Target 8 Joint SECAP plans

Final Version 30/04/ 2021

Deliverable Number 4.3

Output 2.1O2
Plans of adaptation measures put in place

ANNEX I - Joint Actions Repertoire
Part B

ANNEX I: Joint Actions Repertoire

[PP4] Municipality of Pescara

Strategy

1) Long-term vision (i.e. 2050 and beyond)

The project area is wider than the area that will be identified as the Greater Pescara, which is a metropolitan area with a resident population of approx. 200,000 people. It is candidate to be the urban area with more parks on the Italian adriatic coast. The construction of the "North Park" shared with Montesilvano, the Annunziana Regional Reserve at the south area and the others urban parks of involved municipalities will represent a definitive arrangement of more than 13.5 hectares of greenery as an urban natural park. The initiatives for the sustainability and environmental quality of the area and the river contract on the Pescara river, will represent others relevant issues for the project area in its general objective of reducing CO2 emissions from final energy consumption by 40% by 2030. In addition, the proposed actions are already part of the municipals plans for the "Smart city" related to the Italian PNRR and European Union policies.

2) Target(s) and commitment(s)

Mitigation					
CO₂ / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2016	absolute	
40%	%	2030	2016	absolute	
60%	%	2050	2016	absolute	

ⓘ Only if your local authority has set up a 2020 objective.
ⓘ Only if your local authority has set up a 2030 objective.
ⓘ Add as many rows as necessary.

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
Implementation of socio-economic adaptation actions to climate risks identified in the Scoping report.	100%	2030	2016	
Reduce the climate risks for the population living and the enterprises located in the urban areas at risk	20%	2023	2016	

ⓘ Only if your local authority is committed to adaptation. // Add as many rows as necessary.

3) Administrative structure

Type of administrative structure
☐ **Mono-sectoral** - (one officer of one sectoral department assigned within the municipal administration
☑ **Multi-sectoral** - several departments assigned within the municipal administration
☑ **Multi-level** - several departments assigned at different level(s) of governance (e.g. provincial/regional)

Comments [v] ⓘ Click on the [+] button on the left to expand or collapse.
The organizational structure for the governance of the SECAP should include: a Steering Committee that carries out the political function on the policy of the Plan; an Office that carries out the functions of coordination on the governance of the SECAP; a Working Group between the Administrative Sectors involved that carries out the functions of monitoring and sharing the governance of the SECAP towards the government initiatives on the individual actions identified. The SECAP, not being a mere sectoral plan but transversal between the governance policies of the Local Administration and between the Local Administrations, will be an organizational coordination structure within the Administration. The SECAP Coordinator will be costitued by adapting the organizational structures already existing inside each Municipality with a collaborative approach as a governance tool rather than a government one.

4) Staff capacity allocated

MONITORING

Type	Plan preparation			Plan implementation		
	Mitigation	Adaptation	(Estimated) full-time equivalent job(s)	Mitigation	Adaptation	(Estimated) full-time equivalent job(s)
Local authority	☐	☑	200	☐	☑	2000
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☑	0	☐	☑	50
External consultant	☐	☑	100	☐	☑	100
Other	☐	☑	60	☐	☑	60
Total			360	Total		2210

Comments [v] ⓘ Click on the [+] button on the left to expand or collapse.
The Plan preparation starts from the costitution of a Working Group organized in a "variable geometry" mode according to the issues to be dealt with and involving the administrative staff of the signatory Municipalities. The work of the inter-municipal and thematic working groups should be technically supported by the external experts contracted by Pescara Municipality. This support has to operate in the preparation phase of the joint SECAP and will operate both, in the drafting phase and in the future monitoring reports. Furthermore, within the inter-municipal working group, the Technical Committee should also be identified (made up of the Heads of the Municipal Environment Services (or their delegates) of each individual signatory Municipality), coordinated by the Head of the Joint Plan Office (which is the SECAP Coordinator). Finally, an Operational Agreement should be agreed by the signatory Municipalities to ensure information flows and the homogeneity of the process.

5) Stakeholder engagement

ⓘ Delete categories that are not applicable. / ⓘ Delete categories that are not applicable. / ⓘ Delete categories that are not applicable.

Type of stakeholders		Stakeholders engaged	Engagement level	Engagement method(s)	Engagement purpose
Local authority's staff	☑	Staff members, experts, and politicians of the Municipalities of the target area, which as: Francavilla al Mare, San Giovanni Teatino, Spoltore, Montesilvano and Pescara	High	Focus Group	Information ; Consultation; Advice; Co-production; Co-decision; Implementation
External stakeholders at local level	☑	Academia; Business & private sector; trade-union; citizens; NGO & civil society on environmentals issues; Regional environmental agency; Fire Provincial Command and the Regional Environmental, Agrifood and Forestry Command of Carabinieri	Low	Survey	Information
Stakeholders at other levels of governance	☐		[drop-down]		

ⓘ Select x for the ares that are applicable.

Comments [v] ⓘ Click on the [+] button on the left to expand or collapse.
Above, the list of the Authorities with environmental responsibility that have been involved with a survey during the project activities and, some of them, have also taking part to the two Focus Groups organized in December 2020 and February 2021.

6) Budget

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)	0	Total (€)	Mitigation (%)	0
	Adaptation (%)	100		Adaptation (%)	100

ⓘ % to be reported only for signatories also committed to adaptation

Budget period	
From:	2012
To:	2030

ⓘ depending on signatories' selected time horizon (2030/2050)

Financing sources		Share (in % of overall budget)
Local Authority's own resources	☑	10
External sources		
> Public	☑	80
> Private	☑	5
Not allocated to any sources		5

Comments [v] ⓘ Click on the [+] button on the left to expand or collapse.
The main financial resource to support the implementation and monitoring of the Plan will come from european, national and regional funds. The Italian PNRR 2021-2026 will be the most financial source, followed by the Abruzzo Regional Operational Programme - ERDF 2021-2027 - and funds from Italian Environmental Ministry. Local Authority funds will be need to cover staff costs, while private funds will be stimulated for adaptation actions that require active involvement of private sector. Not allocated financial resources will be identified during the implementation phase (ETC Programmes or others European Sectoral Programmes)

7) Monitoring process

The monitoring process will be carried out by involving the Abruzzo Regional Environmental Agency, the Accademia sector and an external evaluator consultant. The monitoring system will be based on the baseline regarding the latter monitoring data comes from the SEAPs of participating Municipalities.

Risk & Vulnerability Assessment (RVA)

Note that the online platform *MyCovenant* applies an IT solution through which tables in the RVA are generated automatically and prefilled depending on previously made selections. While content in this file and in *MyCovenant* is the same, the method of completion of the RVA will slightly differ.

ⓘ Underlined words are defined; definitions are visible upon clicking the respective cell. Definitions of climate hazards, sectors, adaptive capacity factors are provided in the reporting guidelines.

ⓘ To choose option(s) from a predefined list, copy and paste the relevant option(s). 'Single choice' indicates only one option is possible; 'multiple choice' indicates more than one options are possible.

Table 1) Climate hazards

Climate hazards	<< Current risk of hazard occurring >>		<< Future hazards >>		
	Probability of hazard	Impact of hazard	Expected change in hazard intensity	Expected change in hazard frequency	Timeframe(s)
ⓘ **Step 1)** Check the boxes for the climate hazards that are applicable to your local authority >>> **Step 2)** Fill in all green fields for the selected hazards by choosing (i.e. copying and pasting) option(s) in row# 14 >>> **Step 3)** Optionally, fill in information for the relevant sub-hazards (do not fill anything for sub-hazards that are not relevant)					
	Single choice: Low Moderate High Not known	Single choice: Low Moderate High Not known	Single choice: Increase Decrease No change Not known	Single choice: Increase Decrease No change Not known	Multiple choice: Short-term Mid-term Long-term Not known
☑ **Extreme heat**	Moderate	Low	Increase	Increase	Mid-term
☑ **Extreme cold**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☑ **Heavy precipitation**	High	Moderate	[Please choose]	[Please choose]	Mid-term
Heavy rainfall	High	Moderate	No change	Not known	Mid-term
Heavy snowfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Fog	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Hail	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☑ **Floods & sea level rise**	High	Moderate	[Please choose]	[Please choose]	Mid-term
Flash / surface flood	High	Moderate	No change	[Please choose]	Mid-term
River flood	High	Moderate	No change	[Please choose]	Mid-term
Coastal flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Groundwater flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Permanent inundation	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☑ **Droughts & water scarcity**	High	Moderate	[Please choose]	[Please choose]	[Please choose]
☐ **Storms**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Severe wind	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Tornado	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Cyclone (hurricane / typhoon)	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Tropical storm	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Extratropical storm	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Storm surge	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Lightning / thunderstorm	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☐ **Mass movement**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Landslide	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Avalanche	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Rockfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Subsidence	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☐ **Wild fires**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Forest fire	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Land fire	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☐ **Chemical change**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Saltwater intrusion	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Ocean acidification	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Atmospheric CO2 concentrations	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☐ **Bilogical hazards**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Water-borne disease	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Vector-borne disease	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Airborne disease	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Insect infestation	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☐ **Other** [please specify]	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]

Table 2) Vulnerable sectors

Climate hazards	Relevant vulnerable sector(s)	Current vulnerability level	Indicator
ⓘ **Step 4)** Mark again with a tick box the same hazards selected in Table 1 above *(in the online template, these hazards will be generated/displayed automatically).* Ignore the rest of the hazards. >>> **Step 5)** Choose (i.e. copy-paste) the relevant sectors from the list. When more than one sector is relevant, add separate rows for each sector and indicate the level of vulnerability against each sector identified.			
	Multiple choice: Buildings Transport Energy Water Waste Land use planning Agriculture & forestry Environment & biodiversity Health Civil protection & emergency Tourism Education ICT (Information & communication technologies) All listed sectors Not known	Single choice: Low Moderate High Not known	Choose an indicator from Annex 3, Table 1, along with a unit and numeric value, or write down your own indicator.
☑ **Extreme heat**	Health	Low	Number of deaths related to extreme weather event(s) (e.g. heat or cold waves)
☐ **Extreme cold**	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☑ **Heavy precipitation**	Buildings	Moderate	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑ **Floods & sea level rise**	Buildings	Moderate	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑ **Droughts & water scarcity**	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)

Climate Change Risks and Vulnerabilities ⊡ HOME

Storms	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Mass movement	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Wild fires	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Other [please specify]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]

ⓘ Specify your indicators in Annex 3, Table 1 (optional)

Table 3) Adaptive capacity

Impacted sector(s)	Relevant climate hazard(s)	Adaptive capacity factor(s)	Current adaptive capacity level	Indicator
ⓘ **Step 6)** Mark with a tick box the sectors which have been identified in Table 2 above, in respect of all climate hazards *(in the online template, the list of sectors will be generated/displayed automatically. The online template will also generate automatically the hazards relevant to each sector as in Table 2: there is no need to fill in this information below)*. >>>**Step 7)** Choose (i.e. copy-paste) the relevant adaptive capacity factors from the list. When more than one adaptive factor is relevant, add separate rows for each factor and indicate the level of adaptive capacity against each factor.				
	ⓘ Column not to be filled in	**Multiple choice:** Access to services Socio-economic Governmental & institutional Physical & environmental Knowledge & innovation	**Single choice:** Low Moderate High Not known	Choose an indicator from Annex 3, Table 1, along with a unit and numeric value, or write down your own indicator.
Buildings	[to be generated automatically in online template]	Physical & environmental	Moderate	% of (e.g. residential/commercial/agricultural/industrial/touristic)
Transport	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Energy	[to be generated automatically in online template]	Governmental & institutional	Moderate	% change in green & blue infrastructure/areas (e.g. through new urban planning regulation/policy)
Water	[to be generated automatically in online template]	Socio-economic	Moderate	% of public funds available to address a climate hazard and its impacts (e.g. fire, flood, heatwave, etc)
Waste	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Land use planning	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Agriculture & forestry	[to be generated automatically in online template]	Socio-economic	Low	% of population living in areas at risk (e.g. flood/drought/heat wave/ forest or land fire)
Environment & biodiversity	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Health	[to be generated automatically in online template]	Socio-economic	Moderate	% share of vulnerable population groups (e.g. elderly (65+)/young (25-) people, lonely pensioner households, low-...
Civil protection & emergency	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Tourism	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Education	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
ICT (Information & communication technologies)	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]

