


Pla d'Acció per l'Energia Sostenible i el Clima Guilleries

ANNEX I - *SECAP Template*

Pacte dels Alcaldes pel Clima i l'Energia

Diputació de Girona

CILMA
Consell d'Iniciatives locals per al Medi Ambient de les comarques de Girona

Covenant of Mayors - Europe
SECAP template | Working document

The present template is a working document only. The official reporting to the Covenant of Mayors initiative shall be done using the online platform "*MyCovenant*".

Do not use this file for offical submission

SECAP template d'Anglès

Strategy

HOME

Strategy

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

1000 chars left

2) Target(s) and commitment(s)

Mitigation					
CO_2 / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2005	absolute	
55%	%	2030	2005	absolute	
		2050	[drop -down]	[drop -down]	

ⓘ 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.

MONITORING

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
		[drop -down]	[drop -down]	
		[drop -down]	[drop -down]	

ⓘ 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.

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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	☐	☐		☐	☐	
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☐		☐	☐	
External consultant	☐	☐		☐	☐	
Other	☐	☐		☐	☐	
Total			0	Total		0

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

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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	☐		[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
External stakeholders at local level	☐	*Academia; Business & private sector; trade-union; citizens; NGO & civil society; Education sector; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
Stakeholders at other levels of governance	☐	*National government and/or agency(ies); Sub-national governments(s) and/or agencies; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*

ⓘ Select x for the ones that are applicable.

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

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6) Budget

MONITORING

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)		Total (€)	Mitigation (%)	
	Adaptation (%)			Adaptation (%)	
Budget period					
From:		2012			
To:		2030			

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

ⓘ depending on signatories' selected time horizon (2020/2020)

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

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

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7) Monitoring process

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Emission Inventory

HOME

Emission Inventory

ⓘ To be filled in only if your local authority is committed to mitigation.

ⓘ Copy as many "emission inventory" tabs as necessary. Minimun 1 "baseline emission inventory" (BEI) at the 1st reporting stage, minimum 1 "monitoring emission inventory" (MEI) every 4 years.

1) Inventory year: 2019

2) Population in the inventory year: 5599

3) Emission factors
- ☑ IPCC (Intergovernmental Panel on Climate Change)
- ☐ LCA (Life Cycle Assessment)
- ☐ National/sub-national — Specify: ____ Source: ____

4) Emission reporting unit
- ☑ tonnes CO_2
- ☐ tonnes CO_2 equivalent

5) Methodological note

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A. Final energy consumption

ⓘ Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

ⓘ Please note that the following notation keys can be used in the table below: "NO" (not occuring), "IE" (included elsewhere), "NE" (not estimated) and "C" (confidential). More information in the Reporting Guidelines.

ⓘ Click on the [+/-] buttons on the left to expand or collapse. Hide rows as appropriate to your emission inventory.

Sector		FINAL ENERGY CONSUMPTION [MWh]																
				Fossil fuels								Renewable energies						
		Electricity	District heating and cooling	Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biogas	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities		**991,082**	**0**	**0**	**3,720054**	**66**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1060,80205
	Municipal buildings, equipment/facilities	390,681	NE	0	3,720054	66	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**460,401054**
	Public lighting	600,401	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**600,401**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Tertiary (non municipal) buildings, equipment/facilities		**4521,978**	**0**	**0**	**647,484587**	**855,3966568**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6024,85924
	Institutional buildings	4521,978	NE	0	647,484587	855,3966568	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**6024,85924**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Residential buildings		7447,202	0	0	5702,62272	1973,457713	0	0	0	0	0	0	0	0	0	0	0	15123,2824
Industry	Non-ETS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	ETS (not recommended)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Buildings, equipment/facilities and industries not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		12960,262	0	0	6353,82736	2894,85437	0	0	0	0	0	0	0	0	0	0	0	22208,9437
TRANSPORT																		
Municipal fleet		**0**	**0**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**
	Road	NE	NE	NE	NE	NE	17	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**17**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Public transport		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Private and commercial transport		**6,16**	**0**	**0**	**0**	**0**	**51605,4317**	**4862,9875**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**56474,5792**
	Road	6,16	NE	NE	NE	NE	51605,4317	4862,9875	NE	NE	NE	NE	NE	NE	NE	NE	NE	**56474,5792**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local aviation	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Transport not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		6,16	0	0	0	0	51622,4317	4862,9875	0	0	0	0	0	0	0	0	0	56491,5792
OTHER																		
Agriculture, Forestry, Fisheries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		**12966,422**	**0**	**0**	**6353,82736**	**2894,85437**	**51622,4317**	**4862,9875**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**78700,5229**

Covenant Key Sectors

B. Energy supply

ⓘ Hide sections or rows as appropriate to your emission inventory.

