financially supporting the investment projects of production of energy using local green sources such as wood or biogas</li> <li>instruments used : grants</li> <li>main beneficiaries : small and medium enterprises, local public administrations</li> </ul>
Key results achieved so far	<i>The main goal is to produce 11.58 megawatts of additional capacity for renewable energy production. So far 6.77 megawatts has been achieved but the managing authorities expect at least 11,85 by 2023.</i>
Budget (EUR)	8,318,782 €
Time (duration of the initiative)	<i>From 01/2015 to 12/2023</i>
Thematic Objectives	<i>TO4</i>
Relevant category of intervention	<i>011 and 012</i>
Website or link to relevant material	<a href="https://www.europe-bfc.eu/dispositif/aide-a-linvestissement-pour-la-production-denergies-renouvelables/">https://www.europe-bfc.eu/dispositif/aide-a-linvestissement-pour-la-production-denergies-renouvelables/</a>
Additional optional comments	
Continuity in the next period	Yes

#### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Réduire la consommation énergétique des bâtiments</i> <i>Energy efficiency renovation of infrastructure</i>
Scope of intervention	<i>Climate mitigation</i>
Description	<ul style="list-style-type: none"> <li>the main aims of the intervention : Reduce the energy consumption of local buildings (households and others) by financially supporting the projects of energy efficiency renovation</li> <li>instruments used (e.g. grants, loans, provision of services, creation of infrastructure...) : grants</li> <li>main beneficiaries: small and medium enterprises, local public administrations</li> </ul>
Key results achieved so far	<i>The main goal is to increase the number of households with improved energy consumption classification with a target of 5,251 households. So far 2,451 households has been achieved but the managing authorities expect at least 5,000 by 2023.</i>
Budget (EUR)	13,446,498€



Time (duration of the initiative)	<i>From 01/2015 to 12/2023</i>
Thematic Objectives	<i>TO4</i>
Relevant category of intervention	<i>13 and 14</i>
Website or link to relevant material	<a href="https://www.europe-bfc.eu/dispositif/renovation-energetique-des-logements-sociaux-hors-agglomeration/">https://www.europe-bfc.eu/dispositif/renovation-energetique-des-logements-sociaux-hors-agglomeration/</a> <a href="https://www.europe-bfc.eu/dispositif/renovation-energetique-des-batiments-universitaires-y-compris-les-logements-etudiants/">https://www.europe-bfc.eu/dispositif/renovation-energetique-des-batiments-universitaires-y-compris-les-logements-etudiants/</a> <a href="https://www.europe-bfc.eu/dispositif/reduire-la-consommation-energetique-des-batiments/">https://www.europe-bfc.eu/dispositif/reduire-la-consommation-energetique-des-batiments/</a>
Additional optional comments	
Continuity in the next period	<i>Yes with higher expectations</i>

### 3.11. OP Environment - CZ - ERDF/CF (2014CZ16M1OP002)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<p>Operační program Životní prostředí 2014 –2020</p> <p>Prioritní osa 5 – Energetické úspory</p> <p>Specifický cíl 5.1 - Snížit energetickou náročnost veřejných budov a zvýšit využití obnovitelných zdrojů energie</p> <p>Operational Programme Environment (OPE) 2014 –2020</p> <p>Priority axis 5 - Energy savings</p> <p>Specific Objective 5.1 - To reduce the energy intensity of public buildings and increase the use of renewable energy sources</p>
Scope of intervention	<p>This Specific Objective (SO) is supported from the Cohesion Fund and it concerns Thematic Objective (TO) 4: Supporting the transition to a low-carbon economy in all sectors as well as the Priority Area (PA) 2 "To encourage more sustainable energy" of the macro-regional strategy The EU Strategy for the Danube Region. It mainly includes climate change mitigation, partially also climate change adaptation.</p>
Description	<p>In the SO 5.1, energy efficiency focuses on reducing final energy consumption and the consumption of non-renewable primary energy. In case of climate mitigation it contributes to the reduction of greenhouse gases emissions and air pollutants, especially CO<sub>2</sub>, particulate matters, benzo[a]pyrene and NO<sub>x</sub>, and reduces damage to ecosystems and landscapes caused by the extraction of fossil fuels. In respect of climate adaptation, it helps to create measures that increase a building resilience against weather changes.</p> <p><u>Types of supported projects:</u></p> <p>Total or partial energy-saving renovation of public buildings:</p> <ul style="list-style-type: none"> <li>• Insulation of a building envelope,</li> <li>• Replacement and renovation (refurbishment) of doors and windows,</li> </ul>

	<ul style="list-style-type: none"> <li>• Implementation of construction measures that have a significant effect on the energy performance of buildings or improvement of the indoor environment quality,</li> <li>• Implementation of mechanical ventilation heat recovery systems,</li> <li>• Implementation of systems using waste heat,</li> <li>• Replacement of heat and cooling sources with installed capacity below 5 MW for space or domestic hot water heating using fossil fuels with an efficient source using biomass, heat pump, condensing boiler for natural gas or a combined heat or cooling and power system utilising renewable fuels or natural gas,</li> <li>• Installation of solar thermal collectors,</li> <li>• Separate measures concerning replacement of a heat source for space or hot water heating, installation of solar thermal collectors, installation of photovoltaic system and the installation of a forced ventilation systems with waste heat recovery under certain rules, where public buildings have achieved a certain degree energy efficiency and where, in the case of recovery ventilation system installation, they do not meet the requirements to ensure adequate air exchange,</li> <li>• Construction of new public buildings in the passive energy standard.</li> </ul> <p><u>Types of beneficiaries:</u></p> <ul style="list-style-type: none"> <li>• Regions,</li> <li>• Municipalities,</li> <li>• Voluntary municipal associations,</li> <li>• Organizational units of the State,</li> <li>• State organisations,</li> <li>• Public research institutions,</li> <li>• Public institutions,</li> <li>• Boroughs of the City of Prague,</li> <li>• Contributory organisations,</li> <li>• Higher education institutions, schools and educational establishments</li> <li>• Non-government non-profit organisations (public benefit organisations, foundations, funds, institutes, associations),</li> <li>• Churches, religious societies and their associations,</li> <li>• Business companies owned 100% by a public body.</li> </ul>
Key results achieved so far	<p>Estimated annual reduction in greenhouse gas emission:</p> <ul style="list-style-type: none"> <li>• programme's target value: 255 420 tons of CO<sub>2</sub> equivalent per year</li> <li>• target value from current grant decisions: 91 382,47 tons of CO<sub>2</sub> equivalent per year</li> <li>• achieved: 12 209,7 tons of CO<sub>2</sub> equivalent per year</li> </ul> <p>Additional capacity of renewable energy production installations:</p> <ul style="list-style-type: none"> <li>• programme's target value: 40 MW</li> <li>• estimated = target value from current grant decisions: 12,01 MW</li> <li>• achieved: 1,87 MW</li> </ul> <p>Reduced annual consumption of primary energy in public buildings:</p> <ul style="list-style-type: none"> <li>• programme's target value: 662 116 000 kWh per year</li> <li>• estimated = target value from current grant decisions: 504 183 555,78 kWh per year</li> <li>• achieved: 152 730 727,93 kWh per year</li> </ul> <p>Heat production from renewable energy sources:</p> <ul style="list-style-type: none"> <li>• programme's target value: 43 335 GJ</li> <li>• estimated = target value from current grant decisions: 46 688,91 GJ</li> <li>• achieved: 8 445,81 GJ</li> </ul> <p>Decrease in final energy consumption of public buildings:</p> <ul style="list-style-type: none"> <li>• programme's target value: 1 348 200 GJ per year</li> </ul>

	<ul style="list-style-type: none"> <li>• estimated = target value from current grant decisions: 1 026 618,1 GJ per year</li> <li>• achieved: 310 990,17 GJ per year</li> </ul> <p>Decrease in dust emissions:</p> <ul style="list-style-type: none"> <li>• programme's target value: 696 tons per year</li> <li>• estimated = target value from current grant decisions: 587,97 tons per year</li> <li>• achieved: 142,51 tons per year</li> </ul> <p>Amount of eliminated PM10 precursor emission from the tertiary sector from supported projects in SO 5.1:</p> <ul style="list-style-type: none"> <li>• estimated = target value from current legal acts: 19,24 tons per year</li> <li>• achieved: 7,33 tons per year</li> </ul> <p>Amount of eliminated PM2.5 particulate matters precursor emission from the tertiary sector from supported projects in SO 5.1:</p> <ul style="list-style-type: none"> <li>• estimated = target value from current grant decisions: 12,19 tons per year</li> <li>• achieved: 4,88 tons per year</li> </ul> <p>Useful floor area of renovated buildings:</p> <ul style="list-style-type: none"> <li>• estimated = target value from current grant decisions: 641 308,37 m<sup>2</sup></li> <li>• achieved: 253 393,89 m<sup>2</sup></li> </ul> <p>Newly built floor area of public buildings in near zero or passive standard in SO 5.1:</p> <ul style="list-style-type: none"> <li>• estimated = target value from current grant decisions: 33 031,85 m<sup>2</sup></li> <li>• achieved: 0 m<sup>2</sup></li> </ul> <p>Number of supported projects on new energy efficient buildings:</p> <ul style="list-style-type: none"> <li>• programme's target value: 12 projects</li> <li>• estimated = target value from current grant decisions: 13 projects</li> <li>• achieved: 13 projects</li> </ul>
Budget (EUR)	Total allocation of this SO 5.1 is EUR 450 567 183 from the Cohesion Fund. No national co-financing of SO 5.1 is provided under the OP Environment.
Time (duration of the initiative)	30.4. 2015 – 31. 12. 2023
Thematic Objectives	TO 4
Relevant category of intervention	013 Energy efficiency renovation of public infrastructure
Website or link to relevant material	<a href="https://www.opzp.cz/about/">https://www.opzp.cz/about/</a>
Additional optional comments	
Continuity in the next period	Within the scope of the new OPE 2021 – 2027 the same or similar measures as in the current programming period will be supported and several new activities will be added. New SO related to energy efficiency and renewables will also include a new individual support scheme for renewable energies on public infrastructure and support of climate adaptation and resilience against catastrophes e.g. green roofs, building shielding, green and grey water management and others. The emphasis will be put on complex projects. Newly, we plan to support public building construction not only in a passive standard but in a plus standard (producing more energy than consuming) as well.

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	Operační program Životní prostředí 2014–2020
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	<p>Prioritní osa 4 – Ochrana a péče o přírodu a krajinu</p> <p>Specifický cíl 4.3 - Posílit přirozené funkce krajiny</p> <p>Operational Programme Environment 2014–2020</p> <p>Priority axis 4 - Conservation and care of nature and landscape</p> <p>Specific Objective 4.3 - To strengthen natural functions of the landscape</p>
Scope of intervention	<p>This SO is supported from the European Regional and Development Fund and it concerns TO 6 - Protecting the environment and promoting resource efficiency as well as the PA 6 "To preserve biodiversity, landscapes and the quality of air and soils" of the macro-regional strategy The EU Strategy for the Danube Region. It includes both climate change mitigation, and climate change adaptation.</p>
Description	<p>The SO 4.3 meets the objectives of the National Environmental Policy of the CR 2012-2020, which include, among others, improvement of the ecological stability of the landscape and restoration of the landscape water regime. It also takes into account the basic principles of the draft Strategy to Adapt to Climate Change Designed for the Conditions of the CR, which ranks amongst the key measures ecosystem-based adaptation, maintaining connectivity and permeability of the landscape and, conservation and restoration of valuable habitats and ecosystem functions.</p> <p><u>Types of supported projects:</u></p> <ul style="list-style-type: none"> <li>• Creation, regeneration and strengthening of the functionality of landscape elements and structures,</li> <li>• Revitalisation and support of spontaneous renaturation of water courses and floodplains, restoration of eco-stabilising functions of water and water dependant ecosystems,</li> <li>• Near-nature measures aimed at slower surface runoff, erosion protection and adaptation to climate change,</li> <li>• Improving the species, age and spatial structure of forests (except for forests owned by the State) established under the FMP outside SPA and Natura 2000 sites,</li> <li>• Unblocking migration barriers for animals, and measures to reduce the death rate of animals connected to the development of technical infrastructure.</li> <li>•</li> </ul> <p><u>Types of beneficiaries:</u></p> <ul style="list-style-type: none"> <li>• Regions,</li> <li>• Municipalities,</li> <li>• Voluntary municipal associations,</li> <li>• Organisational state units (except for Nature Conservation Agency CR),</li> <li>• State enterprises,</li> <li>• State organisations,</li> <li>• Public research institutions,</li> <li>• Public institutions,</li> <li>• Contributory organisations,</li> <li>• Higher education institutions, schools and educational establishments,</li> <li>• Non-government non-profit organisations (public benefit organisations, foundations, funds, institutes, associations),</li> <li>• Churches, religious societies and their associations,</li> <li>• Business entities,</li> <li>• Trading companies and cooperatives,</li> <li>• Natural persons.</li> </ul>

Key results achieved so far	<p>Safeguarding the migration permeability of the river network:</p> <ul style="list-style-type: none"> <li>programme's target value: 317 km</li> <li>target value from current grant decisions: 33,92 km</li> <li>achieved: 17,29 km</li> </ul> <p>Number of localities where the ecosystem functions of landscape were enhanced:</p> <ul style="list-style-type: none"> <li>programme's target value: 4 110 localities</li> <li>target value from current grant decisions: 2 238 localities</li> <li>achieved: 1 173 localities</li> </ul> <p>Number of newly permeable migration barriers for animals:</p> <ul style="list-style-type: none"> <li>programme's target value: 125 pieces</li> <li>target value from current grant decisions: 35 pieces</li> <li>achieved: 13 pieces</li> </ul> <p>Space habitats that are supported in order to improve their conservation status:</p> <ul style="list-style-type: none"> <li>programme's target value for SO 4.3: 31 234 ha</li> <li>target value from current grant decisions: 46 383,01 ha</li> <li>achieved: 9 194,55 ha</li> </ul> <p>Length of revitalized watercourses:</p> <ul style="list-style-type: none"> <li>target value from current grant decisions: 65 599,60 m</li> <li>achieved: 28 282,99 m</li> </ul>
Budget (EUR)	Total allocation of SO 4.3 is EUR 224 284 028 from the European Regional Development Fund. No national co-financing of SO 4.3 is provided under the OP Environment.
Time (duration of the initiative)	30.4. 2015 – 31. 12. 2023
Thematic Objectives	TO 6 - Protecting the environment and promoting resource efficiency
Relevant category of intervention	085 Protection and enhancement of biodiversity, nature protection and green infra-structure
Website or link to relevant material	<a href="https://www.opzp.cz/about/">https://www.opzp.cz/about/</a>
Additional optional comments	
Continuity in the next period	Within the scope of new OPE 2021 – 2027 the same or similar measures as in the current programming period in SO 4.3 will be supported and several new activities will be added. Newly these measures will be under SO 1.3 "Support of adaptation against climate changes, risk preventions and resilience against catastrophes" which will have a broader scope. Among supported activities will be e.g. activities aiming at prevention and increase of resilience against floods, landslides and drought, activities increasing awareness about climate change, further measures dealing with retention of rainwater in urban areas, landscape elements (wetlands, pools, spring areas etc.).

### 3.12. OP Environmental and Energy Efficiency - HU - ERDF/CF (2014HU16M1OP001)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<i>VTT Felső-Tisza árvízvédelmi rendszerének kiépítése, Tisza-Túr tározó</i> <i>Construction of IVP Upper-Tisza Flood Protection System, Tisza-Tur Reservoir</i>
Scope of intervention	<i>Both: climate change mitigation and adaptation</i>
Description	<p><i>The main aims of the intervention:</i></p> <ul style="list-style-type: none"> <li><i>The project aims to implement a development, in accordance with the content of the Hungarian-Ukrainian joint flood protection development program and Improved Vásárhelyi Plan, that can deal with extreme flood waves expected to occur at a higher level and intensity in the future, by reducing peak water levels. Flood protection safety can be achieved by establishing a flood control reservoir on the section of the Upper Tisza near the border. On the left bank side of the Tisza, in the Palád-csécsei basin, a new flood control reservoir of almost 45 million m<sup>3</sup> is planned, and the water management system of the basin will be renewed. The flood controlling effect of the Tisza-Túr reservoir is the most significant in one of the most critical sections of the Upper Tisza. The project does not only serve flood protection purposes, as it envisages a complex water damage prevention and water management development. Thereby it can support the individual settlement and tourism developments in the area, as well as regional water-based economic development programs, conservation of natural assets and floodplain revitalization.</i></li> </ul> <p><i>The intervention addresses river floods.</i></p> <p><i>Instrument used: creation of infrastructure</i></p> <ul style="list-style-type: none"> <li><i>Construction of flood control reservoir and related facilities. Development of infrastructure related to the operation of the reservoir (communications, hydrographic monitoring, development of water management facilities, equipment acquisition) and water management developments.</i></li> </ul> <p><i>Main beneficiaries: the consortium formed by General Directorate of Water Management and Upper-Tisza Regional Water Directorate</i></p>
Key results achieved so far	<p><i>Outcomes achieved so far:</i></p> <ul style="list-style-type: none"> <li><i>Acquisition of land: expropriation of 391 properties;</i></li> <li><i>95% of construction plans have been approved;</i></li> <li><i>Working area was handed over in June 2019;</i></li> <li><i>Borrow pits are available;</i></li> <li><i>Construction works have begun in all areas, 24% of the construction is completed.</i></li> </ul> <p><i>Expected outcomes:</i></p> <ul style="list-style-type: none"> <li><i>Construction of 11 structures is in progress (18%), inlet structure has reached 33% completion, outlet structure has reached 43% completion;</i></li> <li><i>Water extraction structure has reached 25% completion;</i></li> <li><i>Construction works of the reservoir dam are on 26%;</i></li> <li><i>Construction of a dike keeper's house, a warehouse, demolition of a farmhouse has started;</i></li> <li><i>As a result of the intervention, the water system will be reconstructed, which means the cleaning of the sewerage network in the length of 46.75 km, together with the renovation and reconstruction of the affected culverts.</i></li> </ul>
Budget (EUR)	<i>Total amount: 102 563 507 EUR,</i> <i>from which EU funding: 87 178 981 EUR.</i>