ⓘ Specify your indicators in Annex 3, Table 2 (optional)

Table 4) Vulnerable population groups

Climate hazards	Most vulnerable population group(s)
ⓘ **Step 8)** Mark again with a tick box the same hazards selected in Table 1 above *(in the online template, these hazards will be generated/displayed automatically)*. Ignore the rest of the hazards. >>> **Step 9)** Choose (i.e. copy-paste) the most vulnerable population groups from the list. When more than one group is relevant, add in the same cell and separate with a comma.	
	Multiple choice: Women and girls Children Youth Elderly Marginalized groups Persons with disabilities Persons with chronic diseases Low-income households Unemployed persons Persons living in sub-standard housing Migrants and displaced people Other All listed population groups Not known
Extreme heat	Elderly
Extreme cold	[Choose from the list above]
Heavy precipitation	All
Floods & sea level rise	All
Droughts & water scarcity	Marginalized groups
Storms	[Choose from the list above]
Mass movement	[Choose from the list above]
Wild fires	[Choose from the list above]
Other [please specify]	

Additional comments

1) Action plan(s) and other related documents

1) Action plan(s)
ⓘ Add as many rows as necessary. Minimum 1 action plan document

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Joint SECAP of the involved Municipalities of Pescara, Montesilvano, Spoltore and San Giovanni Teatino	List of joint actions selected by the involved cities/municipalities of Pescara, Montesilvano, Spoltore and San Giovanni Teatino. The 4 cities have been involved within the Focus Group of the participated Municipalities of the Project Target Area which were: Pescara, Montesilvano, Spoltore, San Giovanni Teatino, Chieti and Francavilla al Mare. The Municipalities of Chieti and Francavilla al Mare have not showed their interests to any of the 12 joint actions proposed.	on-going	Technical Committee	Standalone climate adaptation plan (and/or strategy)	Greater than municipality's boundary	Italian / English	☐

2) Other related documents
ⓘ Add as many rows as necessary.

Title	Short description	Date	Author(s)	Nature of the document	Scope / Boundary	Method & Sources	Language	Published?
Climate projections for the Abruzzo region	Provides climate projections for the Abruzzo region with the highest spatial resolution	[dd/mm/yy]	Copernicus Climate Service	Emission inventory	Greater than municipality's boundary		Italian	☐
Scoping Report	Defines the scientific, operational and methodological outlines through which the Strategic Environmental Assessment of the Plan will be elaborated	04/04/2021	Project external experts	Risk & vulnerability assessment	Equal to municipality's boundary		Italian	☐
Joint Thematic Focus Group Report	The Joint SECAP project decided to use the focus groups methodology by organizing thematic focus group workshops in each area target area, with the engagement of relevant stakeholders that would possibly activate synergies and financial resources for the Joint Actions of climate adaptation.	08/04/2021	Regional Energy Agency Kvarner	Other	Equal to municipality's boundary		English	☐
Analysis of organizational models for the adoption, management and monitoring of a joint SECAP	A comparative study that has unequivocally allowed to highlight that the identification of the best possible governance model is one of the first actions that the Administrations should undertake in the path that will lead them to join the Covenant of Mayors and adopt a SECAP	21/04/2021	Project external experts	Other	Greater than municipality's boundary		Italian/English	☐
State aid for natural disasters: an economic mitigation measure in the event of extreme weather phenomena	The analysis has made it possible to identify some hypotheses of public intervention, through State aid measures, among the actions that the Municipalities can prepare in the event of extreme and catastrophic climatic events even it is not an appropriate adaptation action for a SECAP	21/04/2021	Project external experts	Other	Greater than municipality's boundary		Italian/English	☐
VULNERABILITY AND RISK ASSESSMENT	The stakeholders involved to collect information and data for this assessment were the representatives of the municipal technical offices, the Abruzzo Region Hydrographic Office, the Abruzzo Agency for the Protection of the Environment, citizens' associations, local trade associations, local action group, nonprofit organizations	05/08/2020	Project external experts	Risk & vulnerability assessment	Greater than municipality's boundary		Italian/English	☐

Comments [v]   ⓘ Click on the [+/-] button on the left to expand or collapse.

List of actions
ⓘ Please specify the total number of (mitigation and adaptation) actions planned per sector. For mitigation actions, estimate their impacts in your plan's time horizon (2020, 2030 and/or other).

3) Mitigation actions
ⓘ Only if your local authority is committed to mitigation.

Mitigation sectors	Number of actions included in the plan	Action plan implementation status				Estimated impacts in [2020, 2030 and/or other longer-term time horizon] in relation to:		BEI (option 1)
		Completed (%)	On-going (%)	Postponed (%)	Not-started (%)	Energy savings MWh/a	Renewable energy production MWh/a	CO₂ reduction t CO₂/a
Municipal buildings, equipment/facilities	0							
Tertiary (non municipal) buildings, equipment/facilities	0							
Residential buildings	0							
Industry	0							
Transport	0							
Waste	0							
Local Electricity Production	0							
Local Heat/Cold Production	0							
Others	0							
TOTAL	0,00					0	0	0

4) Adaptation actions
ⓘ Only if your local authority is committed to adaptation.

Adaptation sectors	Number of actions included in the plan	Action plan implementation status			
		Completed (%)	On-going (%)	Postponed (%)	Not-started (%)
Buildings					
Transport	3	0%	100	0	0
Energy	3	0%	100	0	0
Water	2	0%	0	0	100
Waste					
Land Use Planning	1	0%	0	0	100
Agriculture & Forestry					
Environment & Biodiversity	1	0	0	0	100
Health					
Civil Protection & Emergency					
Tourism					
Education					
ICT (Information & communication technologies)	2	0%	50	0	50
Other					
TOTAL	12				

Key actions

ⓘ Copy as many "Key action" tabs as necessary (minimun 3 mitigation actions and 3 adaptation actions)

1) Type of action
☐ Mitigation
☑ Adaptation
☐ Energy poverty   ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action   Joint Action - Digitization of administrative procedures in public offices

3) Origin of the action   National

4) Responsible body   Innovation and demographic sectors of the involved Municipalities: Pescara - Montesilvano - Spoltore - S.G. Teatino

5) Short description
Number of Municipalities involved: 4; Total number of Municipalities of the target area: 6. Joint action to reduce the mobility of people within the involved cities to obtain documents or assistance from public offices. The action finds correspondence in the "smart city" policies (for i.e., Municipality of Pescara, DUP 2021-2023 - Strategic Line 4, Mission 1, Strategic Action 4.2) for which the involved cities face the challenge of globalization in terms of increasing competitiveness, attractiveness and inclusiveness, placing technology at the service of the needs of citizens and the Administrations themself. Correlated with the action is the Administrations' goals of realizing the City Times Plans to allow a better articulation of the times of work, care, relationship and leisure that allows self-governance of personal life time and with less impact on the environment and less exposure of people to climate threats such as extreme heat waves.
43 characters left

6) Implementation timeframe
Start: 2021
End: 2023

7) Implementation status   Ongoing

8) Stakeholders involved   National government and/or agency(ies)   ⓘ Insert additional rows as needed

Additional comments
For the Municipality of Pescara, the action is strenghen correlated with six sub-actions of the Strategic Action 4.2 "Digitalization and administrative efficiency"

9) Total implementation costs   4.200.000,00 € €
Source of funding: EU funds and programmes
Investment costs: 4.000.000,00 € €
Non-investment costs: 200.000,00 € €

A. Mitigation
ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector   [Drop-down]

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]

ⓘ To be filled in only for the concerned sector

11) Estimated impacts
Energy savings: MWh/a
Renewable energy production: MWh/a
CO₂ reduction: t CO2/a

12) Vulnerable population group(s) targeted   [Drop-down]

13) Financial savings   €
14) Life expectancy of the action   years
15) Return on Investment   %
16) Jobs created   full-time equivalent
17) Other figures   [Please specify]   [numerial value]   [Unit]

B. Adaptation
ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed   Extreme heat
19) Sector(s)   ICT (Information & communication technologies)

20) Outcome(s) reached
Description: Digitization of administrative procedures and innovation of management processes aimed at raising the quality of online services for citizens, professionals and businesses.
828 characters left

Related indicator: Number of deaths related to extreme weather event(s): heat waves   [numerial value]   (per year / over a certain period)

21) Vulnerable population group(s) targeted   Persons with chronic diseases
22) Avoided cost   10.000.000,00 € €
23) Life expectancy of the action   3   years
24) Return on Investment   14   %
25) Jobs created   100   full-time equivalent
26) Other figures   [Please specify]   [numerial value]   [Unit]

C. Energy poverty
ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted   [Drop-down]
28) Outcome(s) reached
Description: 1000 characters left
Related indicator: [Please specify]   [numerial value]   [Unit]

Further information
30) Weblink   www.
31) Video link   www.
32) Picture   [upload]

Key actions

ⓘ Copy as many "Key action" tabs as necessary (minimun 3 mitigation actions and 3 adaptation actions)

1)	Type of action	☐ Mitigation	
		☑ Adaptation	
		☐ Energy poverty	ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2)	Title of the action	Joint Action - Energy efficiency of public buildings
3)	Origin of the action	National
4)	Responsible body	Public works sectors of the involved Municipalities: Pescara - Montesilvano - Spoltore - S.G. Teatino

5) Short description

Number of Municipalities involved: 4; Total number of Municipalities of the target area: 6. Joint action to reduce the energy consuming by the public offices (thermal insulation of walls, windows, roofs). Energy production and management must be widespread and articulated, using all the most innovative systems linked to smart lands and widespread networks, promoting cogeneration and distributed generation actions, facilitating investments in renewable energy and promoting actions for the rational use of energy, focusing on energy saving at all levels, from public to private buildings. In particular, the action will be aimed at increasing energy efficiency in buildings, reducing consumption and the negative impact of heating and air conditioning. The action takes base on SEAPs of the involved cities.   189 characters left

6)	Implementation timeframe	Start:	2012
		End:	2023
7)	Implementation status	Ongoing	
8)	Stakeholders involved	National government and/or agency(ies)	ⓘ Insert additional rows as needed

Additional comments

The action is part of the broader urban policies that intend to: promote and support the development of new businesses, employment and new productive vocations for eco-sustainable activities that recycle materials; rationalize electricity consumption starting from public lighting and promote energy efficiency in buildings to reduce consumption and the negative impact of heating and air conditioning; reduce the amount of waste, increasing separate collection and economically enhancing the recycling chain development of advanced energy consumption monitoring and control systems (energy management systems); encourage the use of low energy impact public transport systems.