B1. Certified green electricity

Certified green electricity	Renewable electricity [MWh]	CO_2 / CO_2 eq. Emission factor [t/MWh]
Purchases Guarantees of Origins (within the municipality boundaries)	NE	
Sales Guarantees of Origins (within the municipality boundaries)	NE	

B2. Local/distributed electricity production (Renewable energy only)

Local renewable electricity plants	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO_2 / CO_2 eq. emissions [t]
Wind	0	0,000	0
Hydroelectric	2395,68	0,312	747,3082172
Photovoltaics	0	0,000	0
Geothermal	0	0,000	0
Other	0	0,000	0
TOTAL	0		**747,3082172**

B3. Local/distributed electricity production

Local electricity production plants	Electricity produced [MWh]		Energy carrier input [MWh]											CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels												
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other (ETS and large-scale plants > 20 MW not recommended)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B4. Local heat/cold production

Local heat/cold production plants	Heat/cold produced [MWh]		Energy carrier input [MWh]											CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels												
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
District heating (heat-only)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

C. CO_2 emissions

C1. Please insert the CO_2 emission factors adopted [t/MWh]:

ⓘ Click here to visualise fuel emission factors

Electricity		Heat/cold	Fossil fuels								Renewable energies					
National	Local		Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil	Biogas	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal
0,481	0,481		0,202	0,227	0,267	0,267	0,249									

C2. Please complete in case non-energy related sectors are included:

ⓘ Click on the [+/-] buttons on the left to expand or collapse.

Non-energy related sectors		CO_2 eq. emissions [t]	Activity data (tons)
Waste management		**1510,881791**	**0**
	Solid waste disposal	1510,881791	
	Biological Treatment of Solid Waste	NE	
	Incineration and Open Burning of Waste	NE	
	Other	NE	
		CO_2 eq. emissions [t]	Activity data (m3)
Wastewater treatment and discharge		NE	
Other non-energy related such as fugitive emissions		NE	

Emission Inventory Summary

ⓘ The emission inventory summary table is automatically generated in the online platform (*MyCovenant*).

Additional comments

500 chars left

Climate Change Risks and Vulnerabilities

HOME

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**	High	High	Increase	Increase	Long-therm
☑	**Extreme cold**	Moderate	Moderate	Increase	Increase	Long-therm
☑	**Heavy precipitation**	High	High	Increase	Increase	Long-therm
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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	High	Increase	Increase	Long-therm
	Flash / surface flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	River flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Moderate	Moderate	Increase	Increase	Long-therm
☑	**Storms**	High	High	Increase	Increase	Long-therm
	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**	High	High	Increase	Increase	Short-therm
	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**	Moderate	Moderate	Increase	Increase	Long-therm
	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**	Buildings	High	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑	**Extreme heat**	Health	Moderate	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☑	**Extreme heat**	Energy	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☑	**Extreme heat**	Transport	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☑	**Extreme heat**	Tourism	Low	% change in tourist flows / tourism activities

☐	Extreme cold	Buildings	High	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☐	Extreme cold	Health	Moderate	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☐	Heavy precipitation	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Heavy precipitation	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Heavy precipitation	Tourism	Low	% change in tourist flows / tourism activities
☐	Floods & sea level rise	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Floods & sea level rise	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Floods & sea level rise	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Water	Low	[Choose from Annex 3 or write down your own]
☐	Droughts & water scarcity	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Droughts & water scarcity	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☐	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	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Wild fires	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Water**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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**	[Choose from the list above]
☐	**Extreme cold**	[Choose from the list above]
☐	**Heavy precipitation**	[Choose from the list above]
☐	**Floods & sea level rise**	[Choose from the list above]
☐	**Droughts & water scarcity**	[Choose from the list above]
☐	**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

Action Plan

HOME

1) Action plan(s) and other related documents

1) Action plan(s)