Time (duration of the initiative)	<i>Approximate duration of the intervention: from 10/2018 to 06/2022.</i>
Thematic Objectives	<i>TO5</i>
Relevant category of intervention	<i>087 Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures</i>
Website or link to relevant material	<i>Subpage: <a href="http://ovf.hu/hu/futo-projektek/3967f9ed-fd0a-435e-928e-56daf52af82a">http://ovf.hu/hu/futo-projektek/3967f9ed-fd0a-435e-928e-56daf52af82a</a> Project website: <a href="http://tiszaturtarozo.ovf.hu/">http://tiszaturtarozo.ovf.hu/</a></i>
Additional optional comments	<i>Not relevant</i>
Continuity in the next period	<i>Not relevant</i>

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Tisza Hullámtér: Nagyvízi meder vízszállító képességének javítása a szolnoki vasúti híd és Kisköre közötti szakaszon Tisza Floodplain: Improving Conveyance Capacity of the High-water Riverbed Between the Railway Bridge at Szolnok and Kisköre</i>
Scope of intervention	<i>Climate change adaptation</i>
Description	<i>The main aims of the intervention:</i> <ul style="list-style-type: none"> <li><i>The aim of the project is to increase flood conveyance capacity of the high-water riverbed on the Middle Tisza section between Kisköre and the railway bridge at Szolnok for increasing flood safety. The project will address the floodplain narrowing sections, reduce the height of protrusions that significantly affect conveyance conditions of high-water, and improve the roughness of the most critical area - the flood conveyance zone - resulting from land use. The implementation of the project will bring nearly 125,000 people to greater flood safety.</i></li> </ul> <i>The intervention addresses river floods.</i> <i>Instrument used: creation of infrastructure</i> <ul style="list-style-type: none"> <li><i>Relocation and construction of main flood defence lines, construction of structures, forestry interventions.</i></li> </ul> <i>Main beneficiaries: the consortium formed by General Directorate of Water Management and Middle Tisza Regional Water Directorate</i>
Key results achieved so far	<i>Outcomes achieved so far:</i> <ul style="list-style-type: none"> <li><i>To tackle narrowing sections of the floodplain by relocating main flood defence lines;</i></li> <li><i>Removal of natural and artificial landforms in the floodplain - such as summer dikes, sandbars, sediment depositions - which prevent flood conveyance;</i></li> <li><i>Construction of structures and sluice reconstruction to replenish water in oxbow lakes for nature conservation purposes;</i></li> <li><i>Bank protection along the inlet channels of the Hanyi-Tiszasülyi flood level reduction reservoir;</i></li> </ul>



	<ul style="list-style-type: none"> <li>• River training interventions;</li> <li>• Restoration of appropriate flood conveyance condition and cultivation method by removing obstructive vegetation.</li> </ul> <p>Expected outcomes:</p> <ul style="list-style-type: none"> <li>• Restoring of the flood conveyance zone, floodplain rehabilitation.</li> </ul>
Budget (EUR)	Total amount: 51 745 777 EUR, from which EU funding: 43 983 910 EUR.
Time (duration of the initiative)	Approximate duration of the intervention: from 01/2016 to 03/2023.
Thematic Objectives	TO5
Relevant category of intervention	087 Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	Subpage: <a href="http://ovf.hu/hu/futo-projektek/1cd1f3d8-4e74-4d02-af72-ccc47165e507">http://ovf.hu/hu/futo-projektek/1cd1f3d8-4e74-4d02-af72-ccc47165e507</a> Project website: <a href="http://tiszahullamter.ovf.hu/">http://tiszahullamter.ovf.hu/</a>
Additional optional comments	Not relevant
Continuity in the next period	Not relevant

### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	Záportározó építése a Baranya csatorna vízgyűjtőjén Construction of a Storm Water Reservoir on the Catchment Area of Baranya Canal
Scope of intervention	Climate change adaptation
Description	<p>The main aims of the intervention:</p> <ul style="list-style-type: none"> <li>• The aim of the project is to reduce the flood risk and the risk of water damage especially to the population of Magyarhertelend and Sásd, by implementing the Magyarszék reservoir on the catchment area of Baranya Canal. The main goal is to reduce flood risk in the spring by retaining water. The secondary goal – in the case of reservoirs with complex utilisation – is water conservation, providing water used for irrigation, replenishing water during drought periods, making the flow regime of watercourses even and retaining the sediment of the upper watercourse sections partially.</li> </ul> <p>The intervention addresses flash floods and droughts.</p> <p>Instrument used: creation of infrastructure</p> <ul style="list-style-type: none"> <li>• Dam construction, riverbed stabilization, (drop) spillway construction, as well as hydrographic gauging station construction.</li> </ul> <p>Main beneficiaries: the consortium formed by General Directorate of Water Management and South-Transdanubian Regional Water Directorate</p>
Key results achieved so far	<p>Outcomes achieved:</p> <ul style="list-style-type: none"> <li>• Parallel-dam and supply channel construction for the Magyarszék reservoir</li> </ul>



	<ul style="list-style-type: none"> <li>• Building revetments on dam slopes</li> <li>• Riverbed stabilization of the Baranya Canal</li> <li>• Outlet and inlet sluice construction, weir building</li> <li>• Construction of (drop) spillways and a chute</li> <li>• Establishment of a hydrographic gauging station in Magyarhertelend</li> </ul>
Budget (EUR)	Total amount: 5 277 532 EUR, from which EU funding: 4 485 902 EUR.
Time (duration of the initiative)	Duration of the intervention: from 07/2016 to 10/2019.
Thematic Objectives	TO5
Relevant category of intervention	087 Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	Subpage: <a href="http://ovf.hu/hu/lezart-projektek/zaportarozok-baranyaicsatorna-vizgyujtojen">http://ovf.hu/hu/lezart-projektek/zaportarozok-baranyaicsatorna-vizgyujtojen</a> Project website: <a href="http://www.ddvizig.hu/hu/lezarult-fejlesztések-baranya-megye-1">http://www.ddvizig.hu/hu/lezarult-fejlesztések-baranya-megye-1</a>
Additional optional comments	Not relevant
Continuity in the next period	Not relevant

### 3.13. OP Bayern - ERDF (2014DE16RFOP002)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	MOORuse
Scope of intervention	It is about climate change mitigation.
Description	<p>The main aim of the intervention is twofold. The intervention shall promote efforts to reduce CO<sub>2</sub> emissions from peaty soils and it shall promote research projects on potential usage of wet cultivation on lowland moor soils.</p> <p>The instrument used is a non-repayable grant and the main beneficiary is Weihenstephan-Triesdorf University of Applied Science.</p>
Key results achieved so far	<p><u>Expected</u> key outcomes:</p> <p>Develop new sustainable options to use lowland moors that</p> <ul style="list-style-type: none"> <li>- consider and promote ecological functions (e.g. biodiversity)</li> <li>- prevent the progressive mineralisation of the existing peat bog (largely climate-neutral greenhouse gas balance)</li> <li>- are economically viable and can be integrated into regional value chains.</li> </ul>
Budget (EUR)	Total amount: 3,839,159.43 € EU amount: 1,919,579.71 €
Time (duration of the initiative)	From 03/2016 to 12/2022

Thematic Objectives	3.3
Relevant category of intervention	023 – Environmental measures aimed at reducing and/or avoiding greenhouse gas emissions (including treatment and storage of methane gas and composting)
Website or link to relevant material	<a href="https://mooruse.hswt.de">MOORuse (hswt.de)</a>
Additional optional comments	
Continuity in the next period	Yes, planned as part of the funding area "Promotion of green infrastructure", sub-area biodiversity such as biotopes and moors. Negotiations with COM but not yet completed.

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	Aufbau eines kommunalen Nahwärmenetzes (engl.: Development of a municipal district heating network)
Scope of intervention	It is about climate change mitigation.
Description	<p>Three school buildings and a sports hall together with an administrative building are jointly supplied with heat by three water heat pumps, a combined heat and power unit and a highly efficient peak load gas heating. A newly built district heating network distributes the heat. Moreover, the thermal insulation of the five public buildings has been carefully improved considering their architectural value. The main aim of the intervention is to reduce CO<sub>2</sub> emissions and to enhance energy-efficiency of public infrastructures.</p> <p>The instrument used is a non-repayable grant and the main beneficiary is the city of Kaufbeuren.</p>
Key results achieved so far	<p><u>Expected</u> key outcome:</p> <p>The CO<sub>2</sub> emission should be reduced by about 70%, i.e. a total of 225 tons of CO<sub>2</sub> should be emitted less per year.</p>
Budget (EUR)	<p>Total amount: 2,570,000.00 €</p> <p>EU amount: 1,285,000.00 €</p>
Time (duration of the initiative)	From 02/2019 to 07/2021
Thematic Objectives	3.2
Relevant category of intervention	013 – Energy efficiency renovation of public infrastructure, demonstration projects and supporting measures
Website or link to relevant material	<a href="https://kaufbeuren-baut.de">Kaufbeuren baut - Aufbau eines kommunalen Nahwärmenetzes bei den Schulen und dem Schraderhaus in der Schraderstraße (kaufbeuren-baut.de)</a>
Additional optional comments	
Continuity in the next period	Yes, planned as part of the funding area "Energy efficiency in public infrastructures". Negotiations with COM not yet completed.

### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Hochwasserschutz Wassertrüdingen (engl.: Flood protection Wassertrüdingen)</i>
Scope of intervention	<i>It is about climate change adaption.</i>
Description	<p><i>The main aim of the intervention is to promote the adaptation to climate change as well as risk prevention and risk management.</i></p> <p><i>The intervention addresses river floods.</i></p> <p><i>The instrument used is a non-repayable grant and the main beneficiary is the authority for water resources in Ansbach</i></p>
Key results achieved so far	<p><u>Expected</u> key outcome:</p> <p><i>The flood protection measures should be integrated into the urban and rural landscape in a very sophisticated way. The concept should serve the protection from flood events of the Wörnitz and the Lentersheimer Mühlbach.</i></p> <p><u>Achieved</u> outcome:</p> <p><i>The first construction phase of the overall project was completed.</i></p>
Budget (EUR)	<p><i>Total amount: 9,963,475.00 €</i></p> <p><i>EU amount: 4,981,737.50 €</i></p>
Time (duration of the initiative)	<i>From 09/2016 to 12/2021</i>
Thematic Objectives	<i>4.1</i>
Relevant category of intervention	<i>087 – Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures</i>
Website or link to relevant material	<a href="http://Hochwasserschutz.Wassertruedingen-Wasserwirtschaftsamt-Ansbach.bayern.de">Hochwasserschutz Wassertrüdingen - Wasserwirtschaftsamt Ansbach (bayern.de)</a>
Additional optional comments	
Continuity in the next period	<i>Yes. Negotiations with COM but not yet completed.</i>

### 3.14. OP Bolzano ERDF (2014IT16RFOP005)

#### Example of intervention for climate change mitigation or adaptation

Name of intervention	Stazione idrometrica Gadera a Mantana
	<b>Project title:</b> Gadera hydrometric station in Mantana
Scope of intervention	The project contributes to the implementation of <b>measures to adapt to climate change, prevention and management of climate-related risks</b>
Description	<p><b>Main aims of the intervention</b></p> <ul style="list-style-type: none"> <li>Since 1975, the Civil Protection Agency of the Autonomous Province of Bolzano has been managing a network of hydrometric stations in order to monitor and analyses flow water levels and the waterway expansion in South Tyrol. These data are useful to manage hydrological and hydraulic emergencies and for the sustainable planning of water resources in the Province of Bolzano. In order to ensure a satisfactory database for the aforementioned needs, it is required that the monitoring network is appropriately maintained, improved and integrated, as planned by the new Public Water Use Plan (PGUAP) for Alto Adige - paragraph 4.6. - part 2 "Management objectives and criteria". In order to achieve this objective, an overall project for the renewal of the provincial hydrometric network was developed, in which the rehabilitation and expansion of the monitoring station on the Gadera in Mantana is marked as a high priority measure.</li> </ul> <p><b>In the case of intervention for climate change adaptation, which type of climate hazards it addresses (e.g. sea level rise, river floods, landslides, droughts, heat waves, forest fires, multiple climate risks...)</b></p> <ul style="list-style-type: none"> <li>The definition of a surface water-monitoring network in South Tyrol encourages activities aimed at improving the hydrological knowledge of the plan basins and it assumes strategic relevance in terms of preventing hydrogeological risks.</li> </ul> <p><b>Instruments used</b></p> <p>Among the works and the measurements, we highlight:</p> <ol style="list-style-type: none"> <li>Civil foundation and bank stabilization works;</li> <li>Service room for measuring instruments;</li> <li>New generation real-time level data transmission and measurement equipment;</li> <li>Hydrometric cableway to support flow measurements in compliance with machinery regulations and the requirements regarding safety at work;</li> <li>Instruments for the sediment transport measurement (suspended and bed load).</li> </ol> <p><b>Beneficiary</b></p> <ul style="list-style-type: none"> <li>Civil Protection Agency</li> </ul>
Key results achieved so far	<p><b>Key outputs and outcomes achieved so far (or expected).</b></p> <p>All results have been achieved</p>
Budget (EUR)	<b>Total amount:</b> € 525.000,00, <b>EU amount:</b> € 262.500,00
Time (duration of the initiative)	<b>Duration of the intervention:</b> from 01/11/2016 to 31/10/2019
Thematic Objectives	<b>Obiettivo tematico 5:</b> Promuovere l'adattamento al cambiamento climatico, la prevenzione e la gestione dei rischi.

	<b>Priorità d'investimento 5.b:</b> promuovere investimenti destinati a far fronte a rischi specifici, garantire la resilienza alle catastrofi e sviluppare sistemi di gestione delle catastrofi.
Relevant category of intervention	<b>Category of intervention</b> as defined in Annex I of Commission Implementing Regulation (EU) No 215/2014: 087 Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures.
Website or link to relevant material	Link to website and/or relevant material on the intervention: <a href="https://appc.provincia.bz.it/downloads/Progetti_FESR_-_EFRE_Projekte_2014-2020.pdf">https://appc.provincia.bz.it/downloads/Progetti_FESR - EFRE Projekte 2014-2020.pdf</a>
Additional optional comments	The intervention permitted the realization of an unique infrastructure, which has been appreciated at national and international level.
Continuity in the next period	In 2021-2027 similar gauging station will be renewed so that the experience of Mantana will be useful to optimize the new interventions.

### 3.15. OP Trento ERDF (2014IT16RFOP018)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Promuovere l'efficienza energetica e l'uso di energia rinnovabile nelle imprese (avviso 4/2017)</i> <i>Scheda di intervento: cogenerazione ad alto rendimento</i> <i>- Hotel Ambassador Suite (Riva del Garda)</i> Promote energy efficiency and the use of renewable energy in businesses (Notice 4/2017) Operation type: high efficiency cogeneration
Scope of intervention	Installation of a new high-efficiency cogeneration plant with combined production of electrical and thermal energy. The plant must comply with the energy efficiency criteria established in the Provincial Environmental Energy Plan.
Description	A high-performance 40 thermal kw cogeneration plant was built, with a return of 20 kw in electricity at no cost. The plant, while producing domestic hot water, generates electricity which in turn is used within the structure in the various services. <ul style="list-style-type: none"> <li>climate change mitigation by means of improved clean energy efficiency in the productive process</li> <li>new equipment financed by means of public grant</li> <li>beneficiary: local enterprise. Ambassador Suite Hotel – Riva del Garda</li> </ul>
Key results achieved so far	Installation of a new high-efficiency cogeneration plant
Budget (EUR)	Total cost: 40.778,22 eur ERDF contribution: 24.284,11 eur
Time (duration of the initiative)	July 2018 – April 2019
Thematic Objectives	TO4 supporting the shift towards a low-carbon economy in all sectors by b) promoting energy efficiency and renewable energy use in enterprises;
Relevant category of intervention	023 Environmental measures aimed at reducing and / or avoiding greenhouse gas emissions (including treatment and storage of methane gas and composting)
Website or link to relevant material	<a href="https://fesr.provincia.tn.it/OPPORTUNITA-DI-FINANZIAMENTO2/Avvisi/Archivio-avvisi-scaduti/PO-FESR-2014-2020-AVVISO-n.-4-2017-scadenza-15-ottobre-2017">https://fesr.provincia.tn.it/OPPORTUNITA-DI-FINANZIAMENTO2/Avvisi/Archivio-avvisi-scaduti/PO-FESR-2014-2020-AVVISO-n.-4-2017-scadenza-15-ottobre-2017</a>

	<a href="https://www.ambassadorsuite.it/wp-content/uploads/2020/07/MODELLO-POSTER.pdf">https://www.ambassadorsuite.it/wp-content/uploads/2020/07/MODELLO-POSTER.pdf</a>
Additional optional comments	
Continuity in the next period	Not decided yet.