9)	Total implementation costs	15.000.000,00 € €
	Source of funding:	EU funds and programmes
	Investment costs:	12.500.000,00 € €
	Non-investment costs:	2.500.000,00 € €

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector   [Drop-down]   ⓘ To be filled in only for the concerned sector

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:		MWh/a
CO$_2$ reduction:		t CO2/a

12)	Vulnerable population group(s) targeted	[Drop-down]
13)	Financial savings	€
14)	Life expectancy of the action	years
15)	Return on Investment	%
16)	Jobs created	full-time equivalent
17)	Other figures	[Please specify]	[numerical value]	[Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

| 18) | Climate hazard(s) addressed | Extreme heat |
| 19) | Sector(s) | Energy |

20) Outcome(s) reached

| Description: | Improved energy management in owned and municipal buildings in order to reduce excessive loads due to needs related to heating or cooling the rooms of the building itself. | | 828 characters left |
| Related indicator: | Number of minute with public service interruptions for energy reasons | [numerical value] | No. |

21)	Vulnerable population group(s) targeted	Persons with chronic diseases
22)	Avoided cost	30.000.000,00 € €
23)	Life expectancy of the action	50 years
24)	Return on Investment	1 %
25)	Jobs created	100 full-time equivalent
26)	Other figures	[Please specify]	[numerical value]	[Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

| 27) | Vulnerable population group(s) targeted | [Drop-down] |

28) Outcome(s) reached

| Description: | | 1000 characters left |
| Related indicator: | [Please specify] | [numerical value] | [Unit] |

Further information

30)	Weblink	www.
31)	Video link	www.
32)	Picture	[upload]

Key Actions

Key actions

ⓘ Copy as many "Key action" tabs as necessary (minimun 3 mitigation actions and 3 adaptation actions)

1)	Type of action	☐ Mitigation
		☑ Adaptation
		☐ Energy poverty ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action — Joint Action - Installation of electrical stations for recharging vehicles and other public and private ecological means of transport

3) Origin of the action — Local authority

4) Responsible body — Mobility sectors of the involved Municipalities: Pescara - Montesilvano - Spoltore - S.G. Teatino

5) Short description —
Number of Municipalities involved: 4; Total number of Municipalities of the target area: 6. Joint action to reduce to increase the temperature and pollution by fine dust. The action is related to the actions of involved cities SEAPs, since it completes the creation of exchange parking lots with electric "car-saring" and bike-sharing, contributes to the growth of Limited Traffic areas with access to only efficient vehicles, to promote sustainable mobility. The joint action proposed is strictly related with the construction of eco-mobility points equipped with bicycle parking, electric bike rental, bicycle charging points and electric buses that are planned to be realized by the involved municipalities.
290 characters left

6) Implementation timeframe — Start: 2021 — End: 2023

7) Implementation status — Ongoing

8) Stakeholders involved — Business & private sector   ⓘ Insert additional rows as needed

Additional comments
The action is synergistic with the key joint action n. 4 and with the single action n. 5 of the SECAP Pescara. At the same time and limited to Pescara Municipality, the action is also recognized in the DUP 2021-2023 of the Municipality of Pescara, Strategic Line 5 Mobility, action 5.1 Mobility planning, sub-action 5.1.1. which plans to implement: the SUTRA PROJECT - sustainable transport in the Adriatic coastal areas and neighboring areas; the spread of SHARING MOBILITY; the electric car charging service in the municipal area; and experimental electric micro-mobility in the urban environment.

9) Total implementation costs — 1.500.000,00 € €
   Source of funding: National funds and programmes
   Investment costs: 1.300.000,00 € €
   Non-investment costs: 200.000,00 € €

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector — [Drop-down]

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	ⓘ To be filled in only for the concerned sector
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11) Estimated impacts
   Energy savings: _____ MWh/a
   Renewable energy production: _____ MWh/a
   CO_2 reduction: _____ t CO2/a

12) Vulnerable population group(s) targeted — [Drop-down]

13) Financial savings — _____ €
14) Life expectancy of the action — _____ years
15) Return on Investment — _____ %
16) Jobs created — _____ full-time equivalent
17) Other figures — [Please specify] | [numerical value] | [Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed — Droughts and water scarcity
19) Sector(s) — Transport
20) Outcome(s) reached
   Description: Having facilitated the movement of people by electric vehicles   938 characters left
   Related indicator: kwh of electricity taken from the charging stations installed per year | [numerical value] | No.

21) Vulnerable population group(s) targeted — All
22) Avoided cost — 10.000.000,00 € €
23) Life expectancy of the action — 5 years
24) Return on Investment — 3 %
25) Jobs created — 100 full-time equivalent
26) Other figures — [Please specify] | [numerical value] | [Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted — [Drop-down]
28) Outcome(s) reached
   Description: _____   1000 characters left
   Related indicator: [Please specify] | [numerical value] | [Unit]

Further information

30) Weblink — www.
31) Video link — www.
32) Picture — [upload]

Key Actions

Key actions

ⓘ Copy as many "Key action" tabs as necessary (minimun 3 mitigation actions and 3 adaptation actions)

1)	Type of action	☐ Mitigation
		☑ Adaptation
		☐ Energy poverty ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2)	Title of the action	Joint Action - Promote sustainable mobility through services, equipment and infrastructures that encourage the use of ecological vehicles with zero impact even in sharing mode
3)	Origin of the action	Mixed
4)	Responsible body	Environmental quality sectors of the involved Municipalities: Pescara - Montesilvano - Spoltore - S.G. Teatino
5)	Short description	Number of Municipalities involved: 4; Total number of Municipalities of the target area: 6. Joint action to reduce the pollution by fine dust (promote the use of bicycles, e-scooters and electric vehicles) and at the same time, move commuter traffic away from the historic center, divert part of the local traffic onto alternative means, invest in public transport so that it becomes more comfortable and attractive to the population. The action is in synergy with the following actions of the cities SEAPs, such as: the creation of exchange parking lots with electric "car-saring" and bike-sharing, the renewal of the municipal vehicle fleet and the creation of cycle paths. *325 characters left*

6)	Implementation timeframe	Start:	2012
		End:	2023

7)	Implementation status	Ongoing
8)	Stakeholders involved	NGOs & civil society ⓘ Insert additional rows as needed

Additional comments

The action intends to enhance the long Pescara river as an access road between the neighborough cities towards the historic center of Pescara, intersecting the river contract project and the Pescara river urban project, so as to complete and enhance the cycle paths as a continuation of the green corridor of the long river and creating connections of environmental value between the neighboring territories of the Great Pescara (Joint initiative between Pescara-Montesilvano-Spoltore). It also intersects the "intelligent" public transport route in a protected site (Pescara central station - University section) and intends to encourage the use of public transport with specific actions and projects (eg project for navigability of the Pescara river from the tourist port to the airport (S.G.Teatino territory), from integrate with the River Park project and Purchase of ecological buses), also through the use of innovative systems for parking management (Aer Park & Ride with monitoring of CO2 emissions).

9)	Total implementation costs	20.000.000,00 €
	Source of funding:	EU funds and programmes
	Investment costs:	19.000.000,00 €
	Non-investment costs:	1.000.000,00 €

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10)	Sector	[Drop-down]							ⓘ To be filled in only for the concerned sector
		Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	
	Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	
	Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11)	Estimated impacts		
		Energy savings:	MWh/a
		Renewable energy production:	MWh/a
		CO₂ reduction:	t CO2/a

12)	Vulnerable population group(s) targeted	[Drop-down]
13)	Financial savings	€
14)	Life expectancy of the action	years
15)	Return on Investment	%
16)	Jobs created	full-time equivalent
17)	Other figures	[Please specify] [numerical value] [Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18)	Climate hazard(s) addressed	Droughts and water scarcity
19)	Sector(s)	Transport

20)	Outcome(s) reached	Description:	Having facilitated the movement of people, lightened city traffic and especially the pollution of fine *493 characters left*
		Related indicator:	Number of air quality warnings issued [numerical value] No.

21)	Vulnerable population group(s) targeted	All
22)	Avoided cost	30.000.000,00 €
23)	Life expectancy of the action	20 years
24)	Return on Investment	3,33 %
25)	Jobs created	100 full-time equivalent
26)	Other figures	[Please specify] [numerical value] [Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27)	Vulnerable population group(s) targeted	[Drop-down]

28)	Outcome(s) reached	Description:	*1000 characters left*
		Related indicator:	[Please specify] [numerical value] [Unit]

Further information

30)	Weblink	www.
31)	Video link	www.
32)	Picture	[upload]

Key Actions

Key actions

ⓘ Copy as many "Key action" tabs as necessary (minimun 3 mitigation actions and 3 adaptation actions)

1)	Type of action		
		☐	Mitigation
		☑	Adaptation
		☐	Energy poverty ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2)	Title of the action	Joint Action - Provide citizens (individuals or groups in association) with the care and maintenance of public areas: parks, gardens, flower beds, roundabouts, etc.
3)	Origin of the action	Local authority
4)	Responsible body	Quality sectors of public spaces of the involved Municipalities: Pescara - Montesilvano - Spoltore - S.G. Teatino
5)	Short description	Number of Municipalities involved: 4. Total number of Municipalities of the target area: 6. Joint action to reduce the rise in temperatures and the production of oxygen in the urban environment. The action intends to enhance the good management of urban green spaces owned or of municipal competence, through the "adoption conventions" with active citizenship, with the aim of: involving and involving citizens and / or economic operators in the management, maintenance and improvement of the municipals areas; stimulate and increase the sense of belonging of citizens towards the common good; recover public green spaces, restoring their decor and restoring the usefulness and efficiency of the asset itself; obtain the restoration and conservation of green areas, without heavy management burdens for the involved Municipalities. 169 characters left

6)	Implementation timeframe	Start:	2022
		End:	2030

7)	Implementation status	Not started
8)	Stakeholders involved	Citizens ⓘ Insert additional rows as needed

Additional comments

By public areas and / or spaces we mean all those areas intended for flower beds, gardens, parks, green areas pertaining to school buildings, roundabouts and traffic dividers, flower boxes and urban spaces such as squares, stairways, fountains, etc., with the exception of all those public places with high institutional, cultural, historical, landscape value. The possibility of adopting urban public green areas, without prejudice to the right of pre-emption for citizens residing in the areas subject to requests for adoption (paragraph 4, art.4 of Law 10/2013), is addressed to: Individual citizens or spontaneous groups, Condominiums; Commercial businesses, companies, economic operators in any legal form; Voluntary Associations, Sports Associations, Clubs, Foundations; Credit, Insurance or similar institutions; School Institutions; Parishes, Religious Institutions; Other Public Bodies in various capacities, with properties falling within the municipal area.

9)	Total implementation costs	50.000,00 €	€
	Source of funding:	Local authority's own resources	
	Investment costs:	10.000,00 €	€
	Non-investment costs:	40.000,00 €	€

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10)	Sector	[Drop-down]							ⓘ To be filled in only for the concerned sector
		Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	
	Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	
	Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11)	Estimated impacts		
	Energy savings:		MWh/a
	Renewable energy production:		MWh/a
	CO_2 reduction:		t CO2/a

12)	Vulnerable population group(s) targeted	[Drop-down]	
13)	Financial savings		€
14)	Life expectancy of the action		years
15)	Return on Investment		%
16)	Jobs created		full-time equivalent
17)	Other figures	[Please specify]	[numerical value]	[Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18)	Climate hazard(s) addressed	Extreme heat
19)	Sector(s)	Environment & biodiversity

20)	Outcome(s) reached	Description:	Improvement of the aesthetics of the city through green infrastructures managed directly by citizens, capable of reducing fine dust, increasing the surfaces shaded by vegetation and improving the quality of the breathable area 774 characters left
		Related indicator:	% of urban green areas affected by soil quality degradation	[numerical value]	%

21)	Vulnerable population group(s) targeted	Migrants and displaced people	
22)	Avoided cost	150.000,00 €	€
23)	Life expectancy of the action	8	years
24)	Return on Investment	4,17	%
25)	Jobs created	20	full-time equivalent
26)	Other figures	[Please specify]	[numerical value]	[Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27)	Vulnerable population group(s) targeted	[Drop-down]	
28)	Outcome(s) reached	Description:	1000 characters left
		Related indicator:	[Please specify]	[numerical value]	[Unit]

Further information

30)	Weblink	www.
31)	Video link	www.
32)	Picture	[upload]

[PP5] SDEWES CENTRE - International Centre for Sustainable Development of Energy, Water and Environment Systems

Key actions

ⓘ Copy as many "Key action" tabs as necessary (minimum 3 mitigation actions and 3 adaptation actions)

1) Type of action
- ☐ Mitigation
- ☑ Adaptation
- ☐ Energy poverty   ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action — JOINT ACTION: Construction of green canopies that protect from the sun (and precipitation) at public transport stops

3) Origin of the action — Mixed

4) Responsible body — Competent Administrative Departments of the City / Municipality in the observed area; Libertas d.o.o. (public transportation company)

5) Short description — All the Municipalities implement together a joint action and there is a total of 5 municipalities in the area. All the municipalities join this action because all are covered by the same public transport operator and have the same conditions regarding heat waves. Heatwaves are one of the manifestations of climate change that has a significant effect on many aspects of everyday life, and perhaps most pronounced on passengers in public transport, and can pose a serious threat to human health. Consequently, this action aims to ensure the availability of (green) canopies that provide greater protection from direct sun exposure at public transport stops. When choosing the type of canopies and building materials should consider, and where possible give preference, the use of green materials and technologies.
187 characters left

6) Implementation timeframe — Start: 2021 End: 2030

7) Implementation status — Not started

8) Stakeholders involved — Sub-national governments(s) and/or agency(ies) / Business & private sector   ⓘ Insert additional rows as needed
Additional comments
The stakeholders have involved thanks to the 3 focus group meetings managed by the Joint Action Coordinator for Climate and Energy. The role of stakeholders was to contribute to the design of the action. The stakeholders also provided their feedback on the action design via email exchange.