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

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Sustainable Energy and Climate Action Plans (PAESC) Les Guilleries	The "Covenant of Mayors for Local Sustainable Energy" is the European Commission's first ambitious initiative to tackle climate change at the local	jul-22	Diputació de Girona and town halls	Integrated climate plan (ad	Equal to municipality's b	Catalan	☑
		[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?
SEAP monitoring report for all study municipalities	This report corresponds to the assessment of the actions implemented in the municipalities as well as the emissions monitoring inventory.	2016	External consultants	Emission inventory	Greater than municipality's bou	Data of the municipalities and the administration	Catalan	☑
IRE emissions reference inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑
ISE Emission Tracking Inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑

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	MONITORING: 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	Renewable energy production	CO_2 reduction
						MWh/a	MWh/a	t CO_2/a
Municipal buildings, equipment/facilities	4				100%	1003,09		1579,3
Tertiary (non municipal) buildings, equipment/facilities								
Residential buildings	6				100%	2586,03		1477,06
Industry								
Transport	6				100%	5662,56		3094,51
Waste	1				100%	314,11		151,09
Local Electricity Production	6				100%	141,41	4626,82	6105,61
Local Heat/Cold Production	2				100%	3195,69		1605,84
Others	1				100%			46,86
TOTAL	26					12902,89	4626,82	14060,27

4) Adaptation actions

ⓘ Only if your local authority is committed to adaptation.

Adaptation sectors	Number of actions included in the plan	MONITORING: Action plan implementation status			
		Completed (%)	On-going (%)	Postponed (%)	Not-started (%)
Buildings	2				100%
Transport					
Energy					
Water	8				100%
Waste					
Land Use Planning	3				100%
Agriculture & Forestry	2				100%
Environment & Biodiversity					
Health	2				100%
Civil Protection & Emergency	2				100%
Tourism	2				100%
Education	1				100%
ICT (Information & communication technologies)					
Other	1				100%
TOTAL	23				

Key Actions

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promoting sustainable mobility in urban commuting

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: and raise awareness by reducing the avoidable traffic of motor vehicles through the interior of the municipality and at the same time mak

691 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

9) Total implementation costs: 700.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Transport

ⓘ 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]	shift to walking & c	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	Other	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts

Energy savings:	311,95	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	150,05	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promote a citizen renewable energy installation

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: It is proposed to promote a small solar park, with citizen participation and funding.

915 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

9) Total implementation costs: 1.000.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:	2.700	MWh/a
CO_2 reduction:	1.481,60	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Create local renewable energy communities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: council will create a local community of renewable energy that will start in municipal facilities with the aim of connecting the whole mur

844 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

9) Total implementation costs: 150.000 €

Source of funding:	[Drop-down]	
Investment costs:		€
Non-investment costs:		€

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:	141,41	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	68,02	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

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: Collect and reuse rainwater. Deposits in public facilities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: stallation of water tanks on roofs, gardens, basements or other municipal spaces to collect water and reuse it in the facilities, for irrigatic

803 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 98.700 €

Source of funding: [Drop-down]

Investment costs: €

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]

	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
- 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] | [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

19) Sector(s): Water

20) Outcome(s) reached

Description: to collect and reuse rainwater in public facilities

948 characters left

Related indicator: m3 rainwater collected and reused | | m3

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 772.000 €

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]

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

HOME

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: Optimize, review and improve alert and communication systems with the population

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: ng and improving existing systems for alerting the public in the event of a risk or emergency, in order to implement self-protection meas

781 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

9) Total implementation costs: 1.761 €

Source of funding:	[Drop-down]	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Civil protection & emergency

20) Outcome(s) reached

Description: to create alert and communication systems with the population

939 characters left

Related indicator: nber of warning and communication systems with the popula

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 2.500.000 €

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]

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

HOME

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: Training plan aimed at elected officials and municipal workers. Creation of the "Municipal Commission for Adaptation to Climate Change"

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: s proposed to carry out training and awareness plan for elected officials and the creation of a "Municipal Commission for adaptation an

613 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 25.704 €

Source of funding:	Regional funds and programmes	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Education

20) Outcome(s) reached

Description:	offer training to all municipal workers		
Related indicator:	number of municipal workers who have received the training		

961 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 1.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Create an itinerant energy advice point

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: y advice point that will provide information on energy and water at home, aimed al all citizens. The fact that the service is aimed at all c