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	Intervento di prosecuzione della sistemazione della sponda sinistra e della ricalibratura del tratto iniziale del fiume Brenta in uscita dal lago di Caldonazzo al fine di migliorare lo sfruttamento della capacità di invaso (PN278) Management of the left bank and recalibration of the initial section of the Brenta river leaving the Caldonazzo lake in order to improve the exploitation of the reservoir capacity (PN278)
Scope of intervention	The operation supports the Management Plan of Floods Risk in the Autonomous Province of Trento, whose main aim is to ensure high standards of hydraulic safety for the population, for its economic activities and local infrastructures in relation to flood events, on the basis of a general hazards assessment which considers the possible effects induced by climate change. The general purpose is to prevent and mitigate the consequences of extreme climatic events.
Description	Reconstruction of the left bank of river Brenta, on the section leaving Caldonazzo lake and improvement of the reservoir capacity. <ul style="list-style-type: none"> <li>• <i>danger targeted: river floods</i></li> <li>• <i>Instruments used: infrastructures as a result of public works</i></li> <li>• <i>main beneficiaries: autonomous Province of Trento. Further targeted beneficiaries: local population of the Town of Borgo Valsugana</i></li> </ul>
Key results achieved so far	Reconstruction of the left bank of river Brenta, on the section leaving Caldonazzo lake and improvement of the reservoir capacity. The recalibration will allow to extend the possible use of the reservoir capacity of Lake Caldonazzo, contributing to the safety of the nearby town of Borgo Valsugana, which was exposed to sudden, unforeseen floods in the last years.
Budget (EUR)	<ul style="list-style-type: none"> <li>- total cost: 1.060.000 Eur</li> <li>- ERDF contribution: 707.624,13 Eur</li> </ul>
Time (duration of the initiative)	February 2019 – May 2020
Thematic Objectives	TO5 promoting climate change adaptation, risk prevention and management; (b) promoting investment to address specific risks, ensuring disaster resilience and developing disaster management systems;
Relevant category of intervention	087: adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures.
Website or link to relevant material	<a href="https://fesr.provincia.tn.it/Programmazione-2014-2020/Programmazione-FESR-2014-2020/OPERE-PUBBLICHE-REALIZZATE/Consolidamento-e-messa-in-sicurezza-di-argini-e-bacini-montani/FIUME-BRENTA">https://fesr.provincia.tn.it/Programmazione-2014-2020/Programmazione-FESR-2014-2020/OPERE-PUBBLICHE-REALIZZATE/Consolidamento-e-messa-in-sicurezza-di-argini-e-bacini-montani/FIUME-BRENTA</a>
Additional optional comments	
Continuity in the next period	Not decided yet

## 3.16. OP Interreg V-A-Spain-France-Andorra (POCTEFA) (2014TC16RFCB006)

### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	OPCC-2: Desarrollo y ejecución en cooperación de la estrategia del Observatorio Pirenaico de Cambio Climático  OPCC-2: Development and cooperative implementation of the strategy of the Pyrenean Observatory for Climate Change
Scope of intervention	Adaptation
Description	The OPCC2 (Pyrenean Climate Change Observatory, an initiative of the Working Community of the Pyrenees) is one of POCTEFA's 2014-2020 flagship projects. With a large partnership that includes members from almost all POCTEFA's territory, the OPCC faces the challenge of climate change adaptation in the Pyrenees. It specifically aims to monitor and understand the phenomenon in order to help the territory adapt to its effects, but also share the knowledge with and tools to other mountain regions facing similar problems.
Key results achieved so far	<p>The Pyrenees are a mountain range shared by seven regions belonging to three countries: Spain, France and Andorra. However, climate change knows no borders. Thus, cross-border cooperation is essential when addressing adaptation strategies.</p> <p>And that's where the Pyrenean Climate Change Observatory has truly made a difference: driving a network of more than 80 organizations from the three countries involved, this project acts now as a liaison between the scientific sphere, decision-makers and society. What is more, the OPCC2 has managed to connect itself with other POCTEFA projects, capitalising results and sharing good practices. Currently, six projects work together under the same vision and mission, ensuring that the work will continue even once the project has ended.</p> <p>Besides, the publication of the OPCC's report "Climate change in the Pyrenees: impacts, vulnerabilities and adaptation" in October 2018 had an unprecedented media coverage. More than 100 media outlets from France, Spain and Andorra spoke about its main conclusions and, since then, the members of the OPCC are often contacted by journalists to give their opinion on different topics linked to climate change.</p>
Budget (EUR)	<i>Total amount: 1 173 920 € (ERDF 763 048 €)</i>
Time (duration of the initiative)	<i>From 01/07/2016 to 31/12/2019</i>
Thematic Objectives	TO5 promoting climate change adaptation, risk prevention and management
Relevant category of intervention	087: Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	<a href="https://www.opcc-ctp.org/en">https://www.opcc-ctp.org/en</a> <a href="https://www.youtube.com/watch?v=TKd1aLd5yqM">https://www.youtube.com/watch?v=TKd1aLd5yqM</a> <a href="https://www.youtube.com/watch?v=wTna2pDNPRI">https://www.youtube.com/watch?v=wTna2pDNPRI</a>
Additional optional comments	OPCC-2 was finalist at the European Project Slam Contest 2019: <a href="https://europa.eu/regions-and-cities/programme/sessions/302_en">https://europa.eu/regions-and-cities/programme/sessions/302_en</a>
Continuity in the next period	Currently, the OPCC ADAPYR project, which began in January 2020, gives continuity to the work carried out in the OPCC2 project. OPCC ADAPYR is a unifying and flagship



	<p>project in the Pyrenees in terms of observation, capitalization and transfer of knowledge and good practices for climate change adaptation. The 3 strengths of this project are:</p> <p>1) The scientific consensus for the definition of basic indicators on the impacts of climate change in the Pyrenees (biodiversity, forests, glaciers, lakes and peatlands, hydrologic resources and natural risks).</p> <p>2) The elaboration of the first Pyrenean Climate Change Strategy, which will fall within the axis 1 of the Pyrenean Strategy of the Working Community of the Pyrenees and will be in harmony with the rest of regional and national climate change policies;</p> <p>3) The transfer of knowledge to socioeconomic sectors through participative processes, to identify needs of information and generate specific data useful for the main socioeconomic sectors of the Pyrenees (agropastoralism, tourism, energy, health). The OPCC ADAPYR project has set the goal of finding ways of collaborating with competent organisms and possible sources of funding to maintain the observations of the impacts of climate change in the Pyrenees in the long-term. Some of the new aspects of this project in respect to the OPCC2 project are the elaboration of an annual climate report for the Pyrenees, the organizing of environmental education activities aimed at raising awareness and adding new functionalities and content on the OPCC platform and map viewer. The success of the OPCC ADAPYR project is guaranteed by its 12 partners, among which there are partners and associate partners from all the projects programmed in the 1 st and 2 nd POCTEFA 14-20 calls for of the axis 5b, effectively covering all the Pyrenean territory. Thanks to the experience of the CTP in coordinating the OPCC1 and OPCC2 projects, a maximal media visibility will be achieved, with a growth of social media and communication in 5 languages.</p>
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### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<p><i>MAREA: Modelizaciones y Apoyo a la toma de decisiones ante los Riesgos costeros del Euskal Atlántico</i></p> <p><i>MAREA: Modelling and support for decision-making to deal with coastal hazards at the Basque Coast.</i></p>
Scope of intervention	<i>Adaptation</i>
Description	<p>During 2013 and 2014, storms have impacted strongly the Bask Coast on both sides of the border putting under risk persons' and properties' safety. In front of this situation, Bask local Administrations want to improve their environmental knowledge at local scales to better anticipate coastal risk management. To meet this need, local administrations and scientists have been coordinated by the GIS Littoral Basque to develop MAREA research project which purpose is to create local operative tools to help decisions-making about coastal risks.</p>



	<p>MAREA is divide in 4 parts:</p> <ul style="list-style-type: none"> <li>- To mutualize coastal observation and develop real time monitoring systems at high frequency and resolution</li> <li>- To develop local tools for modelling very locally the effects of storms to warn flood waves and erosion process to help decisions-making</li> <li>- To analyse sedimentary stocks dynamics and risk erosion to define recommendation about coastal and sedimentary management</li> <li>- To introduce reflections about risk culture in the public policies</li> </ul> <p>The Bask Coast is characterized by a homogeneous conurbation with common environmental and socio-economical stakes and with the same erosion and coastal flood risks on both sides of the border. MAREA partners want to unify their cross border skills to develop innovating operative solutions for local administrations accountable for populations and activities' protection.</p> <p>The objectives of the project were:</p> <ul style="list-style-type: none"> <li>• To make more operational the risks management at the coast areas using local indicators and sharing observation and monitoring networks in real time.</li> <li>• Improve the anticipation and risks prevention in the coast in a climate change context.</li> <li>• Raise awareness of the politicians and technical teams of the Basque coast regarding the importance of risk prevention culture.</li> </ul>
Key results achieved so far	<p>What are the results achieved to date?</p> <ul style="list-style-type: none"> <li>- a cross border observation network setting up sensors, buoys, video systems in different beaches and ports in the Basque coast (Bermeo, Donostia, Zarautz, Biarritz, Anglet St Jean de Luz).</li> <li>- analysis of past storms thanks to existing data to optimize statistics analysis and develop robust models to generate local alerts</li> <li>- plug in to implement statistic data to develop waves-models.</li> </ul> <p>Since 2016 MAREA is setting up a cross border observation network along the Basque coast to collect data at high frequency and very high resolution, study and analyse the physical ocean-meteorological characteristics of the waves generated by the storms from the offshore sea to the near shore beach. Local tools for modelling and warn the waves impacts of flood and erosion will be developed.</p> <p>MAREA approach is interesting because:</p> <ul style="list-style-type: none"> <li>- Spanish and French Basque scientists and public bodies join together in order to resolve cross border local issues dues to climate change.</li> <li>- Its aim is to develop new local tools, developed at the scale of the beach, to help local authorities to manage coastal risks, tools which can be transferred to manage coastal zones in Europe and worldwide.</li> </ul>
Budget (EUR)	<i>Total amount: 1 545 036€ (ERDF 1 004 273 €)</i>
Time (duration of the initiative)	<i>From 01/06/2016 to 31/01/2020</i>
Thematic Objectives	TO5 promoting climate change adaptation, risk prevention and management

Relevant category of intervention	087: Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	<a href="https://www.marea-paysbasque.fr/fr/">https://www.marea-paysbasque.fr/fr/</a>
Additional optional comments	MAREA project was the winner of the Atlantic Strategy Awards in 2017: <a href="https://www.marea-paysbasque.fr/fr/projet-marea-remporte-prix-de-strategie-atlantique-de-lunion-europeenne/">https://www.marea-paysbasque.fr/fr/projet-marea-remporte-prix-de-strategie-atlantique-de-lunion-europeenne/</a>
Continuity in the next period	

### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	<b>COOPEREM – Cooperació Operativa d’Emergències i Prevenció d’Incendis</b> <b>COOPEREM – Emergency Operational Coordination and Fire Prevention</b>
Scope of intervention	<ul style="list-style-type: none"> <li>The project contributes to the climate change adaptation. It has implemented actions to prevent wildfires through forestry works, creating fire protection areas between the forestry zones and urban areas in the cross-border between Pyrénées-Orientales and Catalonia.</li> </ul>
Description	<ul style="list-style-type: none"> <li>The overall aim of the COOPEREM project is the development of a common policy in the fields of emergency prevention and fire management. This is intended to reduce the impacts of that risk, avoiding human and economic losses as well as material and environmental damages at the border area of the Catalan Cross-border Space (ECT), which includes the main transportation and service corridor of that zone.</li> <li>To achieve this ambitious scope, a sound shared work is required between the local stakeholders entitled on each phase of fire protection: alert, prevention and risk management. Thus, led by the DINT of the Government of Catalonia, COOPEREM establishes a partnership between DARP, DDGI, SDIS 66, ONF, CDPO and SIVU des Albères. Together, we will design a cross-border strategy providing a global answer to risk by a shared anticipation strategy, a common management of fire risk, and the development of a fast, secure and efficient cross-border answer scheme against fire-related emergencies.</li> <li>This project is of utmost importance for our territory, taking into account that fire has always been closely linked with the Mediterranean ecosystem, and therefore represents a real and permanent threat, especially in the last years, due to fast, intense wildfires, which are difficult to afford by the firefighting forces.</li> </ul>
Key results achieved so far	<ul style="list-style-type: none"> <li>The project has succeeded in establishing the basis for cross-border coordination in the case of an emergency. It has developed a cross-border strategic plan of cooperation in the prevention and management of fire risk in the Catalan-French border. This plan means a better way to anticipate and it provides a more coordinated, efficient and rapid response to disasters, thanks to the collaboration of all the territorial bodies.</li> </ul>
Budget (EUR)	<ul style="list-style-type: none"> <li>Total amount 2 556 505 € (ERDF 1 661 728€)</li> </ul>

Time (duration of the initiative)	<ul style="list-style-type: none"> <li>From 01/01/2018 to 31/12/2021</li> </ul>
Thematic Objectives	<ul style="list-style-type: none"> <li>TO5 <i>promoting climate change adaptation, risk prevention and management</i></li> </ul>
Relevant category of intervention	<ul style="list-style-type: none"> <li>087: <i>Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures</i></li> </ul>
Website or link to relevant material	<a href="http://cooperem.eu/fr/">http://cooperem.eu/fr/</a> <a href="https://twitter.com/poctefacooperem?lang=es">https://twitter.com/poctefacooperem?lang=es</a> <a href="https://www.youtube.com/channel/UCOACOlpaK3b117GaefVLJAg">https://www.youtube.com/channel/UCOACOlpaK3b117GaefVLJAg</a>
Additional optional comments	
Continuity in the next period	<ul style="list-style-type: none"> <li><i>The Consortium is working on preparing a new COOPEREM to be financed in 2021-2027. This new project will be a continuation of current COOPEREM, which would contribute to consolidate the goals achieved during COOPEREM and developing new actions to make more resilient the cross-border region.</i></li> </ul>

### 3.17. OP Interreg V-B - Alpine Space (2014TC16RFTN001)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<i>GoApply - Multidimensional governance of climate change adaptation in policy making and practice</i>
Scope of intervention	<i>climate change adaptation</i>
Description	<p><i>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).</i></p> <p><i>GoApply project facilitates multi-level and transnational governance of climate change adaptation in policy-making and practice in the Alpine Space. The main beneficiaries are in that regard political decision-makers, national, regional and local authorities, sectorial agencies (e.g. environment, water management, risk management,...), infrastructure and (public) service providers, international organisations (e.g. EUSALP, Alpine Convention) as well as interest groups including NGOs.</i></p>
Key results achieved so far	<ul style="list-style-type: none"> <li>• <a href="#"><i>Climate Adaptation Governance in the Alpine Space - Transnational Synthesis Report</i></a>: Transnational comparison of climate adaptation governance (policies, actors, multilevel interactions, good practices, barriers, success factors) in Austria, Germany, Italy and Switzerland.</li> <li>• <a href="#"><i>Mapping governance of adaptation to climate change in the Alpine Space</i></a>: Interactive online visualisation of the climate adaptation governance systems in the Alpine countries</li> <li>• <a href="#"><i>Criteria and factors for successful stakeholder participation</i></a>: Success criteria for stakeholder interaction formats and their application in the context of climate adaptation</li> <li>• <a href="#"><i>Adapting to climate change - Good participation practices in the Alpine Region</i></a>: brochure with good practice examples of stakeholder participation in climate adaptation and guidelines for successful participation</li> <li>• Long-term transnational cooperation platform of the national climate adaptation policy owners of the Alpine countries + mutually agreed mechanisms for regular consultation and information exchange between the national adaptation policy making level and institutional bodies of EUSALP and Alpine Convention</li> </ul>
Budget (EUR)	<p><i>Total budget: EUR 734 331.10</i></p> <p><i>European Union funding: EUR 502 121.43</i></p>
Time (duration of the initiative)	<i>from 11/2016 to 04/2019</i>

Thematic Objectives	TO11
Relevant category of intervention	<i>119 Investment in institutional capacity and in the efficiency of public administrations and public services at the national, regional and local levels with a view to reforms, better regulation and good governance</i>
Website or link to relevant material	<a href="https://www.alpine-space.eu/projects/goapply/en/home">https://www.alpine-space.eu/projects/goapply/en/home</a>
Additional optional comments	<i>n.a.</i>
Continuity in the next period	<i>Not to our knowledge.</i>

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<i>CaSCo Carbon Smart Communities</i>
Scope of intervention	<i>Material flows in the timber industry – very often between regions spanning great distances – contribute to climate change. CaSCo makes the case for the role of low carbon timber in green public procurement by raising awareness of public authorities, practitioners and stakeholders in the private sector, including SMEs. Timber plays an important role in public procurement. Many of the purchases made by public authorities or public utility operators imply complex material flows, which are at present being aggravated by long transportation routes. By sourcing timber locally in public procurement, the sector will respond better towards reducing CO2 emissions that result from shipping.</i>
Description	<i>The intervention is aimed at developing and implementing low carbon policy instruments at transnational level by sourcing timber locally in public procurement. In order to achieve this goal – and thus create value and attain long-term results – the project conducted a number of activities in favour of the integration of timber products in public procurement. The architecture was then tested in pilot areas with the view to provide a common understanding of the tools and their application for up scaling. To do this requires considerable awareness and commitment from a wide variety of target groups. The main beneficiaries are decision-makers at all levels, practitioners who advocated the use of timber in construction, and SMEs in the timber sector, including producers and processors of forest raw materials.</i>
Key results achieved so far	<i>The project has developed a number of tools to reinforce the level of implementation of low carbon policy instruments, including a <a href="#">training programme</a> on skills and tools for the promotion and implementation of low carbon timber of short value chains. Another key result are the actions taken for embedding the training programme in the existing educational and vocational training systems, from regional to European. The <a href="#">pilot activities</a> carried out across the cooperation area offered the opportunity to better understand the gaps and make recommendations to improve value-added chains and therefore reduce CO2 emissions in</i>

	<i>the long- term. For further information please visit the <a href="#">project results</a> section of the CaSCo website.</i>
Budget (EUR)	<i>Total amount corresponds to €2.291.187,39, of which €1.947.509,25 is ERDF</i>
Time (duration of the initiative)	<i>From 01.11.2016 to 30.04.2020</i>
Thematic Objectives	<i>TO4</i>
Relevant category of intervention	<i>023 Environmental measures aimed at reducing and/or avoiding greenhouse gas emissions</i>
Website or link to relevant material	<a href="https://www.alpine-space.eu/projects/casco/en/home">https://www.alpine-space.eu/projects/casco/en/home</a>
Additional optional comments	<i>n/a</i>
Continuity in the next period	<i>Not to our knowledge</i>

### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	<i>ADO - Alpine Drought Observatory</i>
Scope of intervention	<i>Climate change adaptation</i>
Description	<p><i>The aim is to set up an Alpine Drought Observatory (ADO) and to derive recommendations for improved risk preparedness and efficiency of drought management, specifically, for the Alpine territory.</i></p> <p><i>The ADO itself will be a transnational Alpine-wide operational system with a web-interface to access data and specific impact-oriented indices for monitoring droughts and their impacts. It will provide optimized observations and forecasts for mountainous areas, which could be integrated in existing EU-level monitoring systems (e.g. European Drought Observatory). Monitoring will be based on a fusion of existing approaches (e.g. meteorological drought indices, hydrological drought indices), and newly available information (e.g. remote sensing of snow and soil moisture), to create new combined drought indices and a common drought classification.</i></p> <p><i>The ADO will be applied in six case studies in all alpine countries with local partners. The case studies represent different drought issues such as agricultural drought, hydrological drought or drought impact on ecosystems. Out of the case studies, guidelines for an improved drought risk management will be developed. Findings will be upscaled to recommendations for drought governance policies for the Alps. Main beneficiaries of project findings are institutions with decision-making capacities in the field of water management, energy production, and agriculture.</i></p>
Key results achieved so far	<p><i>Project started in October 2019 and main results are expected to be delivered in the next 2 years. These includes:</i></p> <ul style="list-style-type: none"> <li><i>- <u>ADO online platform</u>: it will consist of a collection of a drought related data and indices, a storage and data management facilities and a user interface.</i></li> <li><i>- <u>Alpine wide mapping of meteorological, hydrological and agricultural drought</u>: a comprehensive drought dataset for the AS area, which will enable the monitoring and forecasting of the various stages of drought.</i></li> <li><i>- <u>Methods for drought risk assessment and economic impact assessment</u>: Innovative methods to expand the drought impact approach towards a</i></li> </ul>