9) Total implementation costs — Unknown €
Source of funding: Local authority's own resources
Investment costs: Unknown €
Non-investment costs: Unknown €

A. Mitigation
ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

B. Adaptation
ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed — Extreme heat

19) Sector(s) — Transport

20) Outcome(s) reached — Description: The action will reduce the heat waves exposure and direct sunlight exposure for the citizens using public transport. Also, it will locally reduce temperature and increase the attractiveness and comfort level of the public transport.
768 characters left
Related indicator: Number of green canopies build | 0 | /

21) Vulnerable population group(s) targeted — Elderly

22) Avoided cost — €

23) Life expectancy of the action — 30 years

24) Return on Investment — %

25) Jobs created — full-time equivalent

26) Other figures — [Please specify] | [numerical value] | [Unit]

C. Energy poverty
ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

Further information

30) Weblink — https://joint-secap.unicam.it/

31) Video link — www.

32) Picture — [upload]

Key Actions

Key actions

ⓘ Copy as many "Key action" tabs as necessary (minimum 3 mitigation actions and 3 adaptation actions)

1) Type of action
- ☐ Mitigation
- ☑ Adaptation
- ☐ Energy poverty   ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: JOINT ACTION: Rehabilitation of water losses in the water supply system and expansion of the water supply and sewerage system in the City of Dubrovnik

3) Origin of the action: Regional

4) Responsible body: Vodovod Dubrovnik d.o.o., Competent Administrative Departments of the City of Dubrovnik

5) Short description: Four out of five municipalities in the area are participating in this action. The City of Dubrovnik, municipalities of Zupa Dubrovacka, Ston and Dubrovacko primorje participate in this action since it's done by Vodovod Dubrovnik which provides water supply on their territories. Losses in the water supply network amount to 38.29% (the EU average is 34% and the Republic of Croatia 40%). Reducing water losses in the water supply system not only saves water but also the energy needed for its pumping, treatment, and distribution. Currently, the City of Dubrovnik is starting the implementation of the project "Public water supply system, drainage and wastewater treatment plant - Dubrovnik Agglomeration". The value of the project is HRK 881,208,682.00, and it is financed by a grant from the European Union. The project includes the construction of a new wastewater treatment plant UPOV Petka, and the construction of the entire missing sewerage and water supply network in the area.

15 characters left

6) Implementation timeframe
Start: 2019
End: 2025

7) Implementation status: Ongoing

8) Stakeholders involved
- National government and/or agency(ies)
- Sub-national governments(s) and/or agency(ies)
- Business & private sector
- Academia

ⓘ Insert additional rows as needed

Additional comments
The stakeholders have involved thanks to the 3 focus group meetings managed by the Joint Action Coordinator for Climate and Energy. The role of stakeholders was to contribute to the design of the action. The stakeholders also provided their feedback on the action design via email exchange.

9) Total implementation costs: 117.000.000,00 €
Source of funding: EU funds and programmes
Investment costs: 117000000 €
Non-investment costs: €

A. Mitigation
ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

B. Adaptation
ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed: Droughts and water scarcity

19) Sector(s): Water

20) Outcome(s) reached
Description: Reduction of water losses and wastewater treatment plant are outcomes of the actions.
915 characters left
Related indicator: water losses | 38 | %

21) Vulnerable population group(s) targeted: All

22) Avoided cost: €

23) Life expectancy of the action: 50 years

24) Return on Investment: %

25) Jobs created: full-time equivalent

26) Other figures: [Please specify] [numerical value] [Unit]

C. Energy poverty
ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

Further information
30) Weblink: https://joint-secap.unicam.it/
31) Video link: www.
32) Picture: [upload]

Key actions

ⓘ Copy as many "Key action" tabs as necessary (minimun 3 mitigation actions and 3 adaptation actions)

1) Type of action
☐ Mitigation
☑ Adaptation
☐ Energy poverty   ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action | JOINT ACTION: Afforestation of neglected, degraded, and burned areas

3) Origin of the action | Other

4) Responsible body | Competent Administrative Departments of the City of Dubrovnik and 4 municipalities

5) Short description | All the municipalities join this action because deforestation, bush and forest fires are a serious problem in this area. The action has a goal to increase the area covered with forest and reduce the degradation of the land. Afforestation of neglected and degraded forest areas with autochthonous tree species, to prevent the spread of invasive plant species (low vegetation and shrubs) subject to fire and fire spread. This measure is especially applicable to previously burned, neglected and uncultivated areas covered with maquis. The measure should be implemented in a planned manner in accordance with the prepared project documentation that defines the type, quantity and spacing between seedlings. The initiator of the measure should be professional institutions (Croatian Forests - Dubrovnik Branch Office), and certain activities can be carried out by the citizens themselves (civil society associations).
87 characters left

6) Implementation timeframe
Start: 2021
End: 2030

7) Implementation status | Not started

8) Stakeholders involved
National government and/or agency(ies)   ⓘ Insert additional rows as needed
NGOs & civil society
Citizens

Additional comments
The stakeholders have involved thanks to the 3 focus group meetings managed by the Joint Action Coordinator for Climate and Energy. The role of stakeholders was to contribute to the design of the action. The stakeholders also provided their feedback on the action design via email exchange.

9) Total implementation costs | 200.000,00 | €
Source of funding: | Other
Investment costs: | 200000 | €
Non-investment costs: | | €

A. Mitigation
ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

B. Adaptation
ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed | Wild fires

19) Sector(s) | Agriculture & forestry

20) Outcome(s) reached
Description: | The action outcomes are the reduction of wild forest and increased area under forests in all municipalities. | 892 characters left
Related indicator: | Area with newly planted trees | 0 | ha

21) Vulnerable population group(s) targeted | All

22) Avoided cost | | €

23) Life expectancy of the action | | years

24) Return on Investment | | %

25) Jobs created | | full-time equivalent

26) Other figures | [Please specify] | [numerical value] | [Unit]

C. Energy poverty
ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

Further information

30) Weblink | https://joint-secap.unicam.it/

31) Video link | www.

32) Picture | [upload]

[PP6] Primorje - Gorski Kotar County

Action Plan

⌂ HOME

1) Action plan(s) and other related documents

1) Action plan(s)

ⓘ Add as many rows as necessary. Minimum 1 action plan document.

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Joint Sustainable Energy and Climate Action Plan	...nd climate action plan that is carried out by a group of neigh...	[dd/mm/yy]		Integrated climate plan (addressing both mitigation and...	Equal to municipality's b...	Croatian	☐
		[dd/mm/yy]					☐
		[dd/mm/yy]					

2) Other related documents

ⓘ Add as many rows as necessary.

Title	Short description	Date	Author(s)	Nature of the document	Scope / Boundary	Method & Sources	Language	Published?
		[dd/mm/yy]						☐
		[dd/mm/yy]						☐
		[dd/mm/yy]						☐

Comments [v]   ⓘ Click on the [+/-] button on the left to expand or collapse.

List of actions

ⓘ Please specify the total number of (mitigation and adaptation) actions planned per sector. For mitigation actions, estimate their impacts in your plan's time horizon (2020, 2030 and/or other).

3) Mitigation actions

ⓘ Only if your local authority is committed to mitigation.

MONITORING

Mitigation sectors	Number of actions included in the plan	Action plan implementation status				Energy savings MWh/a	Renewable energy production MWh/a	CO₂ reduction t CO₂/a
		Completed (%)	On-going (%)	Postponed (%)	Not-started (%)			
Municipal buildings, equipment/facilities	3					2873,6		695,31
Tertiary (non municipal) buildings, equipment/facilities	3					51819,71		12134,01
Residential buildings	3					143248,72		24177,21
Industry	0					0		0
Transport	3					91012,91		23629,92
Waste	0					0		0
Local Electricity Production	0					0	23925	5508,45
Local Heat/Cold Production	0					0		0
Others	2					3476,18		813,43
TOTAL	13					292431,12	23925	67048,33

Estimated impacts in (2020, 2030 and/or other longer-term time horizon)
In relation to: BAU (option 3)

4) Adaptation actions

ⓘ Only if your local authority is committed to adaptation.

MONITORING

Adaptation sectors	Number of actions included in the plan	Action plan implementation status			
		Completed (%)	On-going (%)	Postponed (%)	Not-started (%)
Buildings	2				
Transport	0				
Energy	0				
Water	3				
Waste	1				
Land Use Planning	2				
Agriculture & Forestry	1				
Environment & Biodiversity	0				
Health	0				
Civil Protection & Emergency	0				
Tourism	1				
Education	0				
ICT (Information & communication technologies)	0				
Other	1				
TOTAL	11				

European Regional Development Fund

www.italy-croatia.eu/jointsecap

Actions

ⓘ Copy as many "action" tabs as necessary **(minimun 3 mitigation actions and 3 adaptation actions)**
ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1)	Type of action	☐	Mitigation
		☑	Adaptation
		☐	Energy poverty	ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action | JOINT ACTION: Improvement in water and utility infrastructure in the territory of the Rijeka Agglomeration

3) Origin of the action | Local authority

4) Responsible body | Administrative departments of the Municipality of Matulji, City of Kastav, the Municipality of Viskovo and the Municipality of Cavle

5) Short description | Number of Municipalities/Cities involved: 4, Total number of Municipalities/Cities of the target area: 5
The Municipalities/Cities join this action because of shortcomings in their sewerage and water supply system. The action has the goal of construction of a new and reconstruction of the existing sewerage system and expansion and reconstruction of the existing water supply system, as well as construction of wastewater treatment plants with the aim of ensuring a higher standard services, better quality of life and increasing environmental standards. The objectives of the measure are to increase the connection to the public sewerage system, ensure adequate wastewater treatment, increase the efficiency and reliability of the
43 characters left

6) Implementation timeframe | Start: 2020 | End: 2028

7) Implementation status | Ongoing

8) Stakeholders involved | Business & private sector | ⓘ For multiple choice, insert additional rows as needed

Additional comments | [blank]

9) Total implementation costs | 234.875.067,00 €
Source of funding: Local authority's own resources / EU funds and programmes
Investment costs: 234.875.067,00 €
Non-investment costs: 0 €

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector | [Drop-down]

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	ⓘ To be filled in only for the concerned sector
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11) Estimated impacts
Energy savings: [ ] MWh/a
Renewable energy production: [ ] MWh/a
CO_2 reduction: [ ] t CO2/a

12) Vulnerable population group(s) targeted | [Drop-down] | ⓘ For multiple choice, insert additional rows as needed

13) Financial savings | [ ] €
14) Life expectancy of the action | [ ] years
15) Return on investment | [ ] %
16) Jobs created | [ ] full-time equivalent
17) Other figures | [Please specify] | [numerial value] | [Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed | Droughts and water scarcity / Heavy precipitation | ⓘ For multiple choice, insert additional rows as needed

19) Sector(s) | Water | ⓘ For multiple choice, insert additional rows as needed

20) Outcome(s) reached
Description: Expected outcome of the action is enhancement of water supply reliability. | 925 characters left
Related indicator: Number of days in water supply interruptions | n/a | No.