620 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

9) Total implementation costs: 60.000 €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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] [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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

21) Vulnerable population group(s) targeted: [Drop-down]
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: All
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 **(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

3) Origin of the action [Drop-down]

4) Responsible body

5) Short description

1000 characters left

6) Implementation timeframe

Start: [Drop-Down]
End: [Drop-Down]

7) Implementation status [Drop-Down]

8) Stakeholders involved [Drop-down]

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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 [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: [numerial 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] [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]

ANNEX 1 - Fuel Emission Factors Database

HOME

		Fossil fuels												Renewable energies															
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-Bitominous 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 [a]														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO_2/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 CO_2 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 CO_2/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,371	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 CO_2 eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,375	0,393	0,380	0,385	0,174	0,392	0,182 [d]		0,206 [e]		0,156 [f]		n.a.	0,106	0,013	0,416 [g]	0,184	n.a	n.a.	n.a. [h]

[s] if sustainability criteria during production are fulfilled
[ns] 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 an own emission factor if the circumstances are different. These 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

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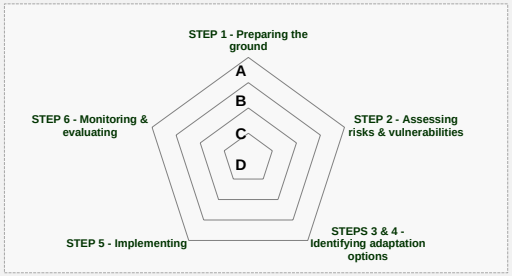
ⓘ Please complete the following self-assessment checklist, using the A-B-C-D scaling system (presented below) in column F (compulsory). Identify your next steps/areas of possible improvements through comments entered in column I (optional). The average status for every step is then visualised through 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 %



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 respondibilities assigned			
	Horizontal (i.e. accross sectoral departments) coordination mechanisms in place			
	Vertical (i.e. accross 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

ANNEX 3 - Indicators for Adaptation

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ⓘ 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.

ⓘ Pease 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 km^2	
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)

Covenant of Mayors - Europe
SECAP template | Working document

The present template is a working document only. The official reporting to the Covenant of Mayors initiative shall be done using the online platform "*MyCovenant*".

Do not use this file for offical submission

SECAP template de Brunyola i Sant Martí Sapresa

Strategy

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Strategy

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

1000 chars left

2) Target(s) and commitment(s)

Mitigation					
CO_2 / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2005	absolute	
55%	%	2030	2005	absolute	
		2050	[drop -down]	[drop -down]	

ⓘ 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.

MONITORING

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
		[drop -down]	[drop -down]	
		[drop -down]	[drop -down]	

ⓘ 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.

1000 chars left

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	☐	☐		☐	☐	
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☐		☐	☐	
External consultant	☐	☐		☐	☐	
Other	☐	☐		☐	☐	
Total			0	Total		0

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

1000 chars left

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	☐		[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
External stakeholders at local level	☐	*Academia; Business & private sector; trade-union; citizens; NGO & civil society; Education sector; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
Stakeholders at other levels of governance	☐	*National government and/or agency(ies); Sub-national governments(s) and/or agencies; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*

ⓘ Select x for the ones that are applicable.

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

700 chars left

6) Budget

MONITORING

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)		Total (€)	Mitigation (%)	
	Adaptation (%)			Adaptation (%)	
Budget period					
From:		2012			
To:		2030			

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

ⓘ depending on signatories' selected time horizon (2020/2020)

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

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

700 chars left

7) Monitoring process

1000 chars left

Emission Inventory

HOME

Emission Inventory

ⓘ To be filled in only if your local authority is committed to mitigation.

ⓘ Copy as many "emission inventory" tabs as necessary. Minimun 1 "baseline emission inventory" (BEI) at the 1st reporting stage, minimum 1 "monitoring emission inventory" (MEI) every 4 years.

1) Inventory year: 2005

2) Population in the inventory year: 353

3) Emission factors
- ☑ IPCC (Intergovernmental Panel on Climate Change)
- ☐ LCA (Life Cycle Assessment)
- ☐ National/sub-national — Specify: ____ Source: ____

4) Emission reporting unit
- ☑ tonnes CO_2
- ☐ tonnes CO_2 equivalent

5) Methodological note

1000 chars left

A. Final energy consumption

ⓘ Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

ⓘ Please note that the following notation keys can be used in the table below: "NO" (not occuring), "IE" (included elsewhere), "NE" (not estimated) and "C" (confidential). More information in the Reporting Guidelines.