	<p>drought risk approach will be developed. Furthermore, methods for economic assessment will be tested.</p> <ul style="list-style-type: none"> <li>- <u>Policy recommendations and guidelines for an improved drought management: Drought management recommendations and governance guidelines will be developed. In connection to adequate policy and economic instruments they will insure durable and transferable impact</u></li> </ul>
Budget (EUR)	<p>Total budget: EUR 1 961 924.65 European Union funding: EUR 1 496 693.52</p>
Time (duration of the initiative)	<p>October 2019 – June 2022</p>
Thematic Objectives	<p>(TO06) preserving and protecting the environment and promoting resource efficiency</p>
Relevant category of intervention	<p>087 Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures</p>
Website or link to relevant material	<p><a href="https://www.alpine-space.eu/projects/ado/en/home">https://www.alpine-space.eu/projects/ado/en/home</a></p>
Additional optional comments	<p>n.a.</p>
Continuity in the next period	<p>Not to our knowledge</p>

### 3.18. OP Interreg V-B - North Sea (2014TC16RFTN005)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	CANAPE - Creating A New Approach to Peatland Ecosystems
Scope of intervention	<p>- Climate Change mitigation: Carbon captured in peat soils and wetlands</p> <p>- Climate Adaptation: Improve resilience of lowland peatland ecosystems against draught and improve their capacity to store water to reduce in flood risk.</p> <p>The project is testing paludiculture that uses crops that can be grown on wet soil, usually by finding uses for plants that grow naturally on wetland. This allows productive agriculture to take place without draining the land. It is working with Spagnum moss, Reed, purple moor-grass and waste wood.</p> <p>The project create over 60 hectares of new bog habitat, over 20 hectares of new reed-land habitat and trial 10 hectares of new agricultural production, including reed, sphagnum moss, and purple moor-grass, distributed across 7 pilot sites.</p>
Description	<p>Main aims are</p> <ol style="list-style-type: none"> <li>1) to improve the way lowland peatland ecosystems are managed to ensure greater climate resilience</li> </ol> <ul style="list-style-type: none"> <li>• Trial min 8 transferable methods to restore lowland peatland ecosystems (focusing on fens, bogs and shallow peat lakes)</li> <li>• Monitor effectiveness &amp; transferability. Showcase methods to land managers &amp; conservation organisations</li> <li>• Involve key stakeholders (incl. farmers and peatland owners) in testing &amp; measurement including Citizen Science approaches</li> </ul> <ol style="list-style-type: none"> <li>2) to reduce potential flood risk as a result of planned water level rise in pilot areas. Rewetting of peatlands will protect against drought and extreme weather events.</li> <li>3) to capture carbon and reduce emissions to contribute to lessening climate change.</li> </ol> <p>The Interreg North Sea Region Programme is co-financing 50% of total project costs.</p> <p>The Partnership consist of 14 beneficiaries representing local, regional &amp; national public authorities and infrastructure and public service provision, NGO's, Private companies and a higher research institution. The Beneficiaries are from UK (1), NL (2), DK (4), DE (4) and BE (3).</p>
Key results achieved so far	<p>Key outputs and outcomes:</p> <ol style="list-style-type: none"> <li>1) 7 pilot sites managed using new solutions supporting long-term sustainability by project completion.</li> </ol> <p>Achieved by mid-2020:1 of the pilot sites has achieved the state it will be in at the end of the project in terms of ecosystem type and water level. Measures on the other 6 pilot sites are progressing well.</p> <ol style="list-style-type: none"> <li>2) Overall the 7 pilot sites are projected to capture carbon of annual saving to 624.7 tonnes of CO<sub>2</sub> per year. The completed pilot site will reduce the annual emissions by an average of 78.76t of CO<sub>2</sub>e.</li> <li>3) Projected reduction in flood risk of approx. 228 thousand cubic meters of water per year. Initial rewetting works by mid-2020 have increased water storage by approximately 3 thousand cubic metres.</li> </ol>
Budget (EUR)	5.545.105 € (Total Grant)



	2.772.553 € (ERDF Grant) No Norwegian participation (budget)
Time (duration of the initiative)	Start 06/2017 End 12/2022
Thematic Objectives	TO5
Relevant category of intervention	087
Website or link to relevant material	Project website: <a href="https://northsearegion.eu/canape#">https://northsearegion.eu/canape#</a> Collection of Project documents: <a href="https://northsearegion.eu/canape/output-library/">https://northsearegion.eu/canape/output-library/</a>
Additional optional comments	The project operate active communications and participatory strategies to improve peatland management through stakeholder involvement and sharing project results, such as citizen's science activities and involving farmers and land owners in paludiculture trials.
Continuity in the next period	The North Sea programme for 2021-2027 is still under preparation. However, the next programme is likely to finance interventions with characteristics such as <ul style="list-style-type: none"> <li>• Carbon storage in peat and wetlands</li> <li>• Multifunctional climate solutions using nature based solutions</li> <li>• Ecosystem services</li> </ul>

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	Building with Nature
Scope of intervention	Climate Adaptation
Description	<p>The Building with Nature (BwN) project demonstrates BwN solutions that utilize natural processes to deliver flood risk and coastal erosion management whilst enhancing ecosystem services. The project demonstrate climate change solutions at:</p> <ul style="list-style-type: none"> <li>• 7 coastal living laboratories at the North Sea Coast and in the Waddensea in NL, D, DK, and SE, targeting coastal erosion and flooding</li> <li>• 6 catchment living laboratories in B, NL, SE and Scotland, targeting inland and coastal flooding</li> <li>• Co-funding grant 50% of total project costs</li> <li>• 15 partners with strong involvement of relevant Public Authorities from all programme countries - 6 national and 5 regional Public Authorities - with tasks and responsibilities on managing coastal areas and river catchments. Three private partner organisations have particular expertise in BwN methods, business development, integrated catchment management and stakeholder participation.</li> </ul>
Key results achieved so far	<ul style="list-style-type: none"> <li>• The testing of nature based solutions at 10 coastal laboratory sites – 3 sites more than originally planned - were achieved and are fully completed. It is resulting in 700 km new coastline plans using shared insights, designs and demonstrations of the effectiveness of the methods of sand nourishments and based on Building with Nature principles.</li> </ul>

	<ul style="list-style-type: none"> <li>• Testing of nature based solutions are almost achieved at 5 catchment laboratory sites and 10938 square km of catchment surface affected by the current plans.</li> <li>• Evidence base developed, sharing BwN knowledge and best practice methodologies, approaches and tools in a manner that is accessible to practitioners and policy makers.</li> <li>• EU and national policy briefs have been produced and disseminated by the Policy Learning Group of the project.</li> </ul>
Budget (EUR)	<ul style="list-style-type: none"> <li>• 6.840.000 € (Total Grant)</li> <li>• 3.399.998 € (ERDF Grant)</li> <li>• Norwegian funding: 20.000 €</li> </ul>
Time (duration of the initiative)	<ul style="list-style-type: none"> <li>• Start: December 2015</li> <li>• End: July 2021</li> </ul>
Thematic Objectives	T05
Relevant category of intervention	085
Website or link to relevant material	<p>BwN Project web-space at Programme Website:  <a href="https://northsearegion.eu/building-with-nature#">https://northsearegion.eu/building-with-nature#</a></p> <p>BwN online Evidence Base:  <a href="https://building-with-nature.eu/">https://building-with-nature.eu/</a></p> <p>The location of the 15 living laboratory sites see map:  <a href="https://northsearegion.eu/media/9199/interreg-1-building-with-nature-with-labels-rgb_v6.jpg">https://northsearegion.eu/media/9199/interreg-1-building-with-nature-with-labels-rgb_v6.jpg</a></p>
Additional optional comments	<p>The Build with Nature project was a frontrunner on Nature based solutions at the start-up in 2015. The concept of nature based solutions has currently gained foothold as an alternative approach to pre-empt flooding, managing water resources and ecosystems. The North Sea 2014-2020 Programme contained a specific objective on climate resilience and it explicitly aimed at supporting projects on nature-based solutions.</p>
Continuity in the next period	<p>The next Interreg North Sea Region programme will likely co-finance interventions on climate adaptation, targeting</p> <ul style="list-style-type: none"> <li>• Nature Based Solutions in Flood Protection</li> <li>• Catchment Management of groundwater and surface waters</li> <li>• Ecosystems Services in Aquatic Freshwaters</li> </ul>

### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	2IMPRESZ - Project to implement energy saving methods and programme for energy-efficient and nearly zero-energy schools
Scope of intervention	<ul style="list-style-type: none"> <li>• Energy consumption and dependence on fossil fuels</li> <li>• CO2 emissions</li> <li>• Reducing the overall consumption of energy through energy savings and energy efficiency gain</li> </ul>
Description	<p>The main intervention is all about energy savings in schools across the North Sea Region. The aim is to reach 30% energy savings in 141 schools in the North Sea Region representing an emission reduction of 7320 tonnes of CO2 and transform at least 4 schools into nearly zero-energy buildings.</p> <p>Co-funding grant 50% of total project costs.</p> <p>10 beneficiaries in total from 5 countries (public and private sector)</p>

Key results achieved so far	<p>One of the main feature of the 2IMPRESZ IFS is an interactive map that allows pupils to select individual schools across the North Sea Region to view their achieved energy savings and thus carbon emission reduction after having participated in the 2IMPRESZ Energy Challenges. The energy savings and carbon emission reduction data per 2IMPRESZ school will be automatically updated into an interactive online platform when partners upload their energy calculator key performances indicator (KPI) sheets developed within the 2IMPRESZ project. The platform also will offer digital resources such as energy-saving or energy-related activities and games, as well as background information on the 2IMPRESZ Energy Challenges — this digital tool will also support in the rollout of the digital Energy Challenges campaigns taking place in light of the COVID-19 pandemic. Ultimately, the Interactive Fact Sheets demonstrate that the 2IMPRESZ Energy Challenges can be replicable across various countries and cultures.</p> <p>2IMPRESZ fosters both behavioural and technical energy efficiency measures in existing schools, reducing energy consumption and thus reducing CO2 emissions.</p> <p>The main output is a joint energy saving programme, tested in different school environments and conditions and replicable in and beyond the North Sea Region, which will support the new 2030 Framework/EU Strategy for climate &amp; energy for a sustainable Europe.</p>
Budget (EUR)	<p>3.743.597 € (Total grant)</p> <p>1.871.797 € (ERDF Grant)</p> <p>No Norwegian participation (budget)</p>
Time (duration of the initiative)	<p>Start: September 2017</p> <p>End: November 2021</p>
Thematic Objectives	TO6
Relevant category of intervention	013
Website or link to relevant material	<p>2IMPRESZ Project web-space at Programme Website:</p> <p><a href="https://northsearegion.eu/2imprezs#">https://northsearegion.eu/2imprezs#</a></p>
Additional optional comments	The North Sea 2014-2020 programme contained a specific objective on supporting the shift towards a low carbon economy in all sectors through promoting research, innovation and adoption of low-carbon technologies
Continuity in the next period	<p>The next Interreg North Sea Region programme will likely co-finance interventions on energy savings, targeting:</p> <p>Contribute to reducing the region's environmental footprint through development of green energy, alternative fuels, circular economy and sustainable transport.</p>

### 3.19. OP Balears - ERDF (2014ES16RFOP006)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Integral management model of street lighting and improvement of its energy efficiency</i>
Scope of intervention	<i>Mitigation measure</i>
Description	<p><i>The action has consisted of the replacement of obsolete luminaires with new LED technology, the adequacy of lighting levels, the elimination of existing interferences between the supports (streetlights) and the urban elements (trees), the adequacy of the networks to the Electrotechnical Regulation of Low Voltage and the elimination of interferences in terms of accessibility in different neighbourhoods of the city, prioritising improvement in the suburbs of the periphery because they are the most necessary.</i></p> <p><i>The form of financing used is the non-refundable grant.</i></p> <p><i>The directly benefited population is 279,684 people, those who live in the neighbourhoods where the new lighting installations have been built, i.e. 63.48 % of the total population of the city of Palma. However, the rest of the city's inhabitants who move through the affected neighbourhoods also benefit from the project, as well as the large number of tourists who visit the city of Palma throughout the year.</i></p>
Key results achieved so far	<p><i>The set targets have been achieved with energy cost savings of approximately EUR 1 million per year on the City Council's electricity bill, which will be reverted to achieving more energy efficiency in public buildings. In addition, it has been possible to reduce by 0.58 ktoe/year (thousand tons of oil equivalent per year), or almost 187,000 trees in CO2 emissions, as well as light pollution.</i></p> <p><i>Those accomplishments correspond to those originally anticipated.</i></p>
Budget (EUR)	<p><i>Total Eligible Cost: 22.000.000 €</i></p> <p><i>ERDF assistant: 11.000.000 €</i></p>
Time (duration of the initiative)	<p><i>Start date: April 2015</i></p> <p><i>End date: March 2021 (the Project will be extended until 2025)</i></p>
Thematic Objectives	<ul style="list-style-type: none"> <li>- <i>Thematic Objective 4: Promoting the transition to a low-carbon economy in all sectors</i></li> <li>- <i>Investment Priority 4C: Support for energy efficiency and the use of renewable energy in public infrastructure, including public buildings and housing</i></li> <li>- <i>Specific Objective 4.3.1: Improving energy efficiency in building and in public infrastructure and services</i></li> </ul>
Relevant category of intervention	<i>13. Renovation of public infrastructure for energy efficiency, demonstration projects and support measures</i>
Website or link to relevant material	<p><a href="http://www.federpalma.es">http://www.federpalma.es</a></p> <p><a href="https://www.dgfc.sepg.hacienda.gob.es/sitios/dgfc/es-ES/ipr/fcp1420/c/bp/2019/Paginas/PODesarrolladasPOBalears2019.aspx">https://www.dgfc.sepg.hacienda.gob.es/sitios/dgfc/es-ES/ipr/fcp1420/c/bp/2019/Paginas/PODesarrolladasPOBalears2019.aspx</a></p>
Additional optional comments	-

Continuity in the next period	<p><i>The project is still under implementation and it is hoped that additional ERDF funding is expected to be allocated under the future OP 2021-2027 to intervene in new neighbourhoods of the city, so that the results achieved so far can be improved.</i></p> <p><i>The additional eligible energy efficiency investment to be made in the period 2021-2025 would be more than EUR 15 million, with an expected energy saving of 3650.00 MWh (0.3139 ktoe).</i></p>
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### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Implementation of renewable energy for self-consumption in companies</i>
Scope of intervention	<i>Mitigation measure</i>
Description	<p><i>The action consists of co-financing small-power photovoltaic solar power generation facilities connected to the distribution grid for self-consumption in companies in the Balearic Islands.</i></p> <p><i>The equipment of these installations consists of state-of-the-art polycrystalline solar modules, equipped with excellent reliability and operational safety, which generate electricity at low cost and are suitable for a wide range of applications, with optimal performance regardless of climate, luminosity, and temperature.</i></p> <p><i>The form of financing used is the public call for grants that has been directed to all the companies in the Balearic Islands that carry out the investments in the territorial sphere of the Autonomous Community.</i></p>
Key results achieved so far	<p><i>The introduction of small-power photovoltaic solar power generation facilities connected to the distribution grid in enterprises has resulted in savings in the energy costs of the activity, a reduction in greenhouse gas emissions and an increase in competitiveness. Specifically:</i></p> <ul style="list-style-type: none"> <li>- <i>Additional capacity to produce renewable energy 2.29 MW</i></li> <li>- <i>Estimated greenhouse gas reduction 2.526,51 Tn CO2/year</i></li> </ul>
Budget (EUR)	<p><i>Total Eligible Cost: 2.929.742 €</i></p> <p><i>ERDF Assistance: 1.464.871 €</i></p>
Time (duration of the initiative)	<p><i>Start date: 2015</i></p> <p><i>End date: 2020</i></p>
Thematic Objectives	<ul style="list-style-type: none"> <li>- <i>Thematic Objective 4: Promoting the transition to a low-carbon economy in all sectors</i></li> <li>- <i>Investment Priority 4B: Promotion of energy efficiency and the use of renewable energy by companies</i></li> <li>- <i>Specific Objective 4.2.1: Progress in assessing and improving the energy efficiency of enterprises, in particular SMEs</i></li> </ul>
Relevant category of intervention	<i>010. Renewable energies: solar energy</i>

Website or link to relevant material	<a href="http://www.caib.es/govern/sac/fitxa.do?codi=3628364&amp;coduo=2390767&amp;lang=es">http://www.caib.es/govern/sac/fitxa.do?codi=3628364&amp;coduo=2390767&amp;lang=es</a> <a href="https://www.caib.es/sites/programafeder1420/es/gestio_i_seguiment/">https://www.caib.es/sites/programafeder1420/es/gestio_i_seguiment/</a>
Additional optional comments	-
Continuity in the next period	<i>During the 2021-2027 programming period, it is hoped that calls for this purpose are expected to continue under the new ERDF OP.</i>

**Example n. 3 of intervention for climate change mitigation or adaptation**

Name of intervention	<i>Replacement of the fleet of diesel buses of the municipal transport company of Palma with compressed natural gas (CNG) buses</i>
Scope of intervention	<i>Mitigation measure</i>
Description	<p><i>The co-financed action consists of the renewal of the bus fleet of the Municipal Urban Transport Company of the City of Palma (EMT), through the acquisition and supply of 39 buses powered by Compressed Natural Gas and equipped with Euro VI engines. This will allow the reductions of fuel consumption, the replacement of diesel fuel by renewable energy and a significant reduction in the emission of harmful gases, reducing the carbon footprint</i></p> <p><i>The main objective is to reduce the emission of carbon dioxide into the atmosphere by replacing the motorisation of vehicles, which will be more efficient and thus reducing the consumption of fossil fuels. This emission reduction is also increased by switching diesel fuel to CNG.</i></p> <p><i>The form of financing used is the non-refundable grant.</i></p> <p><i>The new fleet is more comfortable, more accessible and has also made it possible to start the new restructuring of the urban transport service lines in the city of Palma, with an increase of lines and faster journeys and a lower waiting time for passengers and users of public transport.</i></p>
Key results achieved so far	<p><i>The addition of new vehicles with alternative fuels has led to a substantial improvement in the emission of CO<sub>2</sub> into the atmosphere. The estimated greenhouse gas reduction that this action will entail is 710.48Tn CO<sub>2</sub>/year.</i></p> <p><i>The population that will directly benefit from this project amounts to the total population of Palma, more than 400,000 inhabitants, as well as the multitude of tourists who permanently visit the city of Palma and use municipal public transport for their journeys.</i></p>
Budget (EUR)	<p><i>Total Eligible Cost: 10.775.000 €</i></p> <p><i>ERDF assistance: 5.387.500 €</i></p>
Time (duration of the initiative)	<p><i>Start date: July 2018</i></p> <p><i>End date: December 2020 (the total fleet renewal schedule extends until 2023)</i></p>
Thematic Objectives	<ul style="list-style-type: none"> <li>- <i>Thematic Objective 4: Promoting the transition to a low-carbon economy in all sectors</i></li> <li>- <i>Investment Priority 4E: Promotion of carbon reduction strategies for all types of territory, especially urban areas, including the promotion of sustainable multimodal urban mobility and adaptation measures with mitigation effect</i></li> </ul>

	- Specific Objective 4.5.1: Promoting sustainable urban mobility: clean urban transport, public transport, urban-rural connection, road network improvements, cyclist, pedestrian transport, electric mobility, and development of clean energy supply systems.
Relevant category of intervention	043. Infrastructure and promotion of clean urban transport (including equipment and 40 % rolling stock)
Website or link to relevant material	<a href="http://www.emtpalma.cat/ca/projectes-fons-europeu">http://www.emtpalma.cat/ca/projectes-fons-europeu</a>
Additional optional comments	
Continuity in the next period	It is not ruled out to include the project in the future programming of the ERDF 2021-2027 or the new REACT EU fund.