21) Vulnerable population group(s) targeted | All | ⓘ For multiple choice, insert additional rows as needed

22) Avoided cost | n/a €
23) Life expectancy of the action | 60 years
24) Return on investment | n/a %
25) Jobs created | n/a full-time equivalent
26) Other figures | [Please specify] | [numerial value] | [Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted | [Drop-down] | ⓘ For multiple choice, insert additional rows as needed

28) Outcome(s) reached
Description: [ ] | 1000 characters left
Related indicator: [Please specify] | [numerial value] | [Unit]

Further information

30) Weblink | www.
31) Video link | www.
32) Picture | [upload]

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**
ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1) Type of action
☐ Mitigation
☑ Adaptation
☐ Energy poverty   ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action   JOINT ACTION: Integration of the concept of green infrastructure into spatial and strategic planning processes

3) Origin of the action   Local authority

4) Responsible body   Administrative departments of the City of Opatija, the Municipality of Matulji, the City of Kastav, the Municipality of Viskovo and the Municipality of C

5) Short description
Number of Municipalities/Cities involved: 5, Total number of Municipalities/Cities of the target area: 5
All the Municipalities/Cities join this action because it is necessary to integrate the concept of green infrastructure into spatial planning processes and policies and other strategic documents. It is recommended that special attention is paid to green infrastructure as an element in the organization of space when amending documents such as spatial and urban plans. The aim of the measure is to strategically plan and systematically develop green infrastructure in the observed area, especially at critical points where green infrastructure is poorly developed, primarily to reduce the effect of existing and prevent the emergence of   99 characters left

6) Implementation timeframe   Start: 2021   End: 2050

7) Implementation status   Not started

8) Stakeholders involved
Business & private sector
Trade unions
ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs   213.333,00 €
Source of funding: Local authority's own resources
Regional funds and programmes
EU funds and programmes
Investment costs: 0 €
Non-investment costs: 213.333,00 €

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector   [Drop-down]

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	ⓘ To be filled in only for the concerned sector
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11) Estimated impacts
Energy savings: MWh/a
Renewable energy production: MWh/a
CO$_2$ reduction: t CO2/a

12) Vulnerable population group(s) targeted   [Drop-down]   ⓘ For multiple choice, insert additional rows as needed

13) Financial savings   €
14) Life expectancy of the action   years
15) Return on investment   %
16) Jobs created   full-time equivalent
17) Other figures   [Please specify]   [numerical value]   [Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed   Extreme heat   ⓘ For multiple choice, insert additional rows as needed
19) Sector(s)   Land use planning   ⓘ For multiple choice, insert additional rows as needed

20) Outcome(s) reached
Description: Expected outcome of integration of green infrastructure into spatial and strategic planning municipal processes is improvement of citizens' health conditions and overall well-being.   819 characters left
Related indicator: Number of people injured/evacuated/relocated due to extr   n/a   No. per year

21) Vulnerable population group(s) targeted   All   ⓘ For multiple choice, insert additional rows as needed
22) Avoided cost   n/a €
23) Life expectancy of the action   100 years
24) Return on investment   n/a %
25) Jobs created   n/a full-time equivalent
26) Other figures   [Please specify]   [numerical value]   [Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted   [Drop-down]   ⓘ For multiple choice, insert additional rows as needed

28) Outcome(s) reached
Description: 1000 characters left
Related indicator: [Please specify]   [numerical value]   [Unit]

Further information

30) Weblink   www.
31) Video link   www.
32) Picture   [upload]

Actions

ⓘ Copy as many "action" tabs as necessary **(minimun 3 mitigation actions and 3 adaptation actions)**
ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1)	Type of action	☐ Mitigation
		☑ Adaptation
		☐ Energy poverty ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2)	Title of the action	JOINT ACTION: Designing and implementing programs to inform and educate the public about the benefits of climate-resistant buildings
3)	Origin of the action	Local authority
4)	Responsible body	ministrative departments of the City of Opatija, the Municipality of Matulji, the City of Kastav, the Municipality of Viskovo and the Municipality of Cav

5) Short description

Number of Municipalities/Cities involved: 5, Total number of Municipalities/Cities of the target area: 5
All the Municipalities/Cities join this action with the aim of conducting information and education of the population for the climate-resistant buildings concept application (new and existing buildings) on the possibilities of energy savings and energy production for own needs and for commercial purposes.
The importance of formal and non-formal education on energy, energy efficiency, renewable sources and sustainable development is emphasized in a number of strategic documents of the Republic of Croatia, and is also recognized because it   109 characters left

6)	Implementation timeframe	Start:	2021
		End:	2050

7)	Implementation status	Not started

8) Stakeholders involved

Academia
Education sector
Trade unions
National government and/or agency(ies)

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9)	Total implementation costs	133.333,00	€
	Source of funding:	Local authority's own resources	
		EU funds and programmes	
	Investment costs:	0,00	€
	Non-investment costs:	133.333,00	€

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector   [Drop-down]

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	ⓘ To be filled in only for the concerned sector
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:		MWh/a
CO₂ reduction:		t CO2/a

12)	Vulnerable population group(s) targeted	[Drop-down]	ⓘ For multiple choice, insert additional rows as needed
13)	Financial savings		€
14)	Life expectancy of the action		years
15)	Return on investment		%
16)	Jobs created		full-time equivalent
17)	Other figures	[Please specify]	[numerical value] [Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed

Extreme heat
Extreme cold

ⓘ For multiple choice, insert additional rows as needed

19)	Sector(s)	Buildings	ⓘ For multiple choice, insert additional rows as needed.

20) Outcome(s) reached

Description:	Expected outcome of educational activities is adaptation of citizens to extreme weather conditions which will result in improvement of health and reduction of energy consumption as well. 513 characters left
Related indicator:	Number of people injured/evacuated/relocated due to extrem n/a No. per year

21)	Vulnerable population group(s) targeted	All	ⓘ For multiple choice, insert additional rows as needed
22)	Avoided cost	n/a	€
23)	Life expectancy of the action	100	years
24)	Return on investment	n/a	%
25)	Jobs created	n/a	full-time equivalent
26)	Other figures	[Please specify]	[numerical value] [Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27)	Vulnerable population group(s) targeted	[Drop-down]	ⓘ For multiple choice, insert additional rows as needed

28) Outcome(s) reached

Description:		1000 characters left
Related indicator:	[Please specify]	[numerical value] [Unit]

Further information

30)	Weblink	www.
31)	Video link	www.
32)	Picture	[upload]

Actions

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**

ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1)	Type of action	☑		Mitigation
		☐		Adaptation
		☐		Energy poverty	ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2)	Title of the action	JOINT ACTION: Energy renovation of family houses
3)	Origin of the action	National
4)	Responsible body	The City of Opatija, the Municipality of Matulji, the City of Kastav, the Municipality of Viskovo, the Municipality of Cavle

5) Short description

Number of Municipalities involved: 5, Total number of Municipalities of the target area: 5
This measure primarily applies to single-family homes that have large energy losses caused by poor thermal insulation and inefficient heating systems.
All the Municipalities/Cities join this action with the aim of implementing the following activities:
- renovation of house envelopes - increasing the thermal protection of the envelope which adds, restores or replaces parts of the building such as windows, doors, transparent facade elements, thermal insulation of floors, ceilings, walls and roofs and waterproofing

37 characters left

| 6) | Implementation timeframe | Start | 2021 |
| | | End | 2050 |

| 7) | Implementation status | Not started |

8)	Stakeholders involved	Citizens
		National government and/or agency(ies)
		Sub-national governments(s) and/or agency(ies)

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9)	Total implementation costs	468.857.333,00	€
	Source of funding:	Local authority's own resources
		National funds and programmes
		EU funds and programmes
		Other
	Investment costs:	468.857.333,00	€
	Non-investment costs:	0,00	€

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+ / -] buttons on the left to expand or collapse

10) Sector

		Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	ⓘ To be filled in only for the concerned sector
	Residential buildings								
Tool / Area of intervention:		Integrated action (all above)	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	
Policy instrument:		Building standards	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11) Estimated impacts

	Energy savings:	150130,65	MWh/a
	Renewable energy production:	-	MWh/a
	CO_2 reduction:	24926,49	t CO_2/a

12)	Vulnerable population group(s) targeted		ⓘ For multiple choice, insert additional rows as needed
13)	Financial savings		€
14)	Life expectancy of the action		years
15)	Return on investment		%
16)	Jobs created		full-time equivalent
17)	Other figures	[Please specify]	[numerical value]	[Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+ / -] buttons on the left to expand or collapse

| 18) | Climate hazard(s) addressed | [Drop-down] | ⓘ For multiple choice, insert additional rows as needed |
| 19) | Sector(s) | [Drop-down] | ⓘ For multiple choice, insert additional rows as needed |

20) Outcome(s) reached

| | Description: | | 1000 characters left |
| | Related indicator: | | [numerical value] | [Unit] |

21)	Vulnerable population group(s) targeted	[Drop-down]	ⓘ For multiple choice, insert additional rows as needed
22)	Avoided cost		€
23)	Life expectancy of the action		years
24)	Return on Investment		%
25)	Jobs created		full-time equivalent
26)	Other figures	[Please specify]	[numerical value]	[Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+ / -] buttons on the left to expand or collapse

| 27) | Vulnerable population group(s) targeted | [Drop-down] | ⓘ For multiple choice, insert additional rows as needed |

28) Outcome(s) reached

| | Description: | | 1000 characters left |
| | Related indicator: | [Please specify] | [numerical value] | [Unit] |

Further information

30)	Weblink	www.
31)	Video link	www.
32)	Picture	[upload]

Actions

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**

ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1) Type of action — ☑ Mitigation / ☐ Adaptation / ☐ Energy poverty — ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action — JOINT ACTION: Modernization of public lighting in the observed area

3) Origin of the action — Local authority

4) Responsible body — administrative departments of the City of Opatija, the Municipality of Matulji, the City of Kastav, the Municipality of Viskovo and the Municipality of Cavi

5) Short description —
Number of Municipalities/Cities involved: 5, Total number of Municipalities/Cities of the target area: 5
All the Municipalities/Cities join this action because even though public lighting in the observed area does not have a large share in total energy consumption it represents a large financial cost. By saving in this sector, self government units will be able to open investments in other measures. This measure includes:
- installation of energy efficient and environmentally friendly public lighting and replacement of obsolete luminaires with luminaires that are environmentally and economically compliant with the applicable regulatory framework
(42 characters left)

6) Implementation timeframe — Start: 2021 / End: 2050

7) Implementation status — Not started

8) Stakeholders involved — Sub-national governments(s) and/or agency(ies) — ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs — 6.812.267,00 €
Source of funding: Local authority's own resources / EU funds and programmes
Investment costs: 6.812.267,00 €
Non-investment costs: 0 €

A. Mitigation
ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector — Municipal buildings, equipment/facilities — ⓘ To be filled in only for the concerned sector

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	Energy efficiency	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	Energy management	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts —
Energy savings: 3476,18 MWh/a
Renewable energy production: - MWh/a
CO₂ reduction: 813,43 t CO2/a

12) Vulnerable population group(s) targeted — [Drop-down] — ⓘ For multiple choice, insert additional rows as needed

13) Financial savings — €

14) Life expectancy of the action — years

15) Return on investment — %

16) Jobs created — full-time equivalent

17) Other figures — [Please specify] [numerical value] [Unit]

B. Adaptation
ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed — [Drop-down] — ⓘ For multiple choice, insert additional rows as needed

19) Sector(s) — [Drop-down] — ⓘ For multiple choice, insert additional rows as needed

20) Outcome(s) reached —
Description: (1000 characters left)
Related indicator: [numerical value] [Unit]

21) Vulnerable population group(s) targeted — [Drop-down] — ⓘ For multiple choice, insert additional rows as needed

22) Avoided cost — €

23) Life expectancy of the action — years

24) Return on investment — %

25) Jobs created — full-time equivalent

26) Other figures — [Please specify] [numerical value] [Unit]

C. Energy poverty
ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted — [Drop-down] — ⓘ For multiple choice, insert additional rows as needed

28) Outcome(s) reached —
Description: (1000 characters left)
Related indicator: [Please specify] [numerical value] [Unit]

Further information

30) Weblink — www.