ⓘ Click on the [+/-] buttons on the left to expand or collapse. Hide rows as appropriate to your emission inventory.

Sector		FINAL ENERGY CONSUMPTION [MWh]																
				Fossil fuels								Renewable energies						
		Electricity	District heating and cooling	Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biogas	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities		**70,317**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	70,317
	Municipal buildings, equipment/facilities	12,618	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**12,618**
	Public lighting	57,699	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**57,699**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Tertiary (non municipal) buildings, equipment/facilities		**573,09**	**0**	**0**	**43,66**	**119,51**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	736,26
	Institutional buildings	573,09	0	0	43,66	119,51	0	0	0	0	0	0	0	0	0	0	0	**736,26**
	Other	NE	0	o	NE	NE	0	0	0	0	0	0	0	0	0	0	0	**0**
Residential buildings		717,38	0	0	306,06	333,33	0	0	0	0	0	0	0	0	0	0	0	1356,77
Industry	Non-ETS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	ETS (not recommended)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Buildings, equipment/facilities and industries not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		1360,787	0	0	349,72	452,84	0	0	0	0	0	0	0	0	0	0	0	2163,347
TRANSPORT																		
Municipal fleet		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Public transport		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Private and commercial transport		**0**	**0**	**0**	**0**	**0**	**5926,74**	**808,88**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6735,62**
	Road	NE	NE	NE	NE	NE	5926,74	808,88	NE	NE	NE	NE	NE	NE	NE	NE	NE	**6735,62**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local aviation	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Transport not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		0	0	0	0	0	5926,74	808,88	0	0	0	0	0	0	0	0	0	6735,62
OTHER																		
Agriculture, Forestry, Fisheries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		**1360,787**	**0**	**0**	**349,72**	**452,84**	**5926,74**	**808,88**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8898,967**

Covenant Key Sectors

B. Energy supply

ⓘ Hide sections or rows as appropriate to your emission inventory.

B1. Certified green electricity

Certified green electricity	Renewable electricity [MWh]	CO_2 / CO_2 eq. Emission factor [t/MWh]
Purchases Guarantees of Origins (within the municipality boundaries)	NE	
Sales Guarantees of Origins (within the municipality boundaries)	NE	

B2. Local/distributed electricity production (Renewable energy only)

Local renewable electricity plants	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO_2 / CO_2 eq. emissions [t]
Wind	0	0,000	0
Hydroelectric	0	0,000	0
Photovoltaics	0	0,000	0
Geothermal	0	0,000	0
Other	0	0,000	0
TOTAL	0		**0**

B3. Local/distributed electricity production

Local electricity production plants	Electricity produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other (ETS and large-scale plants > 20 MW not recommended)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B4. Local heat/cold production

Local heat/cold production plants	Heat/cold produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
District heating (heat-only)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

C. CO_2 emissions

C1. Please insert the CO_2 emission factors adopted [t/MWh]:

ⓘ Click here to visualise fuel emission factors

Electricity		Heat/cold	Fossil fuels								Renewable energies					
National	Local		Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil	Biogas	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal
0,481	0,481		0,202	0,227	0,267	0,267	0,249									

C2. Please complete in case non-energy related sectors are included:

ⓘ Click on the [+/-] buttons on the left to expand or collapse.

Non-energy related sectors		CO_2 eq. emissions [t]	Activity data (tons)
Waste management		**131,9**	**0**
	Solid waste disposal	131,9	
	Biological Treatment of Solid Waste	NE	
	Incineration and Open Burning of Waste	NE	
	Other	NE	
		CO_2 eq. emissions [t]	Activity data (m3)
Wastewater treatment and discharge		NE	
Other non-energy related such as fugitive emissions		NE	

Emission Inventory Summary

ⓘ The emission inventory summary table is automatically generated in the online platform (*MyCovenant*).