### 3.20. OP Sustainability and Resource Use Efficiency - PT - CF (2014PT16CFOP001)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<p><i>Renovação da frota de veículos de transporte público urbanos coletivos de passageiros da Carris, tendo em vista a sustentabilidade ambiental e a descarbonização da Área Metropolitana de Lisboa.</i></p> <p><i>Renewal of Carris' collective urban public transport vehicle fleet, with a view to environmental sustainability and decarbonization of the Lisbon Metropolitan Area.</i></p>
Scope of intervention	<i>Climate Change Mitigation</i>
Description	<p><i>Carris' intervention aims to renew its fleet of collective urban passenger transport vehicles, favouring more efficient alternatives that use propulsion alternatives with superior environmental and energy performance, to the detriment of buses with a higher impact on the environment (attentive to the emission of GHG and CO2).</i></p> <ul style="list-style-type: none"> <li><i>Promote an integrated mobility policy in terms of transport, public space, parking, and policing.</i></li> <li><i>Provide the Lisbon Metropolitan Area with a more accessible, more reliable, more comfortable, and more sustainable public transport system.</i></li> <li><i>Promote more passengers on public transport, ensuring a modal shift from individual transport to public transport and active modes.</i></li> </ul>
Key results achieved so far	<p><i>- Acquisition of 160 public transport buses powered by cleaner energy sources (40 articulated Compressed Natural Gas (CNG), 109 standard CNG buses and 11 standard electric buses).</i></p> <p><i>- Construction of 17 service stations for cleaner energy sources for public transport fleets (16 electric charging stations and 1 gas supply station).</i></p> <p><i>Carris so far, at the end of the year 2020, has already achieved the following results (executed in relation to expectations (approved goals):</i></p> <ul style="list-style-type: none"> <li><i>- Reduction of equivalent CO2 emissions / km of its fleet of public transport vehicles by about 21.48%, compared to 5.69% of the approved target;</i></li> <li><i>- Reduction of emissions of Greenhouse Gases (GHG) of the order of 9,11% (approved target: 2.7%) directly through the renovation of 160 vehicles in its fleet, to be understood exclusively with the investment in replacing buses in the current fleet with "clean" buses;</i></li> <li><i>- Contribution to the incorporation of renewable energies, namely by the introduction of 15 electric buses in its fleet of public service vehicles, as well as by the provision of 2 new infrastructures for the supply / loading of "clean" public urban transport buses;</i></li> </ul>



	<p>- Achievement of a ratio between investment and reduction of CO2 emissions Equivalent of 61 €/Kg CO2;</p> <p>- Primary energy savings of around 85% (target 73%) compared to the primary energy used before the Operation was carried out by vehicles to be replaced by buses with 100% electric propulsion, as well as energy savings of around 95.84 Teps (goal of 256.58 Teps).</p> <p>The results obtained are not yet the final results, because the current ones are impacted by the Covid-19 pandemic situation that has been plaguing the country and the world, caused constraints that resulted in the extension of bus supply deadlines, as well as the conclusion infrastructure and licensing processes by the competent authorities.</p> <p>The project has a financial execution of 98.7%, with a conclusion scheduled for 12.31.2020, however for the reasons explained above, a new extension of the deadline for the completion of the intervention to 3.31.2021 was requested, not yet possible at this stage to assess the overall performance of the implementation of this project.</p>
Budget (EUR)	<p>Total amount: € 51.857.255</p> <p>EU amount: € 11.803.330</p>
Time (duration of the initiative)	From 01-2018 to 12-2020
Thematic Objective s	TO4
Relevant category of intervention	043. Infrastructure and promotion of clean urban transport (including equipment and rolling stock)
Website or link to relevant material	<a href="https://www.youtube.com/watch?v=WGCxhdhGMyg">https://www.youtube.com/watch?v=WGCxhdhGMyg</a> <a href="https://poseur.portugal2020.pt/pt/lista-newsletters/newsletter31-abril-2020/">https://poseur.portugal2020.pt/pt/lista-newsletters/newsletter31-abril-2020/</a> <a href="https://poseur.portugal2020.pt/pt/lista-newsletters/newsletter-15-julho-2017/">https://poseur.portugal2020.pt/pt/lista-newsletters/newsletter-15-julho-2017/</a> <a href="https://www.youtube.com/watch?v=1xmFd6Pq4f8&amp;feature=youtu.be">https://www.youtube.com/watch?v=1xmFd6Pq4f8&amp;feature=youtu.be</a> <a href="https://twitter.com/poseur2020/status/1184384993876946945">https://twitter.com/poseur2020/status/1184384993876946945</a>
Additional optional comments	
Continuity in the next period	<p>There is a complementary project also approved in the current period "POSEUR-01-1407-CF-000030 - Energy efficiency modules Installation and driving data management". The installation of this type of fleet management and monitoring systems in the buses allows to follow up the results of the energy efficiency in public transport, with significant advantages from the environmental point of view, namely in terms of the reduction of pollutant gas emissions, and from the point of view of socio-economic view with a relevant contribution to the better quality of life of the population and a greater adaptation to European goals aiming at a transition to a low carbon economy.</p> <p>According to the "Plan of Renewal of the Carris Bus Fleet" in 2040 Carris will have 100% of its fleet with zero emissions. To accomplish this goal Carris will face important investment needs in the coming EU financial cycle to fulfil the overall aim of the decarbonization strategy of the company, which had its first stage financed by PO SEUR, in particular through the Renewal of Carris' collective urban public transport vehicle fleet project.</p>

#### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<p>Elaboração e Monitorização do Plano Metropolitano de Adaptação às Alterações Climáticas - Área Metropolitana de Lisboa (PMAAC-AML)</p> <p>Elaboration and Monitoring of the Metropolitan Plan for Adaptation to Climate Change - Metropolitan Area of Lisbon (PMAAC-AML)</p>
Scope of intervention	Climate change adaptation
Description	The project consisted in the provision of services for the preparation and monitoring of the Metropolitan Plan for Adaptation to Climate Change in the Metropolitan Area of Lisbon (PMAAC-AML). It has already been implemented. The planning instrument produced proposes



	<p><i>the strategic and operational framework in the field of adaptation to climate change in the territories of the Metropolitan Area of Lisbon (AML), with a sectoral perspective.</i></p> <p><i>This project is demonstrative of a process of inclusive and participatory planning in the municipalities, citizens, public authorities and representatives of associations and companies, that took part in the definition of actions and monitoring of the adaptation plan.</i></p> <p><i>Aiming to promote a holistic culture of adaptation aimed at increasing the adaptive capacity of territories, namely with respect to their physical and human aspects and, of course, for the process of sustainable development of AML, the PMAAC-AML – in line with the existing municipal strategies and based on the technical and scientific knowledge that gives it its body - it intends to correspond to the planning instrument that will propose the strategic and operational framework in the field of adaptation to climate change in the territories of the Metropolitan Area of Lisbon .</i></p> <p><i>The climate trajectory studied at the AML will aggravate the impacts on the natural, social and economic systems that are currently occurring, resulting in droughts, floods and rapid floods, rural and forest fires, extreme heat events, storms and overflows and floods in coastal areas. It is in this context of climatic emergency and recognition of the profound implications that the ongoing changes in the Climate will bring to the metropolitan territory and to its communities, that it becomes imperative to start an adaptive path that allows to reduce the territorial and sectorial vulnerability through the containment and to reduce the exposure of people, infrastructure and activities to climate risks, with reference to the precautionary principle, and to prepare communities, local and metropolitan institutions and economic activities to deal with the future climate scenario.</i></p> <p><i>In the context of climate adaptation challenges facing the Metropolitan Area of Lisbon, the PMAAC-AML assumes three major strategic objectives, centred:</i></p> <ul style="list-style-type: none"> <li><i>i) in the protection of people and goods against climatic risks (2,800,000 inhabitants benefited from AAC planning, which corresponds to 27% of the national population);</i></li> <li><i>ii) in the creation of a culture of transversal adaptation to all key sectors and to the entire territory (3,015 km<sup>2</sup> territory with knowledge of specific risks, which corresponds to 3.2% of the country's area).</i></li> <li><i>iii) in the creation of an informed and prepared community for climate change in the AML and for the impacts of changes (18 Municipalities in the Metropolitan Area of Lisbon covered with plans to identify vulnerabilities and risks).</i></li> </ul>
Key results achieved so far	<p><i>After the conclusion / presentation of the PMAAC-AML, the stage of operationalization of the Plan began immediately, with the realization of specific intermunicipal workshops in the context of the identification of Metropolitan Strategic Projects for Adaptation to Climate Change related to municipal interventions for adaptation to priority climate risks in the AML, among which are the climate risks associated with heat waves, floods and floods, droughts and the rise in the average level of sea waters. This exercise aimed to improve sectoral agendas and start preparing the process for operationalizing the PMAAC-AML at the local scale.</i></p> <p><i>On the other hand, the PMAAC-AML aimed to promote the adoption of a transversal culture of adaptation to the various municipalities and strategic sectors. When the process of preparing the PMAAC-AML began, of the 18 municipalities of AML, six municipalities (Almada, Barreiro, Cascais, Lisbon, Mafra and Sintra) had a strategy and / or municipal plan for adapting to climate change. In 2019, the municipality of Oeiras presented its Municipal Climate Change Adaptation Plan.</i></p> <p><i>At present, AML is monitoring the preparation of Municipal Adaptation Plans to Climate Change in the municipalities of Loures and Odivelas. The municipalities of Palmela, Setúbal, Sesimbra and Vila Franca de Xira have recently started their process of drawing up their municipal plans for adapting to climate change, in which they counted on the institutional support of AML.</i></p>

	<p>The next steps, scheduled for 2021, of the monitoring process of the PMAAC-AML will consist of the following set of actions:</p> <ul style="list-style-type: none"> <li>• Coordination of initiatives with the municipalities to implement the instruments and procedures for monitoring the Plan;</li> <li>• Definition of action plans to implement the adaptation options, including the articulation of the institutional actors involved and the analysis of the financial support instruments;</li> <li>• Management and updating of the PMAAC-AML Information System;</li> <li>• Promotion of a metropolitan workshop to share best practices and inspiring municipal experiences in terms of adaptation / climate action, in order to encourage AML municipalities, as a key pillar for the operationalization of PMAAC-AML to develop and / or update their instruments for responding to the challenges of climate change;</li> <li>• Co-organization of an international webinar aimed at institutional strengthening of AML in 'climate action', through national and international experts, within the Portuguese presidency of the European Union, during the 1st semester of 2021.</li> </ul>
Budget (EUR)	<p>Total amount: € 593.790 European Union amount: € 500.587</p>
Time (duration of the initiative)	<p>From 02-2018 to 02-2020</p>
Thematic Objective s	<p>TO5</p>
Relevant category of intervention	<p>087. Measures to adapt to climate change and prevent and manage risks associated with climate, for example, erosion, fires, floods, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures</p>
Website or link to relevant material	<p>Summary of PMAAC-AML (English version): <a href="https://www.aml.pt/susProjects/susWebBackOffice/uploadFiles/wt1wwpgf_aml_sus_pt_site/componentPdf/SUS5E6B9B74C34BC/PMAAC_AML_P069_BROCHURA_INSTITUCIONAL_ENG_PMAAC-AML_30NOV2019_(1).PDF">https://www.aml.pt/susProjects/susWebBackOffice/uploadFiles/wt1wwpgf_aml_sus_pt_site/componentPdf/SUS5E6B9B74C34BC/PMAAC_AML_P069_BROCHURA_INSTITUCIONAL_ENG_PMAAC-AML_30NOV2019_(1).PDF</a></p> <p>Geographic Information System PMAAC-AML available online: <a href="https://sig.aml.pt/portal/apps/sites/#/pmaacaml">https://sig.aml.pt/portal/apps/sites/#/pmaacaml</a></p> <p>Videos produced in the framework of the preparation of the Plan, currently available on the AML's official page on the YouTube platform</p> <p>Municipality of Alcochete: <a href="https://www.youtube.com/watch?v=pB-lZ0Kl1FM">https://www.youtube.com/watch?v=pB-lZ0Kl1FM</a></p> <p>Municipality of Almada: <a href="https://www.youtube.com/watch?v=Tep0Ab3yxDA">https://www.youtube.com/watch?v=Tep0Ab3yxDA</a></p> <p>Municipality of Amadora: <a href="https://www.youtube.com/watch?v=0Tlqkk7qwJY">https://www.youtube.com/watch?v=0Tlqkk7qwJY</a></p> <p>Municipality of Barreiro: <a href="https://www.youtube.com/watch?v=npknhx0A6fk">https://www.youtube.com/watch?v=npknhx0A6fk</a></p> <p>Municipality of Cascais: <a href="https://www.youtube.com/watch?v=0-rD0o5IFjw">https://www.youtube.com/watch?v=0-rD0o5IFjw</a></p> <p>Municipality of Lisbon: <a href="https://www.youtube.com/watch?v=itjlqIZfxxE">https://www.youtube.com/watch?v=itjlqIZfxxE</a></p> <p>Municipality of Loures: <a href="https://www.youtube.com/watch?v=7xxo9nQ9OEQ">https://www.youtube.com/watch?v=7xxo9nQ9OEQ</a></p> <p>Municipality of Mafra: <a href="https://www.youtube.com/watch?v=WYKpvCGaIAU">https://www.youtube.com/watch?v=WYKpvCGaIAU</a></p> <p>Municipality of Moita: <a href="https://www.youtube.com/watch?v=Ph5YAWKgApo">https://www.youtube.com/watch?v=Ph5YAWKgApo</a></p>

	<p>Municipality of Montijo: <a href="https://www.youtube.com/watch?v=eQUvXhelQgQ">https://www.youtube.com/watch?v=eQUvXhelQgQ</a></p> <p>Municipality of Odivelas: <a href="https://www.youtube.com/watch?v=MqIVuGvkZv0">https://www.youtube.com/watch?v=MqIVuGvkZv0</a></p> <p>Municipality of Oeiras: <a href="https://www.youtube.com/watch?v=Mjkb01thM0">https://www.youtube.com/watch?v=Mjkb01thM0</a></p> <p>Municipality of Palmela : <a href="https://www.youtube.com/watch?v=j6YeerAfYMg">https://www.youtube.com/watch?v=j6YeerAfYMg</a></p> <p>Municipality of Seixal: <a href="https://www.youtube.com/watch?v=AWaiUhB7260">https://www.youtube.com/watch?v=AWaiUhB7260</a></p> <p>Municipality of Sesimbra: <a href="https://www.youtube.com/watch?v=yFQqAnX7LB8">https://www.youtube.com/watch?v=yFQqAnX7LB8</a></p> <p>Municipality of Setúbal: <a href="https://www.youtube.com/watch?v=K6muKf-CfCs">https://www.youtube.com/watch?v=K6muKf-CfCs</a></p> <p>Municipality of Sintra: <a href="https://www.youtube.com/watch?v=rWs7En4hu-o">https://www.youtube.com/watch?v=rWs7En4hu-o</a></p> <p>Municipality of Vila Franca de Xira: <a href="https://www.youtube.com/watch?v=r785nf-qKtk">https://www.youtube.com/watch?v=r785nf-qKtk</a></p> <p>First Metropolitan Secretary : <a href="https://www.youtube.com/watch?v=-odprdqOa_Y&amp;t=2s">https://www.youtube.com/watch?v=-odprdqOa_Y&amp;t=2s</a></p> <p>President of the Council Metropolitan (subtitled in English): <a href="https://www.youtube.com/watch?v=cSenNpKalQY&amp;t=89s89s">https://www.youtube.com/watch?v=cSenNpKalQY&amp;t=89s89s</a></p> <p>POSEUR news: <a href="https://www.facebook.com/POSEUR2020/videos/132259781691046">https://www.facebook.com/POSEUR2020/videos/132259781691046</a></p> <p>Complementary projects: Follow-up of AML to the elaboration of Municipal Plans for Adaptation to Climate Change in the municipalities of Loures and Odivelas: <a href="https://www.youtube.com/watch?v=9Aj3qfEuVA0&amp;feature=youtu.be">https://www.youtube.com/watch?v=9Aj3qfEuVA0&amp;feature=youtu.be</a></p> <p>CLIMA.AML: Metropolitan Meteorological Alert and Monitoring Network financed by the 'EEA Grants 2014-2021 ' <a href="https://www.youtube.com/watch?v=lsx8dl--iUjl&amp;t=15siUjl&amp;t=15s">https://www.youtube.com/watch?v=lsx8dl--iUjl&amp;t=15siUjl&amp;t=15s</a></p>
Additional optional comments	