31) Video link — www.

32) Picture — [upload]

Actions

⊞ HOME

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**

ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1) Type of action
- ☑ Mitigation
- ☐ Adaptation
- ☐ Energy poverty ⓘ Only in combination with "Mitigation" and/or "Adaptation" actions

2) Title of the action — JOINT ACTION: Development of transport infrastructure in self-government units

3) Origin of the action — Local authority

4) Responsible body — Administrative departments of the City of Opatija, the Municipality of Matulji, the City of Kastav, the Municipality of Viskovo and the Municipality of Cavle

5) Short description —
Number of Municipalities/Cities involved: 5, Total number of Municipalities/Cities of the target area: 5
All the Municipalities/Cities join this action with the aim to facilitate the acceptance of alternative fuels and modes of transport by users/consumers through strenghtening the pedestrian and bicycle infrastructure and the infrastructure for the distribution of alternative fuels.
The activities covered by this measure are:
- providing adequate pedestrian and bicycle infrastructure that will enable the safety of pedestrians and cyclists
- introduction of smaller busses within and between observed self-goverment units
24 characters left

6) Implementation timeframe
Start: 2021
End: 2050

7) Implementation status — Not started

8) Stakeholders involved — National government and/or agency(ies) ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs — 68.496.667,00 €
Source of funding: Local authority's own resources
Regional funds and programmes
National funds and programmes
Investment costs: 68.496.667,00 €
Non-investment costs: 0,00 €

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector — Transport

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	
Tool / Area of intervention:	[drop-down]	[drop-down]	Road network optimisation	[drop-down]	[drop-down]	[drop-down]	[drop-down]	ⓘ To be filled in only for the concerned sector
Policy instrument:	[drop-down]	[drop-down]	Transport / mobility planning regulation	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11) Estimated impacts
Energy savings: 34346,44 MWh/a
Renewable energy production: - MWh/a
CO₂ reduction: 9092,59 t CO2/a

12) Vulnerable population group(s) targeted — [Drop-down] ⓘ For multiple choice, insert additional rows as needed

13) Financial savings — €

14) Life expectancy of the action — years

15) Return on Investment — %

16) Jobs created — full-time equivalent

17) Other figures — [Please specify] [numerial value] [Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed — [Drop-down] ⓘ For multiple choice, insert additional rows as needed

19) Sector(s) — [Drop-down] ⓘ For multiple choice, insert additional rows as needed

20) Outcome(s) reached
Description:
Related indicator: [numerial value] [Unit] *1000 characters left*

21) Vulnerable population group(s) targeted — [Drop-down] ⓘ For multiple choice, insert additional rows as needed

22) Avoided cost — €

23) Life expectancy of the action — years

24) Return on Investment — %

25) Jobs created — full-time equivalent

26) Other figures — [Please specify] [numerial value] [Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted — [Drop-down] ⓘ For multiple choice, insert additional rows as needed

28) Outcome(s) reached
Description: *1000 characters left*
Related indicator: [Please specify] [numerial value] [Unit]

Further information

30) Weblink — www.

31) Video link — www.

32) Picture — [upload]

[PP7] Split - Dalmatia County

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**

ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1)	Type of action	☐ Mitigation
		☑ Adaptation
		☐ Energy poverty ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action — Joint Action - Incentive system implementation for medical staff

3) Origin of the action — Local authority

4) Responsible body — Island municipalities (Supetar, Sutivan, Milna, Bol, Selca, Pučišća, Nerežišća, Postira)

5) Short description —
Number of Municipalities involved: 8   Total number of Municipalities of the target area: 8
All the municipalities join this action because health protection is of most importance for the entire island and the municipalities rely on each other. The action has the goal to improve the health protection of the entire island's population and tourists by supporting the employment of additional medical staff, especially doctors of medicine.

555 characters left

6) Implementation timeframe
Start: 2021
End: 2030

7) Implementation status — Ongoing

8) Stakeholders involved — Sub-national governments(s) and/or agency(ies)   ⓘ For multiple choice, insert additional rows as needed

Additional comments
The stakeholders were involved thanks to a specifically designed focus group meeting organized and managed by the "Joint Action Coordinator for Climate and Energy" and the external consultant. The role of stakeholders was to present the status of each relevant sector, strengths and weaknesses, issues encountered so far and further challenges as well as their views on possible solutions to improve the situation. Climate change adaptation measures proposed were evaluated according to predefined criteria and discussed till full agreement.

9) Total implementation costs — unknown €
Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: unknown €

A. Mitigation
ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

B. Adaptation
ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed — Extreme heat   ⓘ For multiple choice, insert additional rows as needed

19) Sector(s) — Health   ⓘ For multiple choice, insert additional rows as needed

20) Outcome(s) reached
Description: This action has the following outcome: decreased disease and mortality rate. This is expected to be reached thanks to Action's joint implementation.
862 characters left
Related indicator: Number of people injured/evacuated/relocated and number of death

21) Vulnerable population group(s) targeted — Elderly   ⓘ For multiple choice, insert additional rows as needed
Persons with chronic diseases

22) Avoided cost — €

23) Life expectancy of the action — 40 years

24) Return on Investment — %

25) Jobs created — full-time equivalent

26) Other figures — [Please specify] [numerical value] [Unit]

C. Energy poverty
ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted — [Drop-down]   ⓘ For multiple choice, insert additional rows as needed

28) Outcome(s) reached
Description: 1000 characters left
Related indicator: [Please specify] [numerial value] [Unit]

Further information

30) Weblink — www.

31) Video link — www.

32) Picture — [upload]

Actions

Copy as many "action" tabs as necessary **(minimun 3 mitigation actions and 3 adaptation actions)**

For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1) **Type of action**
- ☐ Mitigation
- ☑ Adaptation
- ☐ Energy poverty   Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) **Title of the action** — Joint Action - Encouraging the development of agritourism

3) **Origin of the action** — Mixed

4) **Responsible body** — Municipalities of island of Brač and Tourist Boards

5) **Short description** — Number of Municipalities involved: 8   Total number of Municipalities of the target area: 8
All the municipalities join this action in order to coordinate agritourism development for the island as a whole since it represents an important economic activitiy for all municipalities. The action has the goal to increase and improve touristic offer in the agritourism domain.
622 characters left

6) **Implementation timeframe**
- Start: 2021
- End: 2030

7) **Implementation status** — Ongoing

8) **Stakeholders involved**
- Sub-national governments(s) and/or agency(ies)
- Business & private sector

   For multiple choice, insert additional rows as needed

Additional comments

The stakeholders were involved thanks to a specifically designed focus group meeting organized and managed by the "Joint Action Coordinator for Climate and Energy" and the external consultant. The role of stakeholders was to present the status of each relevant sector, strengths and weaknesses, issues encountered so far and further challenges as well as their views on possible solutions to improve the situation. Climate change adaptation measures proposed were evaluated according to predefined criteria and discussed till full agreement.

9) **Total implementation costs** — unknown €
- Source of funding: Local authority's own resources
- National funds and programmes
- Investment costs: €
- Non-investment costs: unknown €

A. Mitigation
Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

B. Adaptation
Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) **Climate hazard(s) addressed**
- Extreme heat
- Heavy precipitation

   For multiple choice, insert additional rows as needed

19) **Sector(s)** — Tourism   For multiple choice, insert additional rows as needed

20) **Outcome(s) reached**
- Description: This action has the following outcome: increased diversity of agritouristic products/services, increased number of tourists outside the high seasons as well. The latter is expected to be reached thanks to Action's joint implementation. *765 characters left*
- Related indicator: Change in tourist flows   %

21) **Vulnerable population group(s) targeted** — All   For multiple choice, insert additional rows as needed

22) **Avoided cost** — €

23) **Life expectancy of the action** — 10 years

24) **Return on investment** — %

25) **Jobs created** — full-time equivalent

26) **Other figures** — [Please specify]   [numerial value]   [Unit]

C. Energy poverty
Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) **Vulnerable population group(s) targeted** — [Drop-down]   For multiple choice, insert additional rows as needed

28) **Outcome(s) reached**
- Description: *1000 characters left*
- Related indicator: [Please specify]   [numerial value]   [Unit]

Further information

30) **Weblink** — www.

31) **Video link** — www.

32) **Picture** — [upload]

Actions

🖼 HOME

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**
ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1) Type of action
- ☐ Mitigation
- ☑ Adaptation
- ☐ Energy poverty   ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action — Joint Action - Reconstruction of the water supply network

3) Origin of the action — Local authority

4) Responsible body — Water supply company (Vodovod Brač Ltd)

5) Short description —
Number of Municipalities involved: 8   Total number of Municipalities of the target area: 8
All the municipalities join this action because relevant water supply infrastructure is interconnected and spans over the whole territory irrespective of the administrative borders. The action has the goal to improve the water supply to island population throughout the whole year by reducing water losses in the network.
560 characters left

6) Implementation timeframe — Start: 2021   End: 2030

7) Implementation status — Ongoing

8) Stakeholders involved —
- National government and/or agency(ies)
- Sub-national governments(s) and/or agency(ies)
ⓘ For multiple choice, insert additional rows as needed

8) Stakeholders involved —
- Business & private sector
ⓘ For multiple choice, insert additional rows as needed

Additional comments —
The stakeholders were involved thanks to a specifically designed focus group meeting organized and managed by the "Joint Action Coordinator for Climate and Energy" and the external consultant. The role of stakeholders was to present the status of each relevant sector, strengths and weaknesses, issues encountered so far and further challenges as well as their views on possible solutions to improve the situation. Climate change adaptation measures proposed were evaluated according to predefined criteria and discussed till full agreement.