Additional comments

500 chars left

Climate Change Risks and Vulnerabilities

HOME

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**	High	High	Increase	Increase	Long-therm
☑	**Extreme cold**	Moderate	Moderate	Increase	Increase	Long-therm
☑	**Heavy precipitation**	High	High	Increase	Increase	Long-therm
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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	High	Increase	Increase	Long-therm
	Flash / surface flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	River flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Moderate	Moderate	Increase	Increase	Long-therm
☑	**Storms**	Low	Low	No change	No change	Long-therm
	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**	Low	Low	No change	No change	Short-therm
	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**	High	High	Increase	Increase	Long-therm
	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**	Buildings	Moderate	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑	**Extreme heat**	Health	Moderate	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☑	**Extreme heat**	Energy	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☑	**Extreme heat**	Transport	Moderate	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☑	**Extreme heat**	Tourism	Low	% change in tourist flows / tourism activities

☐	Extreme cold	Buildings	Moderate	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☐	Extreme cold	Health	Moderate	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☐	Heavy precipitation	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Heavy precipitation	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Heavy precipitation	Tourism	Low	% change in tourist flows / tourism activities
☐	Floods & sea level rise	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Floods & sea level rise	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Floods & sea level rise	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Water	Low	[Choose from Annex 3 or write down your own]
☐	Droughts & water scarcity	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Droughts & water scarcity	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☐	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	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Wild fires	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Water**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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**	[Choose from the list above]
☐	**Extreme cold**	[Choose from the list above]
☐	**Heavy precipitation**	[Choose from the list above]
☐	**Floods & sea level rise**	[Choose from the list above]
☐	**Droughts & water scarcity**	[Choose from the list above]
☐	**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

Action Plan

HOME

1) Action plan(s) and other related documents

1) Action plan(s)

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

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Sustainable Energy and Climate Action Plans (PAESC) Les Guilleries	The "Covenant of Mayors for Local Sustainable Energy" is the European Commission's first ambitious initiative to tackle climate change at the local	jul-22	Diputació de Girona and town halls	Integrated climate plan (ad	Equal to municipality's b	Catalan	☑
		[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?
SEAP monitoring report for all study municipalities	This report corresponds to the assessment of the actions implemented in the municipalities as well as the emissions monitoring inventory.	2016	External consultants	Emission inventory	Greater than municipality's bou	Data of the municipalities and the administration	Catalan	☑
IRE emissions reference inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑
ISE Emission Tracking Inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑

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	MONITORING: Action plan implementation status				Estimated impacts in [2020, 2030 and/or other longer-term time horizon]		
		Completed (%)	On-going (%)	Postponed (%)	Not-started (%)	in relation to: Energy savings	Renewable energy production	BEI (option 1) CO_2 reduction
						MWh/a	MWh/a	t CO_2/a
Municipal buildings, equipment/facilities	5				100%	119,34		84,95
Tertiary (non municipal) buildings, equipment/facilities								
Residential buildings	5				100%	498,77		248,82
Industry								
Transport	6				100%	1256,14		775,2
Waste	2				100%	164,53		79,14
Local Electricity Production	7				100%		914,84	1087,23
Local Heat/Cold Production	3				100%	654,98		218,78
Others	1				100%			9,68
TOTAL	29					2693,76	914,84	2503,8

4) Adaptation actions

ⓘ Only if your local authority is committed to adaptation.

Adaptation sectors	Number of actions included in the plan	MONITORING: Action plan implementation status			
		Completed (%)	On-going (%)	Postponed (%)	Not-started (%)
Buildings	2				100%
Transport					
Energy					
Water	9				100%
Waste					
Land Use Planning	3				100%
Agriculture & Forestry	2				100%
Environment & Biodiversity					
Health	2				100%
Civil Protection & Emergency	2				100%
Tourism	2				100%
Education	1				100%
ICT (Information & communication technologies)					
Other	1				100%
TOTAL	24				

Key Actions

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promoting sustainable mobility in urban commuting

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: and raise awareness by reducing the avoidable traffic of motor vehicles through the interior of the municipality and at the same time mak

691 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

9) Total implementation costs: 700.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Transport

ⓘ 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]	shift to walking & c	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	Other	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts

Energy savings:	51,62	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	24,83	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Create local renewable energy communities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: council will create a local community of renewable energy that will start in municipal facilities with the aim of connecting the whole mur

844 characters left

6) Implementation timeframe

Start: 2022
End: 2030

7) Implementation status: Ongoing

8) Stakeholders involved: Citizens ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 150.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	Photovoltaics	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	ants and subsic	[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
CO_2 reduction: 29,04 t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €
14) Life expectancy of the action: 10 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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Encourage the installation of photovoltaic solar energy in the residential and service sectors