### Example n.3 of intervention for climate change mitigation or adaptation

Name of intervention	Proteção Costeira da Praia Formosa e Praia Azul Coastal Protection of Praia Formosa and Praia Azul
Scope of intervention	Climate change adaptation

Description	<p><i>The intervention has the objective to promote coastal protection of Torres Vedras coast, acting on some of its higher - risk areas, contributing to achieving the following four main operational objectives of the Municipality:</i></p> <ul style="list-style-type: none"> <li>• <i>Preserve and maintain the coastline of the territory of Torres Vedras;</i></li> <li>• <i>Prevent to minimize the risk associated with cliff instability;</i></li> <li>• <i>Ensure the public safely enjoyment of coastal areas;</i></li> <li>• <i>Protect and rehabilitate ecosystems and natural values.</i></li> </ul> <p><i>It is an intervention to adapt to climate change related to the risk of sea level rise, which causes instability in the cliffs in an urban context, requiring intervention to protect and safeguard the safety of people and property from the effects caused by coastal erosion.</i></p> <p><i>The physical intervention actions were implemented in an integrated and efficient manner, promoting the coexistence between the mitigation of erosive phenomena and the possibility of safe enjoyment of the maritime public domain, and implemented the guidelines that emanate from the various studies, plans and strategies that incorporate the policy of protection and enhancement of the coastal resource.</i></p> <p><i>Based on the projections for the future climate in the municipality, the Municipal Strategy for Adaptation to Climate Change provides for a typology of climatic events in the territory of Torres Vedras that may include: i) Strong waves / sea level rise; ii) Excessive rainfall with floods, damage, landslides and floods; iii) Excessive precipitation associated with strong wind and storm; and iv) Drought and high temperatures with heat waves.</i></p> <p><i>As a consequence of these changes in the climate, the main expected direct negative impacts are related to damage to bathing infrastructures, to the primary dune cord, acceleration of the erosion process of the cliffs, damage to road infrastructures, buildings, equipment, supply infrastructures, among others. others.</i></p> <p><i>The indirect negative impacts identified as most relevant consist of loss of biodiversity, saline intrusion, conditioning of economic activities, economic costs with the recovery of buildings, equipment and infrastructures and overload for health services.</i></p> <p><i>The interventions carried out in Praia Formosa and Praia Azul reinforce the locations for the scenarios described above of increasing extreme situations motivated by climate change, while protecting and safeguarding the protection and conservation of the coastline.</i></p> <p><i>The main beneficiaries are the resident and visiting population of Praia Formosa and Azul in the parish of Silveira, municipality of Torres Vedras.</i></p>
Key results achieved so far	<p><i>The Operation achieved the results it set out to achieve both in terms of meeting the goals of the indicators identified in the Candidacy phase and in relation to the achievement of the expectations created.</i></p> <p><i>Regarding the fulfilment of the indicators' goals, a total 1.04 km of coastal strip was requalfied, of which 0.28 km for dune recovery and 0.74 km in relation to the coastal strip intervened by actions to minimize the risk associated with the instability of the cliffs.</i></p> <p><i>The extension of protection and / or coastal containment structures built / reinforced was 0.39 km, with the percentage of the coastline in critical erosion situation with an improved situation after the intervention being 75%.</i></p> <ul style="list-style-type: none"> <li>- <i>8. 530 citizens benefited;</i></li> <li>- <i>1.04 m coastal strip benefited .</i></li> </ul> <p><i>Compliance with the targets of the indicators contributed to the achievement of the following results:</i></p> <ul style="list-style-type: none"> <li>. <i>Ensure the preservation of the current coastline supported by the restoration of the sedimentary balance in a natural regime;</i></li> <li>. <i>Contain territorial exposure to coastal risks, establishing regimes to safeguard risk bands, in a medium and long-term perspective;</i></li> <li>. <i>Ensure the public safely enjoyment in the public maritime domain.</i></li> </ul>

	<p>. Ensure the preservation of beaches, dune systems and associated cliffs</p> <p>. Ensure the safety and protection of users and beach support structures;</p> <p>. Improve the quality of access and reception of users, with the improvement of conditions of access and internal circulation;</p> <p>. Ensuring and preparing infrastructure for extreme climatic phenomena resulting from climate change.</p>
Budget (EUR)	<p>Total amount: € 2.320.595</p> <p>EU amount: € 1.936. 643</p>
Time (duration of the initiative)	From 01-2017 to 12-2019
Thematic Objectives	TO5
Relevant category of intervention	087. Measures to adapt to climate change and prevent and manage risks associated with climate, for example, erosion, fires, floods, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	<p>Interview with Architect Author of the Project  <a href="https://youtu.be/J8UXyb2z49w">https://youtu.be/J8UXyb2z49w</a></p> <p>Municipality website - Article published on July 30, 2019 : <a href="http://www.cm-tvedras.pt/artigos/detalhes/protecao-costeira-das-praias-formosa-e-azul/">http://www.cm-tvedras.pt/artigos/detalhes/protecao-costeira-das-praias-formosa-e-azul/</a></p> <p>Video Opening 18.09.2019 :  <a href="https://fb.watch/2OHLUekGMm/">https://fb.watch/2OHLUekGMm/</a></p> <p>“Dias de Europa” event on 15.05.2019 : <a href="https://poseur.portugal2020.pt/pt/not%C3%ADcias/projetos-po-seur-de-portas-abertas/">https://poseur.portugal2020.pt/pt/not%C3%ADcias/projetos-po-seur-de-portas-abertas/</a></p> <p>Post Social Networks of the Municipality : <a href="https://www.facebook.com/TorresVedrasCM/videos/inaugura%C3%A7%C3%A3o-da-obra-e-prote%C3%A7%C3%A3o-costeira-da-praia-azul/684440042006490/">https://www.facebook.com/TorresVedrasCM/videos/inaugura%C3%A7%C3%A3o-da-obra-e-prote%C3%A7%C3%A3o-costeira-da-praia-azul/684440042006490/</a></p> <p>Other Press articles :  <a href="https://www.dn.pt/lusa/torres-vedras-abre-epoca-balnear-a-inaugurar-requalificacao-da-praia-azul-10976325.html">https://www.dn.pt/lusa/torres-vedras-abre-epoca-balnear-a-inaugurar-requalificacao-da-praia-azul-10976325.html</a>  <a href="https://www.dn.pt/lusa/torres-vedras-abre-epoca-balnear-a-inaugurar-requalificacao-da-praia-azul-10976325.html">https://www.dn.pt/lusa/torres-vedras-abre-epoca-balnear-a-inaugurar-requalificacao-da-praia-azul-10976325.html</a>  <a href="https://revistafesta.com/online/pais/item/1979-foram-inauguradas-hoje-as-obras-de-requalificacao-da-praia-azul-santa-cruz-torres-vedras">https://revistafesta.com/online/pais/item/1979-foram-inauguradas-hoje-as-obras-de-requalificacao-da-praia-azul-santa-cruz-torres-vedras</a>  <a href="https://torresvedrasweb.pt/requalificacao-da-orla-costeira-do-concelho-chegou-a-praia-azul">https://torresvedrasweb.pt/requalificacao-da-orla-costeira-do-concelho-chegou-a-praia-azul</a>  <a href="https://youtu.be/J8UXyb2z49w">https://youtu.be/J8UXyb2z49w</a>  <a href="http://www.cm-tvedras.pt/artigos/detalhes/protecao-costeira-das-praias-formosa-e-azul/">http://www.cm-tvedras.pt/artigos/detalhes/protecao-costeira-das-praias-formosa-e-azul/</a>  <a href="https://poseur.portugal2020.pt/pt/eventos/inaugura%C3%A7%C3%A3o-da-obra-de-prote%C3%A7%C3%A3o-costeira-da-praia-azul/">https://poseur.portugal2020.pt/pt/eventos/inaugura%C3%A7%C3%A3o-da-obra-de-prote%C3%A7%C3%A3o-costeira-da-praia-azul/</a></p>
Additional optional comments	

Continuity in the next period	<p><i>Praia Formosa e Azul are also crossing points of the "Great Route Atlantic Way - Natura Network West" that crosses the entire county coast of Torres Vedras and continues in the coastal territory of Lourinhã until Peniche.</i></p> <p><i>With regard to investments co-financed by Portugal 2020 and in a complementary aspect, the operation "Knowing to Preserve I Natura 2000 Network", financed by the Operational Program Sustainability and Efficiency in the Use of Resources, referring to the Nature Conservation domain (POSEUR-03-2215-FC-000020) and inserted in the Typology of operation "Development of contents and awareness actions for the Conservation of nature with the young and school community".</i></p> <p><i>Assuming the importance of complementarity to support the promotion of maritime and coastal biodiversity, protection and preservation of coastal ecosystems, promoting the creation of protected marine and coastal areas at local level, ensuring the maintenance of the favourable conservation status of species and habitats.</i></p> <p><i>With regard to coastal erosion risks in these territories, taking into account that interventions occur in dynamic areas subject to extreme weather phenomena and unpredictable, the intervention needs to be assessed continuously in respect to the evolution of respective vulnerabilities.</i></p>
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### 3.21. OP Transport Infrastructure Environment and Sustainable Development - GR - ERDF/CF (2014GR16M1OP001)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<p><i>Πράσινη Πιλοτική Αστική Γειτονία Β' Φάση</i></p> <p><b>Green Urban Pilot Neighbourhood (Phase B) – Municipality of Agia Varvara, Region of Attica</b></p>
Scope of intervention	<i>Climate change mitigation</i>
Description	<p><i>The project concerns the pilot and innovative energy renovation of a new residential complex of 4 refugee apartment buildings in building block 513 of the Municipality of Agia Varvara, Attica, which is inhabited by low-income citizens.</i></p> <p><i>In particular, the implementation of energy saving measures and Renewable Energy systems is envisaged, in order to achieve "almost zero energy consumption". This building unit presents great potential for energy saving and significant prospects for improving the microclimate.</i></p>
Key results achieved so far	<i>An annual reduction of greenhouse gas emissions by 694 tons of CO2 equivalent, is expected after the completion of the project.</i>
Budget (EUR)	<p><i>Total amount: 5.435.335,87€ (A+B Phase)</i></p> <p><i>EU amount (in EUR): 4.348.269€</i></p>
Time (duration of the initiative)	<i>From 17/10/2016 to 31/12/2023</i>
Thematic Objectives	<i>TO4: Supporting the shift towards a low-carbon economy in all sectors</i>
Relevant category of intervention	<i>014: Energy efficiency renovation of existing housing stock, demonstration projects and supporting measures</i>



Website or link to relevant material	<i>Not available</i>
Additional optional comments	<i>The project will have significant positive environmental impacts as it contributes to the further promotion and application of technologies concerning:</i> <i>-energy and RES saving to address the effects of climate change</i> <i>and</i> <i>-improvement of the microclimate to upgrade the urban environment</i>
Continuity in the next period	<i>Projects concerning the Improvement of the energy efficiency of public and private buildings, with the aim of reducing the effect of climate change are to be further co-financed in the upcoming Programming Period under the OP Environment and Energy 2021-2027.</i>

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Ολοκληρωμένη παρέμβαση στο Άλσος Νέας Φιλαδέλφειας</i> <b><i>Integrated intervention in the Grove of Nea Filadelfeia, Athens</i></b>
Scope of intervention	<i>Climate change mitigation</i>
Description	<i>The project concerns the implementation of sports and leisure infrastructure, the modernization of lighting, as well as the construction of bicycle tracks in the Grove of N. Philadelphia, one of the largest and most important green areas in Athens.</i>
Key results achieved so far	<i>The renovation of areas in the Grove of Nea Filadelfeia and the creation of bicycle tracks in a total area of 0.56 hectares are expected after the completion of the project which will contribute to the reduction of greenhouse gas emissions.</i>
Budget (EUR)	<i>Total amount: 616.638€</i> <i>EU amount (in EUR): 524.142€</i>
Time (duration of the initiative)	<i>From 15/12/2016 to 31/12/2023</i>
Thematic Objectives	<i>TO6: Preserving and protecting the environment and promoting resource efficiency</i>
Relevant category of intervention	<i>090: Cycle tracks and footpaths</i>
Website or link to relevant material	<i>Not available</i>
Additional optional comments	<i>-</i>
Continuity in the next period	<i>Projects concerning revitalization, protection and upgrading of the urban environment with the aim of reducing the effect of climate change are to be further co-financed in the upcoming Programming Period under the OP Environment and Energy 2021-2027.</i>

**Example n. 3 of intervention for climate change mitigation or adaptation**

Name of intervention	Ενεργειακή Αναβάθμιση του Μεγάρου της Βουλής των Ελλήνων <b>Energy efficiency upgrade of the main building (Megaron) of the Hellenic Parliament</b>
Scope of intervention	Climate change mitigation
Description	<p>The project concerns the improvement of the energy efficiency of the Hellenic Parliament. The total area of the building is 27,023 m<sup>2</sup>, while the heated / cooled areas in which the interventions of the present project are being carried out are 24,943 m<sup>2</sup></p> <p>In particular, the following are expected:</p> <ul style="list-style-type: none"> <li>- Energy Saving in the cooling system</li> <li>- Energy Saving in the shell of the building (roof thermal insulation, new frames on the facades)</li> <li>- Automation system BMS (Building Management System) with interface to the lighting, cooling and heating system</li> </ul> <p>With the implementation of the project, the achieved energy saving is expected to be at least 30% and the annual reduction of CO<sub>2</sub> emissions is expected to be 39%, while at the same time the energy classification of the building will improve by at least 1 class.</p> <p>The beneficiaries of the actions are expected to be the employees of the Parliament, through the improvement of their working conditions and through reducing local emissions but also the visitors that mostly consist of school groups.</p>
Key results achieved so far	<p>The project will contribute to the annual final energy savings, through the reduction of the annual primary energy consumption of public buildings and the annual reduction of greenhouse gas emissions.</p> <p>More specifically, by the end of 2019, a reduction of the annual primary energy consumption of public buildings by 582,900 KWh and a reduction of greenhouse gas emissions by 199 Tons of Equivalent CO<sub>2</sub> were achieved.</p>
Budget (EUR)	2.996.760,00
Time (duration of the initiative)	From 12/2018 to 12/2023
Thematic Objectives	TO4 - Supporting the shift towards a low-carbon economy in all sectors
Relevant category of intervention	013 - Energy efficiency renovation of public infrastructure demonstration projects and supporting measures
Website or link to relevant material	Not available
Additional optional comments	The project forms part of a significant number of projects that are being implemented in order to improve energy efficiency of public and private buildings in Greece, given that this is one of the main challenges to be addressed in the current programming period (2014-2020) as well as in the next one (2021-2027).
Continuity in the next period	Projects concerning energy saving and the improvement of the energy efficiency of public and private buildings with the aim of reducing the effect of climate change are to be further co-financed in the upcoming Programming Period under the OP Environment and Energy 2021-2027.



### 3.22. OP National fund for investments in growth and jobs - Sweden - ERDF (2014SE16RFOP009)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<i>Klimatsynk - Swedish Climate sync - Synchronization of projects within the climate area</i>
Scope of intervention	<i>Focus on climate change mitigation.</i>
Description	<p><i>The aim of this intervention was/is to synchronize all Swedish projects within TO4 to increase the learning from these projects as much as between different projects. The aim was also to identify needs of support and generating a more coordinated climate communication from the Swedish ERDF.</i></p> <p><i>The beneficiaries were:</i></p> <ul style="list-style-type: none"> <li>- <i>Project managers – who was managing climate related projects within ERDF</i></li> <li>- <i>Indirect the Small and medium sized businesses who was the primary target of the projects</i></li> <li>- <i>Regional and national decision makers</i></li> <li>- <i>The managing authority who supported the projects and identified new potential projects</i></li> </ul>
Key results achieved so far	<p><i>Output:</i></p> <ul style="list-style-type: none"> <li>- <i>one website for climate communication focusing on TO4 in the Swedish ERDF – available in Swedish and English</i></li> <li>- <i>a definition of six portfolios of projects in the areas of Sustainable transports, Sustainable building, energy efficiency in SMEs, renewable energy in SME, research and innovation for a low carbon economy, and Financial support for green investments and consultation.</i></li> <li>- <i>National conferences for dissemination of results from projects to development actors, authorities, and stakeholders.</i></li> <li>- <i>Informal networks of project managers. They represent a wide range of stakeholders, Research institutes, Academy, the regional development agencies, municipalities, SME, Authorities and more.</i></li> <li>- <i>Regular newsletters to a wide range of stakeholders.</i></li> <li>- <i>Articles in national and regional media</i></li> <li>- <i>Publications of aggregated results</i></li> <li>- <i>Up to date list of available public financing for climate related areas</i></li> <li>- <i>Informal and formal learnings which are not expressed in writing or by technical indicators</i></li> <li>- <i>Increased knowledge of challenges in climate related interventions with Swedish SMEs</i></li> <li>- <i>Learnings of how-to governance climate transition more efficiently for a structural change</i></li> </ul> <p><i>Outcome (achievements):</i></p> <ul style="list-style-type: none"> <li>- <i>More learnings between projects, project owners and regions with similar challenges</i></li> <li>- <i>More learnings between stakeholders involved in the projects.</i></li> <li>- <i>Increased qualities in the projects work with SMEs</i></li> <li>- <i>More strategic decisions in projects</i></li> <li>- <i>More focused analysis of results</i></li> <li>- <i>Increased internal learning within and between national and regional agencies</i></li> <li>- <i>Strengthened and closer cooperation between official national actors</i></li> </ul>

	<ul style="list-style-type: none"> <li>- Capacity building in the regions</li> <li>- Moved focus from individual projects to structural governing of resources for climate area including information to decisionmakers and public officers. Ex for the next ERDF period.</li> </ul>
Budget (EUR)	2 700 000 EUR
Time (duration of the initiative)	10/2015 – 12-2021
Thematic Objectives	TO 4
Relevant category of intervention	Supporting projects in all TO4 categories in Sweden
Website or link to relevant material	<a href="https://klimatsynk.se/">https://klimatsynk.se/</a>
Additional optional comments	
Continuity in the next period	Similar interventions might be financed next period. The ambition is to focus more on results and learnings from the programs and communication to the decisionmakers. The ambition is also to try to support regional actors as well as mobilizing them in creating relevant projects within the field of climate change. Currently we investigate how the financial design can be managed.

#### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	A program of Energy efficiency in Swedish SMEs
Scope of intervention	Focus on climate change mitigation by focusing on energy efficiency
Description	The program is a collection of several projects focusing on energy efficiency in SMEs. The program was designed by the Swedish agency for Energy and focus specifically on identifying and meeting the needs of SMEs. The projects target different aspects of the needed transition and work to support the SMEs from a variation of angles. The aim is to proactively recognize limitations and potentials for SMEs in all sector to initiate and accelerate an energy efficiency transition. The projects focus on digital education, SME focused tools, financial support for detailed analysis on a company level, financial support for investments, increased knowledge of energy efficiency among public officers who control businesses environmental aspects, network for SMEs, development of technologies etc.
Key results achieved so far	<p>Outputs – confirmed in regular reporting from the program.</p> <ul style="list-style-type: none"> <li>- Two websites for SMEs' energy efficiency - Coordinated communication</li> <li>- Nine educational programs with video and interactive tools for SMEs, targeting nine different industries.</li> <li>- 852 approved applications financial supports for detailed analysis on a company level. Current disbursement 1,3 M Euro</li> <li>- 88 approved applications for preparational studies for- or physical investments in SMEs. Current disbursement 1,3 M Euro</li> <li>- 15 regional networks for SMEs. 5311 participating SMEs in regional meetings.</li> <li>- 287 SMEs involved in SME lead networks where they collaborate for more energy efficiency</li> <li>- 150 municipalities proactively support SMEs via coaching. 1287 SMEs receive close up coaching.</li> </ul>

	<p>- 19 regional networks for public officials to increase their knowledge and methods when meeting SMEs to ease their transition to energy efficiency. Current result is 2000 consultations in SMEs of which 500 have initiated a transition.</p> <p>Outcome – some tendencies which we have identified. More exact and confirmed outcome will be determined later this year (2021).</p> <p>Increased understanding of SMEs characteristics and needs related to energy efficiency within the National Agency for Energy (new focus area), officers at municipalities, and control agencies. Important learnings are expected to be picked up into the general operation of these organisations.</p> <p>Increased dialogue about energy efficiency between public authority and industry organisations</p> <p>Increased interests for energy efficiency in SMEs</p>
Budget (EUR)	30 M Euro
Time (duration of the initiative)	2015/05 – 2021/12
Thematic Objectives	TO4
Relevant category of intervention	<p>Tematiskt område 04 - Stödja övergången till en koldioxidsnål ekonomi inom alla sektorer</p> <p>Investeringsprioritering 4b - Att främja energieffektivitet och användning av förnybar energi i företag</p>
Website or link to relevant material	<p><a href="http://www.energimyndigheten.se/smf">http://www.energimyndigheten.se/smf</a> - collection of the full program</p> <p><a href="https://eef.se/">https://eef.se/</a></p>
Additional optional comments	
Continuity in the next period	Learnings are implemented in the organisations core operation.

### 3.23. OP Growth and Employment - LV - ERDF/ESF/CF/YEI (2014LV16MAOP001)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<p>Promotion of climate change adaptation, risk prevention and management including the use of ecosystem – based approaches</p> <p>SAM 5.1.1. Plūdu risku samazināšana blīvi apdzīvotās teritorijās (LV)</p> <p>SO 5.1.1. To prevent the threat of flood and coastal erosion risks in urban areas (ENG)</p>
Scope of intervention	Adaptation to climate change
Description	<ul style="list-style-type: none"> <li>the main aims of the intervention: areas threatened by floods, mainly populated areas and polluted sites, as well as public infrastructure objects threatened by coastal erosion</li> <li>in the case of intervention for climate change adaptation, which type of climate hazards it addresses (e.g. sea level rise, river floods, landslides, droughts, heat waves, forest fires, multiple climate risks...): measures for reduction of the sea coastal erosion, improvement and development of structures of overground run-off and storm</li> </ul>

	<p>water drain infrastructure (incl. the accordant green infrastructure), protection of the areas threatened by floods by the reconstruction of the existing hydro-technical structures and construction of new flood protection structure, and development of green infrastructure. Supported activities are according to the National Flood Management Programme.</p> <ul style="list-style-type: none"> <li>• <i>instruments used (e.g. grants, loans, provision of services, creation of infrastructure):</i> European Regional Development Fund (ERDF) grant programme, state budget dotation, municipal co-funding (including the State Treasury loans for ensuring of municipalities' co-funding).</li> <li>• <i>main beneficiaries:</i> municipalities, their institutions and enterprises, which have to ensure flood prevention measures according to River Basin Management Plans.</li> </ul>
Key results achieved so far	<p>The following output and outcome indicators have been achieved within completed 4 (four) projects:</p> <ul style="list-style-type: none"> <li>• Number of contaminated sites and objects emitting pollution, in regard to which the risks of environmental and socioeconomic losses and damages that would arise as a result of flooding of these sites should be reduced - from baseline value 88 to at least 70 sites; indicator target value set in OP as well as in national legislation from 88 to 74 to 58 sites.</li> <li>• Population benefiting from flood protection measures – 69 461 people; while target value set in OP is 180 208 people</li> </ul>
Budget (EUR)	Total amount 27 662 703 EUR, incl. 23 513 297 EUR of ERDF funding
Time (duration of the initiative)	From 08/2016 to 12/2023
Thematic Objectives	TO5 Protection of environment and effective use of resources
Relevant category of intervention	087 Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures
Website or link to relevant material	<p><a href="https://www.esfondi.lv/upload/Planosana/dp_20072020.pdf">https://www.esfondi.lv/upload/Planosana/dp_20072020.pdf</a></p> <p><a href="https://m.esfondi.lv/upload/Planosana/FMProg_270115_OP_ENG_2.pdf">https://m.esfondi.lv/upload/Planosana/FMProg_270115_OP_ENG_2.pdf</a></p> <p><a href="https://likumi.lv/ta/id/284114-darbibas-programmas-izaugsme-un-nodarbinatiba-5-1-1-specifiska-atbalsta-merka-noverst-pludu-un-krasta-erozijas-risku-apdraudejumu">https://likumi.lv/ta/id/284114-darbibas-programmas-izaugsme-un-nodarbinatiba-5-1-1-specifiska-atbalsta-merka-noverst-pludu-un-krasta-erozijas-risku-apdraudejumu</a></p>
Additional optional comments	<p>The best practice in projects is to use green and blue infrastructure. One of the projects that has received funding is in the city Jelgava. Within the scope of the project also elevated wooden walk pathways have been constructed so that they can be used during flooding. Detailed project description and photos are available here:</p> <p><a href="https://www.pilsetsaimnieciba.lv/project/kompleksu-pasakumu-istenosana-svetes-upes-caurpludes-atjaunosanai-un-pludu-apdraudejuma-samazinasanai-piegulosajas-teritorijas/">https://www.pilsetsaimnieciba.lv/project/kompleksu-pasakumu-istenosana-svetes-upes-caurpludes-atjaunosanai-un-pludu-apdraudejuma-samazinasanai-piegulosajas-teritorijas/</a></p>
Continuity in the next period	Yes. Similar programme with higher focus on green and blue solutions. Operation Programme of Latvia for 2021.-2027 period is still under development.

### Example n. 2 of intervention for climate change mitigation or adaptation

Name of intervention	SAM 4.2.2. Atbilstoši pašvaldības integrētajām attīstības programmām sekmēt energoefektivitātes paaugstināšanu un atjaunojamo energoresursu izmantošanu pašvaldību ēkās (LV)
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	SO 4.2.2. To promote increase in energy efficiency in municipal buildings in accordance with the integrated development programmes of municipalities (ENG)
Scope of intervention	Climate change mitigation
Description	<ul style="list-style-type: none"> <li>• <i>main aims of the intervention:</i> to reduce primary energy consumption by promoting the increase of energy efficiency and the reduction of municipal expenditures on heat supply and by investing in municipal buildings in accordance with the priorities set in the municipal development programs</li> <li>• <i>instruments used:</i> European Regional Development Fund (ERDF) grants, municipalities' co-funding (incl. the State Treasury loans as a part of municipalities' co-funding)</li> <li>• <i>main beneficiaries:</i> Municipalities of the Republic of Latvia, their institutions and enterprises</li> </ul>
Key results achieved so far	<p>Within the framework of 92 completed projects so far, the following outcome indicators have been achieved:</p> <ul style="list-style-type: none"> <li>• Decrease of annual primary energy consumption of public buildings – 21.1 mil kWh/a year; indicator value set in the OP is 13.7 mil kWh/a year, while it is 22.5 mil kWh/a year set in the national regulation of SO 4.2.2. implementation</li> <li>• Estimated annual decrease of greenhouse gas (GHG) emissions – 5675 tons of CO<sub>2</sub> equivalent; indicator value set in the OP is 3460 tons of CO<sub>2</sub> equivalent and 5676 tons of CO<sub>2</sub> equivalent set in the national regulation of SO 4.2.2. implementation</li> <li>• Additional installed capacity of renewable energy sources – 0.62 MW; indicator value set in the OP is 1.2 MW and 1.428 MW set in the national regulation of SO 4.2.2. implementation</li> </ul>
Budget (EUR)	Total amount: 60 583 995 EUR, incl. 51 496 394 EUR of ERDF funding
Time (duration of the initiative)	From 03/2016 to 12/2022
Thematic Objectives	TO4 Supporting the shift towards a low-carbon economy in all sectors
Relevant category of intervention	013 Energy efficiency renovation of public infrastructure
Website or link to relevant material	<p>Operational programme "Growth and Employment" - <a href="https://www.esfondi.lv/upload/Planosana/FMPProg_270115_OP_ENG_2.pdf">https://www.esfondi.lv/upload/Planosana/FMPProg_270115_OP_ENG_2.pdf</a></p> <p><a href="https://likumi.lv/ta/id/281111-darbibas-programmas-izaugsme-un-nodarbinatiba-4-2-2-specifiska-atbalsta-merka-atbilstosi-pasvaldibas-integretajam-attistibas">https://likumi.lv/ta/id/281111-darbibas-programmas-izaugsme-un-nodarbinatiba-4-2-2-specifiska-atbalsta-merka-atbilstosi-pasvaldibas-integretajam-attistibas</a></p>
Additional optional comments	<p>Main aim of the programme is to reduce primary energy consumption by promoting the increase of energy efficiency and the reduction of local government expenditures on heat supply and by making investments in municipal buildings in accordance with the priorities set in the municipal development programs. Within the projects' municipalities are also encouraged to use renewable energy sources.</p> <p>Currently Ministry of Environmental Protection and Regional Development is also working on the continuation and expansion of the existing programme (through REACT-EU), allowing also investments in municipal waste and water infrastructure, making them more energy efficient and climate friendly (by using renewable energy sources). Use of smart solutions are also planned.</p>

Continuity in the next period	Considering that after implementation of SO 4.2.2. there will still be significant potential for reduction of energy consumption and GHG emissions in public sector buildings, it is planned to continue the intervention in 2021-2027 by renovation of municipal buildings to increase energy efficiency, including smart and environmentally friendly long-term energy management solutions.
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### Example n. 3 of intervention for climate change mitigation or adaptation –

Name of intervention	SAM 4.3.1. Veicināt energoefektivitāti un vietējo AER izmantošanu centralizētajā siltumapgādē  SO 4.3.1. Promoting energy efficiency and the energy use of local renewable energy sources in district heating
Scope of intervention	Climate change mitigation
Description	<ul style="list-style-type: none"> <li><i>main aims of the intervention:</i> to promote energy efficiency and the use of local renewable energy sources in district heating</li> <li><i>instruments used:</i> Cohesion Fund (CF) grant programme, enterprises' co-funding.</li> <li><i>main beneficiaries:</i> energy users.</li> </ul>
Key results achieved so far	Regulations state that until 2023: <ul style="list-style-type: none"> <li>61 km of heat pipes must be renovated;</li> <li>thermal energy losses in reconstructed heat networks must be reduced by 47 086 MWh/year;</li> <li>modernisation and growth of installed capacity of renewable energy sources in district heating must rise by 234 MW;</li> <li>additional installed capacity of renewable energy sources must be 8 MW;</li> <li>estimated annual greenhouse gas emission reduction must be 178 437 tonnes of CO<sub>2</sub> equivalent.</li> </ul>
Budget (EUR)	Total amount: (96 370 078+27 586 560) EUR, incl. (38 548 031+ 11 034 624) EUR of CF funding (2 stages)
Time (duration of the initiative)	From 03/2017 to 12/2022
Thematic Objectives	TO4 Supporting the shift towards a low-carbon economy in all sectors
Relevant category of intervention	010 Renewable energy: solar 011 Renewable energy: biomass 012 Renewable energy: other renewable energy 013 Energy efficiency renovation of public infrastructure, demonstration projects and supporting measures
Website or link to relevant material	Operational programme "Growth and Employment" - <a href="https://www.esfondi.lv/upload/Planosana/FMPProg_270115_OP_ENG_2.pdf">https://www.esfondi.lv/upload/Planosana/FMPProg_270115_OP_ENG_2.pdf</a>  <a href="https://likumi.lv/ta/id/293209-darbibas-programmas-izausgme-un-nodarbinatiba-4-3-1-specifiska-atbalsta-merka-veicinat-energoefektivitati-un-vietejo-aer">https://likumi.lv/ta/id/293209-darbibas-programmas-izausgme-un-nodarbinatiba-4-3-1-specifiska-atbalsta-merka-veicinat-energoefektivitati-un-vietejo-aer</a>  <a href="https://likumi.lv/ta/id/289471-darbibas-programmas-izausgme-un-nodarbinatiba-4-3-1-nbsp-specifiska-atbalsta-merka-veicinat-energoefektivitati-un-vietejo">https://likumi.lv/ta/id/289471-darbibas-programmas-izausgme-un-nodarbinatiba-4-3-1-nbsp-specifiska-atbalsta-merka-veicinat-energoefektivitati-un-vietejo</a>
Additional optional comments	Improving the energy efficiency of heat networks and promoting the use of renewable energy sources in district heating is an important step in achieving Latvia's national climate and energy objectives.

	<p>One of the projects that has received funding is in Salaspils. As a result of this project, Salaspils has managed to become the first city in Latvia where solar (thermal) energy is used in the district heating system.</p> <p>Detailed project description and photos are available here:</p> <p>“Ar ES fondu atbalstu Salaspils iedzīvotāji izmantos saules enerģiju centralizētajā siltumapgādē” CFLA <a href="https://www.esfondi.lv/es-fondu-projektu-mekletajs/project?number=4.3.1.0%2F17%2FA%2F061">https://www.esfondi.lv/es-fondu-projektu-mekletajs/project?number=4.3.1.0%2F17%2FA%2F061</a></p>
Continuity in the next period	<p>Yes. Similar intervention with higher focus on energy efficiency promotion, renewable energy use and reducing greenhouse gas emissions reduction.</p> <p>Operation Programme of Latvia for 2021.-2027 period is still under development.</p>

### 3.24. OP EU Structural Funds Investments - LT - ERDF/ESF/CF/YEI (2014LT16MAOP001)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<b>PAJŪRIO JUOSTOS TVARKYMAS COASTAL ZONE MANAGEMENT</b>
Scope of intervention	<b>Adaptation to climate change.</b>
Description	<ul style="list-style-type: none"> <li><i>the main aims of the intervention</i> <b>Implement coastal management measures in the coastal zone and reduce climate change losses.</b></li> <li><i>type of climate hazards it addresses (e.g. sea level rise, river floods, landslides, droughts, heat waves, forest fires, multiple climate risks...)</i> <b>Various risks related to climate change.</b></li> <li><i>instruments used</i> <b>Grant.</b></li> <li><i>main beneficiaries</i> <b>Curonian Spit National Park Authority; Palanga city municipality.</b></li> </ul>
Key results achieved so far	<p>P.N.022 “Length of the maintained sea shore” - 14.47 km (18/11/2020); planned in the contracts 22.38 km.</p> <p>R.N.021 “Part of the maintained sea shore” - 6.75 percent. (18/11/2020); planned in the contracts - 12.50 percent.</p> <p>P.N.022 “Length of a maintained sea shore” - 20 km (31/12/2023)</p> <p>R.N.021 “Part of the maintained sea shore” - 22.3 percent. (31/12/2023)</p>
Budget (EUR)	<b>EU structural funds - 5,819,704 EUR</b>
Time (duration of the initiative)	<b>12/2016 to 12/2023</b>
Thematic Objectives	<b>TO5</b>



Relevant category of intervention	<b>21 Water management and drinking water conservation (including river basin management, water supply, specific climate change adaptation measures, district and consumer metering, charging systems and leak reduction)</b>
Website or link to relevant material	<i>General in English</i> <a href="https://www.esinvesticijos.lt/en/information/about/measure">https://www.esinvesticijos.lt/en/information/about/measure</a> <a href="https://www.esinvesticijos.lt/lt/finansavimas/patvirtintos_priemones/pajurio-juostos-tvarkymas">https://www.esinvesticijos.lt/lt/finansavimas/patvirtintos_priemones/pajurio-juostos-tvarkymas</a>
Additional optional comments	
Continuity in the next period	<p>Activities are planned to continue in 2021-2027.</p> <p>In order to reduce the impact of climate change on the shores of the Baltic Sea and the Curonian Spit, shore management measures based on natural analogues will be implemented, giving priority to strengthening the shore and coastal resilience of the most problematic section of Palanga central beaches by supplementing the shore and coast with imported sea sand.</p> <p>Also, on the shore of the mainland and the UNESCO protected area, the Curonian Spit, in order to strengthen the stability of the protective beach, it is planned to fix the dune ridge with rows of fences and branch formwork.</p>