9) Total implementation costs — unknown €
Source of funding: EU funds and programmes / Local authority's own resources / Other
Investment costs: unknown €
Non-investment costs: unknown €

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+ / -] buttons on the left to expand or collapse

10) Sector — [Drop-down]

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other	
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	ⓘ To be filled in only for the concerned sector
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	

11) Estimated impacts —
Energy savings: MWh/a
Renewable energy production: MWh/a
CO_2 reduction: t CO_2/a

12) Vulnerable population group(s) targeted — [Drop-down]   ⓘ For multiple choice, insert additional rows as needed

13) Financial savings — €

14) Life expectancy of the action — years

15) Return on Investment — %

16) Jobs created — full-time equivalent

17) Other figures — [Please specify] [numerial value] [Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+ / -] buttons on the left to expand or collapse

18) Climate hazard(s) addressed — Droughts and water scarcity   ⓘ For multiple choice, insert additional rows as needed

19) Sector(s) — Water   ⓘ For multiple choice, insert additional rows as needed

20) Outcome(s) reached —
Description: This action has the following outcomes: increased water supply rate on the island with lower number of public service interruptions through decreasing losses in the water supply network. These are expected to be reached thanks to Action's joint implementation.
740 characters left
Related indicator: losses in the water supply network

21) Vulnerable population group(s) targeted — All   ⓘ For multiple choice, insert additional rows as needed

22) Avoided cost — €

23) Life expectancy of the action — 50 years

24) Return on Investment — %

25) Jobs created — full-time equivalent

26) Other figures — [Please specify] [numerial value] [Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+ / -] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted — [Drop-down]   ⓘ For multiple choice, insert additional rows as needed

28) Outcome(s) reached —
Description: 1000 character left
Related indicator: [Please specify] [numerial value] [Unit]

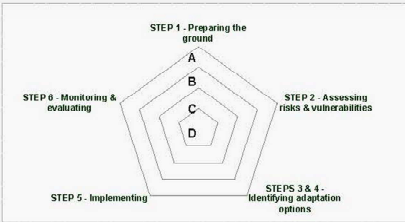### Further information

30) Web link — www.

31) Video link — www.

32) Picture — [upload]

CoM Template Energy carriers		Natural gas	Liquid gas		Heating Oil	Diesel	Gasoline	Lignite	Coal			Other fossil fuels		Plant oil		Biofuel (1)		Biofuel (2)		Other biomass (1)	Other biomass (2)	Other biomass (3)		Other biomass (4)	Other biomass (5)	Solar thermal	Geothermal
IPCC Energy carriers		Natural gas	Liquified Petroleum Gases	Natural Gas Liquids	Gas/Diesel oil	Gas/Diesel oil	Motor gasoline	Lignite	Anthracite	Other Bituminous Coal	Sub-Bituminous Coal	Municipal Wastes (non-biomass fraction)	Peat	Other Liquid Biofuels		Biogasoline		Biodiesels		Biogas	Municipal Wastes (biomass fraction)	Wood		Wood Waste	Other Primary solid biomass		
Sustainability criteria*														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO₂/MWh	0,202	0,227	0,231	0,267	0,267	0,249	0,364	0,354	0,341	0,346	0,330	0,382	0,000	0,287	0,000	0,255	0,000	0,255	0,197	0,000	0,000	0,403	0,403	0,360	-	-
	t CO₂ eq./MWh [b]	0,202	0,227	0,232	0,268	0,268 [c]	0,250 [c]	0,365	0,356	0,342	0,348	0,337	0,383	0,001	0,302	0,001	0,256	0,001	0,256	0,197	0,007	0,007	0,410	0,410	0,367	-	-
LCA	t CO₂/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,271	0,181	0,386	0,171		0,194		0,147		n.a.	0,107	0,006	0,409	0,193	n.a.	n.a.	n.a. [h]
	t CO₂ eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,575	0,591	0,580	0,583	0,174	0,592	0,182 [d]		0,208 [e]		0,156 [f]		n.a.	0,108	0,013	0,415 [g]	0,184	n.a.	n.a.	n.a. [h]

*) if sustainability criteria during production are fulfilled
*) if sustainability criteria during production are not fulfilled

a. IPCC emission factor should be reported zero if the biofuels/biomass meet sustainability criteria; fossil fuel emission factors to be used if biofuels are unsustainable.(s) sustainable, (ns) not sustainable
b. Taking into consideration also the CH4 and the N2O emissions from combustion in stationary sources
c. If choosing to report in CO2eq, please consider that the emission factors for the transport sector are with up to 3% higher than the values provided here, which are characteristic for stationary sources
d. Conservative figure regarding pure plant oil from palm oil. Note that this figure represents the worst ethanol plant oil pathway and does not necessarily represent a typical pathway. This figure does not include the impacts of direct and indirect land use change. Had these been considered, the default value could be as high as 9 t CO2-eq/MWh, in the case of conversion of forest land in the tropics.
e. Conservative figure regarding ethanol from wheat. Note that this figure represents the worst ethanol pathway and does not necessarily represent a typical pathway. This figure does not include the impacts of direct and indirect land use change. Had these been considered, the default value could be as high as 9 t CO2-eq/MWh, in the case of conversion of forest land in the tropics.
f. Conservative figure regarding biodiesel from palm oil. Note that this figure represents the worst biodiesel pathway and does not necessarily represent a typical pathway. This figure does not include the impacts of direct and indirect land use change. Had these been considered, the default value could be as high as 9 t CO2-eq/MWh, in the case of conversion of forest land in the tropics.
g. The figure reflects the production and local/regional transport of wood, representative for Germany, assuming: spruce log with bark; reforested managed forest; production mix entry to saw mill, at plant; and 44% water content. Carbon dioxide incorporation is considered. The local authority using this emission factor is recommended to check that it is representative for the local circumstances and to develop emission factor if the circumstances are different. There are only one set of reference values and another LCA case study could be performed to define a fork spanning the range of variation. This will be done for the next update of this guidebook.
h. Data not available, but emissions are assumed to be low (however the emissions from electricity consumption of heat pumps is to be estimated using the emission factors for electricity). Local authorities using these technologies are encouraged to try to obtain such data.

ANNEX 2 - Adaptation Scoreboard

⌂ HOME

ⓘ Please complete the following self-assessment checklist, using the A-B-C-D scaling system (presented below) in column F (compulsory). Identify your next steps/areas of possible improvement through comments entered in column I (optional). The average status for every step is then visualised through the (automatically computed) spider graph below a well as in the "Synthesis Report" tab.

Status Scale	Status	Indicative Completion Level
D	Not started or getting started	0-25 %
C	Moving forward	25-50 %
B	Forging ahead	50-75 %
A	Taking the lead	75-100 %

STEP 1 - Preparing the ground
A
B
C
D
STEP 6 - Monitoring & evaluating
STEP 2 - Assessing risks & vulnerabilities
STEP 5 - Implementing
STEPS 3 & 4 - Identifying adaptation options

Adaptation cycle steps	Actions	Self check of the Status	Comments
STEP 1 - Preparing the ground for adaptation ⟳ STRATEGY	Adaptation commitments defined/integrated into the local climate policy Human, technical and financial resources identified Adaptation team (officer) appointed within the municipal administration and clear responsibilities assigned Horizontal (i.e. accross sectoral departments) coordination mechanisms in place Vertical (i.e. across governance levels) coordination mechanisms in place Consultative and participatory mechanisms set up, fostering the multi-stakeholder engagement in the adaptation process Continuous communication process in place (for the engagement of the different target audiences)		500 chars left
STEP 2 - Assessing risks & vulnerabilities to climate change ⟳ RISKS & VULNERABILITIES	Mappping of the possible methods & data sources for carrying out a Risk & Vulnerability Assessment conducted Assessment(s) of climate risks & vulnerabilities undertaken Possible sectors of action identified and prioritised Available knowledge periodically reviewed and new findings integrated		500 chars left
STEPS 3 & 4 - Identifying, assessing and selecting adaptation options ⟳ ACTIONS	Full portfolio of adaptation options compiled, documented and assessed Possibilities of mainstreaming adaptation in existing policies and plans assessed, possible synergies and conflicts (e.g. with mitigation actions) identified Adaptation Actions developed and adopted (as part of the SECAP and/or other planning documents)		500 chars left
STEP 5 - Implementing ⟳ ACTIONS	Implementation framework set, with clear milestones Adaptation actions implemented and mainstreamed (where relevent) as defined in the adopted SECAP and/or other planning documents Coordinated action between mitigation and adaptation set		500 chars left
STEP 6 - Monitoring and evaluating ⟳ INDICATORS	Monitoring framework in place for adaptation actions Appropriate M&E indicators identified Progress regularly monitored and reported to the relevant decision-makers Adaptation strategy and/or Action Plan updated, revised and readjusted according to the findings of the M&E procedure		500 chars left

Summary table:

The score obtained for each step is summarised in the table below (based on the information entered by the user in the above table > A: 4 points, B: 3 points, C: 2 points, D: 1 point). The spider graph at the top is automatically generated, making the results more visual.

Adaptation Steps	Your Average Score
STEP 1 - Preparing the ground	0
STEP 2 - Assessing risks & vulnerabilities	0
STEPS 3 & 4 - Identifying adaptation options	0
STEP 5 - Implementing	0
STEP 6 - Monitoring & evaluating	0

ⓘ Below is a non-exhaustive list of indicators which may be used to complement the risks and vulnerability assessment. This is optional; the indicators below are illustrative examples and serve as a source of inspiration only.

ⓘ Please select any indicators that your local authority is using to measure progress and complete the list with your own indicators -simply add/hide the rows according to your needs.

Table 1 Vulnerable sectors

ID#	Sector	Indicator	Measurement unit	Numerical value
1,1	Buildings	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events	(per year / over a certain period)	
1,2	Transport, Energy, Water, Waste, ICT	Number or % of transport/energy/water/waste/ICT infrastructure damaged by extreme weather conditions/events	(per year / over a certain period)	
1,3	Land Use Planning	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls and/or Landslides, Forest/Land Fire)	%	
1,4	Transport, Energy, Water, Waste, Civil Protection & Emergency	Number of days with public service interruptions (e.g. energy/water supply, health/civil protection/emergency services, waste)	No.	
1,5	Transport, Energy, Water, Waste, Civil Protection & Emergency	Average length (in hours) of the public service interruptions (e.g. energy/water supply, public transport traffic, health/civil protection/emergency services)	hours	
1,6	Health	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)	(per year / over a certain period)	
1,7	Health	Number of deaths related to extreme weather event(s) (e.g. heat or cold waves)	(per year / over a certain period)	
1,8	Civil Protection & Emergency	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events	min.	
1,9	Health	Number of water quality warnings issued	%	
1.10	Health	Number of air quality warnings issued	No.	
1.11	Environment & Biodiversity	% of areas affected by soil erosion / soil quality degradation	%	
1.12	Environment & Biodiversity	% of habitat losses from extreme weather event(s)	%	
1.13	Environment & Biodiversity	% change in number of native species	%	
1.14	Environment & Biodiversity	% of native (animal/plant) species affected by diseases related to extreme weather conditions/events	%	
1.15	Agriculture & Forestry	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)	%	
1.16	Agriculture & Forestry	% of livestock losses from extreme weather conditions	%	
1.17	Agriculture & Forestry	% change in crop yield / evolution of the annual grassland productivity	%	
1.18	Agriculture & Forestry	% of livestock losses from pests/pathogens	%	
1.19	Agriculture & Forestry	% of timber losses from pests/pathogens	%	
1.20	Agriculture & Forestry	% change in Forest composition	%	
1.21	Agriculture & Forestry	% change in water abstraction	%	
1.22	Tourism	% change in tourist flows / tourism activities	%	
1.23	Other	€ annual direct economic losses (e.g. in commercial/agricultural/industrial/touristic sectors) due to extreme weather event(s)	€/year	
1.24	Other	€ annual amount of compensation received (e.g. insurance)	€/year	
	ⓘ Add as many rows as necessary.			