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: Encourage the installation of photovoltaic solar energy in the residential sector and the services sector reporting on subsidies

872 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

9) Total implementation costs: 1.624.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	Photovoltaics	[drop-down]	aste & wastewater management
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	ants and subsic	[drop-down]	Other

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:	870,5	MWh/a
CO_2 reduction:	1.011,13	t CO2/a

12) Vulnerable population group(s) targeted: All

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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description: 1000 characters left

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

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

HOME

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: Collect and reuse rainwater. Deposits in public facilities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: stallation of water tanks on roofs, gardens, basements or other municipal spaces to collect water and reuse it in the facilities, for irrigatic

803 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 98.700 €

Source of funding: [Drop-down]

Investment costs: €

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]

	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
- 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] | [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

19) Sector(s): Water

20) Outcome(s) reached

Description: to collect and reuse rainwater in public facilities

948 characters left

Related indicator: m3 rainwater collected and reused | | m3

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 772.000 €

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]

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

HOME

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: Optimize, review and improve alert and communication systems with the population

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: ng and improving existing systems for alerting the public in the event of a risk or emergency, in order to implement self-protection meas

781 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

9) Total implementation costs: 1761 €

Source of funding:	[Drop-down]	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Civil protection & emergency

20) Outcome(s) reached

Description:	to create alert and communication systems with the population		
Related indicator:	nber of warning and communication systems with the popula		

939 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 2.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Training plan aimed at elected officials and municipal workers. Creation of the "Municipal Commission for Adaptation to Climate Change"

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: s proposed to carry out training and awareness plan for elected officials and the creation of a "Municipal Commission for adaptation an

613 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 25.704 €

Source of funding:	Regional funds and programmes	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Education

20) Outcome(s) reached

Description:	offer training to all municipal workers		
Related indicator:	number of municipal workers who have received the training		

961 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 1.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Create an itinerant energy advice point

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: y advice point that will provide information on energy and water at home, aimed al all citizens. The fact that the service is aimed at all c

620 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

9) Total implementation costs: 60.000 €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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] [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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

21) Vulnerable population group(s) targeted: [Drop-down]
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: All
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 **(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

3) Origin of the action [Drop-down]

4) Responsible body

5) Short description

1000 characters left

6) Implementation timeframe

Start: [Drop-Down]
End: [Drop-Down]

7) Implementation status [Drop-Down]

8) Stakeholders involved [Drop-down]

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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 [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: [numerial 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] [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]

ANNEX 1 - Fuel Emission Factors Database

HOME

		Fossil fuels												Renewable energies															
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-Bitominous 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 [a]														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO_2/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 CO_2 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 CO_2/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,371	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 CO_2 eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,375	0,393	0,380	0,385	0,174	0,392	0,182 [d]		0,206 [e]		0,156 [f]		n.a.	0,106	0,013	0,416 [g]	0,184	n.a	n.a.	n.a. [h]

[s] if sustainability criteria during production are fulfilled
[ns] if sustainability criteria during production are not fulfilled

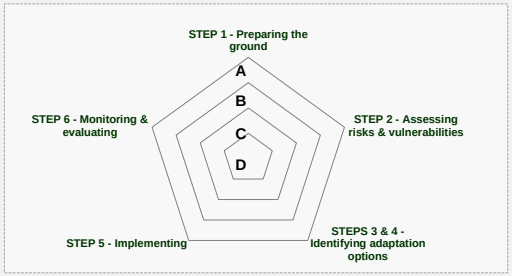
a. IPCC emission factor should be reported zero if the biofuels/biomass meet sustainability criteria; fossil fuel emission factors to be used if biofuels are unsustainable.(s) sustainable, (ns) not sustainable
b. Taking into consideration also the CH4 and the N2O emissions from combustion in stationary 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 an own emission factor if the circumstances are different. These 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 improvements 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 %



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 respondibilities assigned			
	Horizontal (i.e. accross sectoral departments) coordination mechanisms in place			
	Vertical (i.e. accross 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

ANNEX 3 - Indicators for Adaptation

HOME

ⓘ 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.

ⓘ Pease 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 km^2	
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)

Covenant of Mayors - Europe
SECAP template | Working document

The present template is a working document only. The official reporting to the Covenant of Mayors initiative shall be done using the online platform "*MyCovenant*".