**Example n. 2 of intervention for climate change mitigation or adaptation**

Name of intervention	<b>POTVYNIŲ RIZIKOS VALDYMAS</b> <b>FLOOD RISK MANAGEMENT</b>
Scope of intervention	<b>Adaptation to climate change.</b>
Description	<ul style="list-style-type: none"> <li><i>the main aims of the intervention</i> <b>Implement flood risk reduction measures to reduce climate change losses. Also update the flood risk management plan.</b></li> <li><i>type of climate hazards it addresses (e.g. sea level rise, river floods, landslides, droughts, heat waves, forest fires, multiple climate risks...)</i> <b>River floods.</b></li> <li><i>instruments used</i> <b>Grant.</b></li> <li><i>main beneficiaries</i> <b>Municipalities.</b></li> </ul>
Key results achieved so far	<p>P.B.220 "Population benefiting from flood defences" - 8,260 persons (07/12/2020), planned in contracts - 11,964 persons.</p> <p>P.B.220 "Population benefiting from flood defences" - 7000 persons (31/12/2023)</p>
Budget (EUR)	<b>EU structural funds - 14,192,198 EUR</b> <b>Municipal budget funds - 1,110,151 EUR</b>
Time (duration of the initiative)	<b>09/2018 to 12/2023</b>



Thematic Objectives	<b>T05</b>
Relevant category of intervention	<b>21 Water management and drinking water conservation (including river basin management, water supply, specific climate change adaptation measures, district and consumer metering, charging systems and leak reduction)</b>
Website or link to relevant material	<i>General in English</i> <a href="https://www.esinvesticijos.lt/en/">https://www.esinvesticijos.lt/en/</a> <i>Information about measure</i> <a href="https://www.esinvesticijos.lt/lt//finansavimas/patvirtintos_priemones/potvyniu-rizikos-valdymas">https://www.esinvesticijos.lt/lt//finansavimas/patvirtintos_priemones/potvyniu-rizikos-valdymas</a>
Additional optional comments	
Continuity in the next period	<p>Activities are planned to continue in 2021-2027.</p> <p>In order to reduce the flood risk in the coastal zone and the lower reaches of the Nemunas, it is planned to invest in preventive purposes in the implementation of flood risk management plans - river embankment erosion reduction measures (river embankment reinforcement), installation and reconstruction of protective dikes, hydraulic structures dredging), giving priority to green infrastructure and ecosystem-based adaptation measures to climate change, such as restoring the hydro morphological features of drained wetlands and damaged rivers.</p>

### Example n. 3 of intervention for climate change mitigation or adaptation

Name of intervention	<b>DAUGIABUČIŲ NAMŲ MODERNIZAVIMAS</b> <b>MODERNIZATION OF APARTMENT BUILDINGS</b>
Scope of intervention	<b>Climate change mitigation.</b>
Description	<ul style="list-style-type: none"> <li><i>the main aims of the intervention</i> <b>Reduce energy consumption in apartment buildings</b></li> <li><i>instruments used (e.g. grants, loans, provision of services, creation of infrastructure...)</i> <b>Loan</b></li> <li><i>main beneficiaries</i> <b>Owners of apartments and other premises in apartment buildings</b></li> </ul>
Key results achieved so far	<ul style="list-style-type: none"> <li>R.S.317 "Final energy consumption in service and household sectors": 2,151 thous. t 2018 end</li> <li>P.B.231 "Number of households in the improved energy efficiency class": 38.503 households in 2020. I quarter</li> <li>P.B.234 "Total annual greenhouse gas savings": 79,669 t CO<sub>2</sub> equivalent in 2020. I quarter</li> <li>P.N.001 "Number of loans or guarantees granted for the renovation of apartment buildings": 1,585 in 2020 end</li> </ul> <p>Expectations:</p>

	<ul style="list-style-type: none"> <li>• R.S.317 "Final energy consumption in service and household sectors": 1,680 thous. t until 2023 end</li> <li>• P.B.231 "Number of households in the improved energy efficiency class": 52,000 households by 2023 end</li> <li>• P.B.234 "Total annual greenhouse gas savings": 110,000 t CO<sub>2</sub> equivalent by 2023 end</li> <li>P.N.001 "Number of loans or guarantees granted for the renovation of apartment buildings": 2 400 until 2023 end</li> </ul>
Budget (EUR)	<b>EU structural funds - 314,000,000 EUR</b>
Time (duration of the initiative)	<b>03/2015 to 12/2023</b>
Thematic Objectives	<b>TO4</b>
Relevant category of intervention	<i>014 Energy efficiency renovation of existing housing stock, demonstration projects and supporting measures</i>
Website or link to relevant material	<p><i>Residential energy efficiency financial instruments in Lithuania: Case study</i></p> <p><a href="https://www.fi-compass.eu/publication/case-studies/residential-energy-efficiency-financial-instruments-lithuania">https://www.fi-compass.eu/publication/case-studies/residential-energy-efficiency-financial-instruments-lithuania</a></p> <p><i>Information about measure</i></p> <p><a href="https://www.esinvesticijos.lt/lt//finansavimas/patvirtintos_priemones/daugiabuciu-namu-atnaujinimas">https://www.esinvesticijos.lt/lt//finansavimas/patvirtintos_priemones/daugiabuciu-namu-atnaujinimas</a></p>
Additional optional comments	-
Continuity in the next period	<p><b>Activities are planned to continue in 2021-2027.</b></p> <p><b>Increase energy efficiency in households not connected to district heating networks:</b> Further promote the replacement of biomass-fired boilers in households with more efficient AES technologies (e.g. latest generation biofuel boilers, heat pumps, etc.). The incentive will significantly increase energy savings and offset a large part of the costs of households not connected to the district heating network. The activities are implemented in the region of Central and Western Lithuania.</p> <p><b>Renovation of multi-apartment buildings by introducing energy efficiency and renewable energy measures:</b> it is planned to continue renovation of multi-apartment buildings in order to increase the energy efficiency of buildings, thus contributing to climate change mitigation, energy independence and reducing consumer heating and living conditions. Priority will be given to apartment buildings built before 1993. the current technical standards of the Building Regulation, which contribute to solving the problems of energy poverty (deprivation), achieve energy efficiency classes higher than class C and implement AES measures (which may amount to up to 20% of the project value) provided for in the plans for complex renovation of residential areas. There will also be publicity of the renovation wave, information and consultation of municipalities, building owners or managers, supervision and control of project implementation. The activities are implemented in the region of Central and Western Lithuania and throughout Lithuania.</p> <p><b>Renovate public buildings by increasing their energy efficiency:</b> Central government public buildings will continue to be promoted in order to save a significant share of energy in public infrastructure and achieve at least a minimum Class C. Under</p>

	<p>the Energy Performance Improvement Program for Public Buildings, priority will be given to projects aiming at a higher than Class C and larger renovated area.</p> <p><b>Improving energy efficiency in enterprises:</b> Encourage enterprises to implement the measures identified in energy efficiency audit reports. The incentive will be differentiated according to the indicators of the energy efficiency improvement measures, i.e. energy savings, the lifetime of the measures and the payback of the measures. The aim will be to invest in the installation and acquisition of the latest and environmentally friendly technologies, vehicles and equipment. <b>Improving the energy efficiency and expanding district heating, hot water and cooling systems:</b> In order to reduce emissions in the district heating, hot water and cooling sector, the development of integrated district heating and cooling and short-term heat storage and storage systems will be encouraged efficient use of residual and environmental energy (waste heat and cooling energy). The modernization and expansion of district power pipeline systems will also be encouraged through the implementation of lower temperature regimes and technologies, the integration of low temperature sources and different energy sectors and their synergies (e.g. use of residual energy from industrial and energy facilities for heating and cooling, electricity balancing). , efficient use of energy infrastructure for the development of new industrial and other facilities). Investments in the development and management of efficient integrated energy systems will be made in the deployment of smart grid management, including remote metering of used heat, hot water and cooling data, energy metering, consumption control devices and systems in energy efficient <i>buildings and buildings, consumption, generation and supply regimes</i>.</p>
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### 3.25. OP Interreg V-B - Northern Periphery and Arctic (2014TC16RFTN004)

#### Example n. 1 of intervention for climate change mitigation or adaptation

Name of intervention	<b>Collaborative Learning Initiative Managing and Adapting to the Environment - CLIMATE</b>
Scope of intervention	The main project objectives were to Promote and improve climate change awareness in the European peripheral rural communities through a knowledge based approach and climate impact and incorporating transnational collaboration through a best management in future years. The project also developed a preparedness scale matrix for local authorities and partners to be able to disseminate best practice models.
Description	<p>Research Models of Best Practice and Develop Preparedness Scale &amp; Risk Register: Develop models for policy makers which can be adapted to be used to educate local people, community groups and statutory/voluntary organisations on local, regional, national and international issues</p> <p>Produce Climate Adaptation Plan: The Climate Adaptation Plan was targeted at public authorities &amp; environmental agencies in each partner region by illustrating methods for climate change adaptation interventions to government authorities and local communities in the NPA region.</p> <p>A comprehensive evaluation and review of the project aids local authorities in their preparedness in addressing climate change: The aim was to provide an enhanced capacity and preparedness of environmental agencies to handle the risks connected to</p>

	climate change and contribute towards the overall programme objective of increasing the preparedness of competent authorities.
Key results achieved so far	<p>A best practice adaptation planning model has been created. This includes a preparedness scale and risk register. The model and support tools are available to view and download on a bespoke CLIMATE project website. This includes the step by step guide and associated explanation, templates and tools taking the user through the adaptation planning process. <a href="http://www.climate-project.net/">http://www.climate-project.net/</a></p> <p>The model and support tools have been disseminated to all partners and associate partners through social media, press and newsletters.</p> <p>A Climate Adaptation Plan was developed with an associated action plan lead by a dedicated working group across council. The plan has been disseminated across all Councils and relevant government departments. A Climate Change Risk &amp; Opportunities Assessment has been completed of two major regeneration projects - this includes working with statutory agencies and others across the city and district.</p> <p>The climate adaptation plan has been completed consisting of four parts. 1) A main (governing) document - the Climate Adaptation Plan (CAP). 2) the action plan, which will contain more details on relevant measures (AP) 3) A digital tool, ESRI StoryMap (SM), to communicate adaptation planning to a wider audience and 4) GIS-based data to be used internally and in communication with stakeholders (e.g. the rescue service) for planning activities.</p> <p>A Cloudburst Strategy and Heatwave Guidelines to ensure preparedness against severe weather events. These documents have already begun to influence local policy and decision making with allocation of budget towards the management of public assets and buildings to ensure resilience to heat. Key infrastructure projects are also using the cloudburst models for future proofing and planning for change.</p> <p>A Monitoring and Evaluation report has been produced which explored the project outputs, management and delivery by the partners exploring the effectiveness of the project and delivery. Research partners have also developed papers to be published in journals exploring the policy context as well as trans-boundary approaches to climate adaptation planning.</p>
Budget (EUR)	€ 1.366.059,72
Time (duration of the initiative)	01.06.2017 - 30.06.2020 (37 months)
Thematic Objectives	6 (C)
Relevant category of intervention	087
Website or link to relevant material	<a href="https://www.interreg-npa.eu/projects/funded-projects/project/200/">https://www.interreg-npa.eu/projects/funded-projects/project/200/</a> <a href="https://climate.interreg-npa.eu/">https://climate.interreg-npa.eu/</a>
Additional optional comments	–
Continuity in the next period	NPA 2021-2027 Programming Planning Group still in process, but likely.

**Example n. 2 of intervention for climate change mitigation or adaptation**

Name of intervention	<b>ADAPTING NORTHERN cultural HERITAGE</b>
Scope of intervention	ADAPTING NORTHERN cultural HERITAGE to the environmental impacts of climate change and associated natural hazards through community engagement and informed conservation planning
Description	Adapt Northern Heritage was concerned with adapting northern cultural heritage to the environmental impacts of climate change and associated natural hazards through community engagement and informed conservation planning. The project developed an online tool to assess the risks for and vulnerabilities of historic places and provide guidance for the planning of strategic adaptation measures that takes into account cultural, economic, environmental and social sustainability. The tool was tested and demonstrated in nine case studies, in Iceland, Ireland, Norway, Russia, Sweden and Scotland, for which adaptation actions plans will be produced. The project created a community network with a networking platform, round table workshops and training events.
Key results achieved so far	<p>The Adapt Northern Heritage Toolkit helps to reduce anthropogenic and environmental impacts of climate change on historic places, by offering guidance and procedures for assessing risks and planning adaptation strategies. Adapt Northern Heritage case study plan to inform the development of municipal incentives (grants, permission etc.) to reduce risks to historic places.</p> <p>From a building capacity prospective, the Adapt Northern Heritage Toolkit consists of 5 tools to help understand better how climate change will affect Northern historic places and explore response options. The main tool is a Guide for Assessing Risk and Planning Adaptation, supported by examples of Adaptation Stories, Conservation Factsheets and Information Sources. As a result of the project, the Office of Public Works (Ireland) is now using the Climate Risk Management Plan for Ballinskelligs Abbey to inform their conservation policies for this place.</p>
Budget (EUR)	€ 963 212
Time (duration of the initiative)	01.06.2017 - 31.05.2020 (36 months)
Thematic Objectives	6 (C)
Relevant category of intervention	087
Website or link to relevant material	<a href="http://adaptnorthernheritage.interreg-npa.eu/">http://adaptnorthernheritage.interreg-npa.eu/</a> <a href="https://www.interreg-npa.eu/projects/funded-projects/project/198/">https://www.interreg-npa.eu/projects/funded-projects/project/198/</a>
Additional optional comments	–
Continuity in the next period	NPA 2021-2027 Programming Planning Group still in process.

**Example n. 3 of intervention for climate change mitigation or adaptation**

Name of intervention	<b>Arctic Preparedness Platform for oil Spill and other environmental Accidents – APP4SEA</b>
Scope of intervention	<p>APP4SEA is a transnational competence migration project, which aimed to strengthen the preparedness of environmental authorities and the awareness of general public in the coastal areas of the NPA region regarding oil spill response. Combating oil spills in harsh, northern conditions is challenging with current technologies. APP4SEA united coastal authorities, pool their competences and data on oil weathering, share best practices in oil spill response technologies and models. By learning from each other, the authorities can respond faster and more efficiently in order to minimize environmental and social impacts of oil-in-water accidents.</p> <p>The project produced an interactive smart map, which will be an open access platform showing search and rescue centres along the NPA coastline, their equipment and level of preparedness for oil spill accidents, weather conditions in accident zones, as well as information about important ecological areas and species that can be affected by oil spills. The smart application will also have a predictive function to advise in case of accident what equipment to deploy considering the place and scale of spill and environmental conditions.</p> <p>The project also produced a gap analysis and improvement suggestions to improve OSR infra and preparedness level in the NPA region. The end users of the project are local authorities responsible for oil spill response; social groups, educational institutions and the general public. APP4SEA will also involve local entrepreneurs, to support northern entrepreneurship and attract interest to environmental issues. In addition, the general public were provided access to illustrative educational tools.</p>
Description	<p>The main aims of the APP4SEA project were:</p> <p>Transfer of technological best practices to upskill local authorities: Introduce local coastal authorities to state-of-the-art technologies, best practices and international locally discovered know-hows to improve their overall organizational awareness, operational performance and preparedness to protect local nature.</p> <p>Pooling competences across the region in oil spill response, to increase organizational knowledge: Form a transnational expert pool to share best practices and organizational knowledge on oil spill response methods and best practices.</p> <p>Development of an on-line platform and mobile application with a decision-making tool: Provide local authorities and communities with an open access knowledge bank, which offers decision-making tools as well as interactive educational materials on efficient response methods aimed at minimizing ecological risks</p>
Key results achieved so far	<p>The Oil spill response model as such is too general description about the various factors that constitute as oil spill response, such as OSR technologies and methods. weather and currents, behaviour of the oil type in water, etc. It was not possible to create such a model in the project, but this was covered by approaching these individual factors. The smart map includes information about the various OSR methods and technologies, as well as live and static weather, climate and oceanographic data &amp; information about the characteristics of different oil types and how they behave in water. This information is offered in one place, is easily accessible to anyone and on any device, which is useful especially for authorities dealing with oil spill response. This might be interesting as well for the general public, who are interested about environmental issues.</p> <p>The smart map has 4 main map layer sections and useful information section. The regional boundaries section, which was not included in the original plan, puts the NPA</p>

	<p>region on the map and the Exclusive economic zones of the NPA region. Oil industry, transport and response includes several different map features. The most important ones are the oil spill response sites, vessels and airplanes, which illustrate our preparedness to oil spills, whereas hydrocarbon fields in UK and Norwegian waters, point out the static risk sites of potential oil spills. Unlike planned, there is no live data of the movements of shipping and tanker traffic, but the extent, seasonal changes and increase of shipping is illustrated by the Arctic shipping traffic density layer. In addition to this, there is information about oil spill incidents, including simulations of actual and hypothetical oil spill incidents, which are linked to Shared oil spill response models and Predictive model to select best OSR method to improve response efficiency and reduce response time). Climate, ocean and weather includes live and static information, which is important for successful oil spill response operations. This data helps to understand the challenges, which climatic, oceanic and weather phenomena can have on oil spill response. The ecological zones section includes general information about NPA region's ecology and environment, whereas Seabird OVI layers linked to Environmental contamination and ecological risk and impact toolkit, describe in detail the areas, where seabirds are especially in risk, if an oil spill happens. All this data is useful for authorities, organisations and other actors involved in oil spill response.</p> <p>The Environmental contamination and ecological risk and impact toolkit comprises several resources which allow the user to better understand, quantify, and determine the risk of oil spills to seabirds within the north eastern Atlantic and Arctic region and beyond. The toolkit is meant for local, regional and national authorities, sectoral agencies and NGO's, which are involved in oil spill response activities, and above all with protection of birds and wildlife in case of oil spill. North Highland College UHI, who has created the toolkit, will continue to work with it and make updates to it. Possible newer versions of the toolkit will be added to the APP4SEA's homepage and smart map and disseminated through various other channels.</p>
Budget (EUR)	€ 1 414 143
Time (duration of the initiative)	01.05.2017 - 30.04.2020 (36 months)
Thematic Objectives	6 (C)
Relevant category of intervention	087
Website or link to relevant material	<a href="http://app4sea.interreg-npa.eu/">http://app4sea.interreg-npa.eu/</a> <a href="https://www.interreg-npa.eu/projects/funded-projects/project/199/">https://www.interreg-npa.eu/projects/funded-projects/project/199/</a>
Additional optional comments	–
Continuity in the next period	NPA 2021-2027 Programming Planning Group still in process.

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