Table 2 Adaptive capacity

ID#	Adaptive capcity factor	Indicator	Measurement unit	Numerical value
2.1	Socio-economic	% of public funds available to address a climate hazard and its impacts (e.g. fire, flood, heatwave, etc)	%	
2.2	Socio-economic	% share of vulnerable population groups (e.g. elderly (65+)/young (25-) people, lonely pensioner households, low-income/unemployed households, migrants and displaced people) - compared to national average in year X in country X	%	
2.3	Socio-economic	Number of households educated in house energy/water/waste management	No.	
2.4	Socio-economic	Population density (compared to national/regional average in year X in country/region X)	People per km²	
2.5	Socio-economic	% of population living in areas at risk (e.g. flood/drought/heat wave/ forest or land fire)	%	
2.6	Governmental & institutional	% change in green & blue infrastructure/areas (e.g. through new urban planning regulation/policy)	%	
2.7	Physical & environmental	Length of transport network (e.g. road/rail) located in areas at risk (e.g. flood/drought/heat wave/ forest or land fire)	Km	
2.8	Physical & environmental	Average time needed to reach a health facility	Hours	
2.9	Physical & environmental	% of areas non-accessible for emergency responses (e.g. firefighting services)	%	
2.10	Physical & environmental	% of (e.g. residential/commercial/agricultural/industrial/touristic) areas at risk (e.g. flood/drought/heat wave/ forest or land fire)	%	
2.11	Knowledge & technology	Hours needed to inform population of a risk via an early warning system	hours	
	ⓘ Add as many rows as necessary			

→ Relevant resources

EUROSTAT Urban Audit – Database
EEA's Urban Adaptation Map Viewer – Tool
EEA's Map book urban vulnerability to climate change – Factsheets (July 2016)
Urban Vulnerability Indicators – Technical Report (ETC-CCA & ETC-SIA, 2012)
"World Council on City Data" – Open Data Portal
ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life (ISO May 2014) - Note: only informative sessions of standards are publicly available.
Planning for Adaptation to Climate Change – Guidance Document (ACT Life project, 2013)

[PP8] Municipality of Vela Luka

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**

ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1)   Type of action

- ☐ Mitigation
- ☑ Adaptation
- ☐ Energy poverty   ⓘ Only in combination with "Mitigation" and/or "Adaptation" actions

2)   Title of the action   Reconstruction of the water supply network

3)   Origin of the action   Local authority

4)   Responsible body   Local water supply companies

5)   Short description

> Number of Municipalities involved: 5   Total number of Municipalities of the target area: 5
> All the municipalities join this action because relevant water supply infrastructure is interconnected and spans over the whole territory irrespective of the administrative borders. The action has the goal to improve the water supply to island population throughout the whole year by reducing water losses in the network.

580 characters left

6)   Implementation timeframe   Start: 2021   End: 2030

7)   Implementation status   Not started

8)   Stakeholders involved   Sub-national governments(s) and/or agency(ies)   ⓘ For multiple choice, insert additional rows as needed

8)   Stakeholders involved   NGOs & civil society

Additional comments

> The stakeholders were involved thanks to a specifically designed focus group meeting organized and managed by the 'Joint Action Coordinator for Climate and Energy" and the external consultant. The role of stakeholders was to present the status of each relevant sector, strengths and weaknesses, issues encountered so far and further challenges as well as their views on possible solutions to improve the situation. Climate change adaptation measures proposed were evaluated according to predefined criteria and discussed till full agreement.

9)   Total implementation costs   over 130 000 €

Source of funding: EU funds and programmes / Local authority's own resources / Other

Investment costs: over 130 000 €

Non-investment costs: €

A. Mitigation

ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10)   Sector   [Drop-down]   ⓘ To be filled in only for the concerned sector

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11)   Estimated impacts

- Energy savings: MWh/a
- Renewable energy production: MWh/a
- CO_2 reduction: t CO_2/a

12)   Vulnerable population group(s) targeted   [Drop-down]   ⓘ For multiple choice, insert additional rows as needed

13)   Financial savings   €

14)   Life expectancy of the action   years

15)   Return on Investment   %

16)   Jobs created   full-time equivalent

17)   Other figures   [Please specify]   [numerical value]   [Unit]

B. Adaptation

ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18)   Climate hazard(s) addressed   Droughts and water scarcity   ⓘ For multiple choice, insert additional rows as needed

19)   Sector(s)   Water   ⓘ For multiple choice, insert additional rows as needed

20)   Outcome(s) reached

Description:
> This action has the following outcomes: increased water supply rate on the island ie decreased water losses in the network to at least the percentage of losses on national level. There are expected to be reached thanks to Action's joint implementation.

749 characters left

Related indicator: decreased losses in the water supply network to reach at le

21)   Vulnerable population group(s) targeted   All   ⓘ For multiple choice, insert additional rows as needed

22)   Avoided cost   €

23)   Life expectancy of the action   years

24)   Return on Investment   %

25)   Jobs created   full-time equivalent

26)   Other figures   [Please specify]   [numerical value]   [Unit]

C. Energy poverty

ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27)   Vulnerable population group(s) targeted   [Drop-down]   ⓘ For multiple choice, insert additional rows as needed

28)   Outcome(s) reached

Description: 1000 characters left

Related indicator: [Please specify]   [numerical value]   [Unit]

Further information

30)   Weblink   www.

31)   Video link   www.

32)   Picture   [upload]

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**
ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1) Type of action
- ☐ Mitigation
- ☑ Adaptation
- ☑ Energy poverty   ⓘ Only in combination with "Mitigation" and/or "Adaptation" actions

2) Title of the action — Education of decision makers on integrated spatial planning

3) Origin of the action — Mixed

4) Responsible body — Municipalities

5) Short description —
Number of Municipalities involved: 5   Total number of Municipalities of the target area: 5
All the municipalities join this action in order to increase the effectiveness of the measures itself, serving as knowledge sharing platform as well as a platform for dialogue when developing projects of common interest (e.g. infrastructure, irrigation, water supply). The action has the goal to increase the capacities of decision makers with regards to integrative spatial planing as the first step for sustainable development of an area.
463 characters left

6) Implementation timeframe — Start: 2021   End: 2022

7) Implementation status — Not started

8) Stakeholders involved — Sub-national governments(s) and/or agency(ies)   ⓘ For multiple choice, insert additional rows as needed

Additional comments
The stakeholders were involved thanks to a specifically designed focus group meeting organized and managed by the "Joint Action Coordinator for Climate and Energy" and the external consultant. The role of stakeholders was to present the status of each relevant sector, strengths and weaknesses, issues encountered so far and further challenges as well as their views on possible solutions to improve the situation. Climate change adaptation measures proposed were evaluated according to predefined criteria and discussed till full agreement.

9) Total implementation costs — between 12 000 and 35 000 €
Source of funding — Local authority's own resources / EU funds and programmes
Investment costs: €
Non-investment costs: between 12 000 and 35 000 €

A. Mitigation
ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector — [Drop-down]   ⓘ To be filled in only for the concerned sector

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts
- Energy savings: MWh/a
- Renewable energy production: MWh/a
- CO$_2$ reduction: t CO2/a

12) Vulnerable population group(s) targeted — [Drop-down]   ⓘ For multiple choice, insert additional rows as needed

13) Financial savings — €
14) Life expectancy of the action — years
15) Return on investment — %
16) Jobs created — full-time equivalent
17) Other figures — [Please specify] [numerical value] [Unit]

B. Adaptation
ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed —   ⓘ For multiple choice, insert additional rows as needed
- Extreme heat
- Extreme cold
- Heavy precipitation
- Floods and sea level rise
- Droughts and water scarcity
- Storms
- Wild fires
- Mass movement
- Other

19) Sector(s) — Land use planning   ⓘ For multiple choice, insert additional rows as needed

20) Outcome(s) reached
Description: This action has the following outcomes: increased capacities of decision makers and spatial planners with regards to integrative spatial planning which includes the aspect of climate change, its potential impacts and possible approaches. These are expected to be reached thanks to Action's joint implementation.
659 characters left
Related indicator: at least one workshop/training held

21) Vulnerable population group(s) targeted — All   ⓘ For multiple choice, insert additional rows as needed
22) Avoided cost — €
23) Life expectancy of the action — years
24) Return on Investment — %
25) Jobs created — full-time equivalent
26) Other figures — [Please specify] [numerical value] [Unit]

C. Energy poverty
ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted — [Drop-down]   ⓘ For multiple choice, insert additional rows as needed
28) Outcome(s) reached
Description: *1000 characters left*
Related indicator: [Please specify] [numerical value] [Unit]

Further information
30) Weblink — www.
31) Video link — www.
32) Picture — [upload]

Actions

ⓘ Copy as many "action" tabs as necessary **(minimum 3 mitigation actions and 3 adaptation actions)**
ⓘ For the actions your local authority considered as "key actions" - fill in the dedicated "key action" tab.

1) Type of action
☐ Mitigation
☑ Adaptation
☐ Energy poverty   ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action | Education of farmers with regards to financial support and entrepreneurial skills

3) Origin of the action | Mixed

4) Responsible body | Municipalities and Department in the Ministry of Agriculture

5) Short description

Number of Municipalities involved: 5   Total number of Municipalities of the target area: 5
All the municipalities join this action in order to increase the effectiveness of the adaptation measure itself, serving as knowledge/experience sharing platform between farmers. The action has the goal to increase the irrigation rate in the target area as well as to increase the share of farmers educated with regards to different aspects of agricultural production (financial support, insurance, irrigation options etc).

478 characters left

6) Implementation timeframe
Start: 2021
End: 2030

7) Implementation status | Ongoing

8) Stakeholders involved | Business & private sector | ⓘ For multiple choice, insert additional rows as needed
8) Stakeholders involved | NGOs & civil society | ⓘ For multiple choice, insert additional rows as needed
| Citizens

Additional comments

The stakeholders were involved thanks to a specifically designed focus group meeting organized and managed by the "Joint Action Coordinator for Climate and Energy" and the external consultant. The role of stakeholders was to present the status of each relevant sector, strengths and weaknesses, issues encountered so far and further challenges as well as their views on possible solutions to improve the situation. Climate change adaptation measures proposed were evaluated according to predefined criteria and discussed till full agreement.

9) Total implementation costs | around 200 000 | €
Source of funding: | National funds and programmes
| Local authority's own resources
| EU funds and programmes
| Regional funds and programmes
Investment costs: | | €
Non-investment costs: | around 20 000 annually | €

A. Mitigation
ⓘ Only for actions addressing mitigation. Click on the [+/-] buttons on the left to expand or collapse

10) Sector | [Drop-down] | | | | | | | ⓘ To be filled in only for the concerned sector

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts
Energy savings: | | MWh/a
Renewable energy production: | | MWh/a
CO_2 reduction: | | t CO2/e

12) Vulnerable population group(s) targeted | [Drop-down] | ⓘ For multiple choice, insert additional rows as needed

13) Financial savings | | €
14) Life expectancy of the action | | years
15) Return on Investment | | %
16) Jobs created | | full-time equivalent
17) Other figures | [Please specify] | [numerial value] | [Unit]

B. Adaptation
ⓘ Only for actions addressing adaptation. Click on the [+/-] buttons on the left to expand or collapse

18) Climate hazard(s) addressed | Droughts and water scarcity | ⓘ For multiple choice, insert additional rows as needed
19) Sector(s) | Agriculture & forestry | ⓘ For multiple choice, insert additional rows as needed

20) Outcome(s) reached
Description: | This action has the following outcomes: increased irrigation rate in the target area and increased capacities of farmers in terms of their entrepreneurial skills (financial possibilities, insurance for extreme weather events, irrigation options etc.). These are expected to be reached thanks to Action's joint implementation. | *675 characters left*
Related indicator: | at least one workshop/training per year

21) Vulnerable population group(s) targeted | Other | ⓘ For multiple choice, insert additional rows as needed
22) Avoided cost | | €
23) Life expectancy of the action | | years
24) Return on Investment | | %
25) Jobs created | | full-time equivalent
26) Other figures | [Please specify] | [numerial value] | [Unit]

C. Energy poverty
ⓘ Only for actions addressing energy poverty. Click on the [+/-] buttons on the left to expand or collapse

27) Vulnerable population group(s) targeted | [Drop-down] | ⓘ For multiple choice, insert additional rows as needed

28) Outcome(s) reached
Description: | | *1000 characters left*
Related indicator: | [Please specify] | [numerial value] | [Unit]

Further information
30) Weblink | www.
31) Video link | www.
32) Picture | [upload]