Do not use this file for offical submission

SECAP template de la Cellera de Ter

Strategy

HOME

Strategy

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

1000 chars left

2) Target(s) and commitment(s)

Mitigation					
CO_2 / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2005	absolute	
55%	%	2030	2005	absolute	
		2050	[drop -down]	[drop -down]	

ⓘ 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.

MONITORING

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
		[drop -down]	[drop -down]	
		[drop -down]	[drop -down]	

ⓘ 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.

1000 chars left

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	☐	☐		☐	☐	
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☐		☐	☐	
External consultant	☐	☐		☐	☐	
Other	☐	☐		☐	☐	
Total			0	Total		0

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

1000 chars left

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	☐		[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
External stakeholders at local level	☐	*Academia; Business & private sector; trade-union; citizens; NGO & civil society; Education sector; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
Stakeholders at other levels of governance	☐	*National government and/or agency(ies); Sub-national governments(s) and/or agencies; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*

ⓘ Select x for the ones that are applicable.

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

700 chars left

6) Budget

MONITORING

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)		Total (€)	Mitigation (%)	
	Adaptation (%)			Adaptation (%)	
Budget period					
From:		2012			
To:		2030			

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

ⓘ depending on signatories' selected time horizon (2020/2020)

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

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

700 chars left

7) Monitoring process

1000 chars left

Emission Inventory

HOME

Emission Inventory

To be filled in only if your local authority is committed to mitigation.

Copy as many "emission inventory" tabs as necessary. Minimun 1 "baseline emission inventory" (BEI) at the 1st reporting stage, minimum 1 "monitoring emission inventory" (MEI) every 4 years.

1) Inventory year: 2019

2) Population in the inventory year: 1946

3) Emission factors
- [x] IPCC (Intergovernmental Panel on Climate Change)
- [ ] LCA (Life Cycle Assessment)
- [ ] National/sub-national

Specify: Source:

4) Emission reporting unit
- [x] tonnes CO_2
- [ ] tonnes CO_2 equivalent

5) Methodological note

1000 chars left

A. Final energy consumption

Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

Please note that the following notation keys can be used in the table below: "NO" (not occuring), "IE" (included elsewhere), "NE" (not estimated) and "C" (confidential). More information in the Reporting Guidelines.

Click on the [+/-] buttons on the left to expand or collapse. Hide rows as appropriate to your emission inventory.

Sector		FINAL ENERGY CONSUMPTION [MWh]																
				Fossil fuels								Renewable energies						
		Electricity	District heating and cooling	Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biogas	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities		**307,03**	**0**	**21,36465**	**0**	**70,42**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**398,81465**
	Municipal buildings, equipment/facilities	97,521	NE	21,36465	NE	70,42	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**189,30565**
	Public lighting	209,509	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**209,509**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Tertiary (non municipal) buildings, equipment/facilities		**1091,927**	**0**	**0**	**321,602369**	**425,0639081**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1838,59328**
	Institutional buildings	1091,927	NE	0	321,602369	425,0639081	0	0	0	0	0	0	0	0	0	0	0	**1838,59328**
	Other	NE	0	NE	NE	NE	0	0	0	0	0	0	0	0	0	0	0	**0**
Residential buildings		3028,655	0	0	1204,29681	718,0011338	0	0	0	0	0	0	0	0	0	0	0	**4950,95294**
Industry	Non-ETS	1272,31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1272,31**
	ETS (not recommended)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Buildings, equipment/facilities and industries not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**5699,922**	**0**	**21,36465**	**1525,89918**	**1213,485042**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8460,67087**
TRANSPORT																		
Municipal fleet		**0**	**0**	**0**	**0**	**0**	**29,1064**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,1064**
	Road	NE	NE	NE	NE	NE	29,1064	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**29,1064**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Public transport		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Private and commercial transport		**6,16**	**0**	**0**	**0**	**0**	**22791,0336**	**2084,9374**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24882,131**
	Road	6,16	NE	NE	NE	NE	22791,0336	2084,9374	NE	NE	NE	NE	NE	NE	NE	NE	NE	**24882,131**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local aviation	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Transport not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**6,16**	**0**	**0**	**0**	**0**	**22820,14**	**2084,9374**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24911,2374**
OTHER																		
Agriculture, Forestry, Fisheries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL		**5706,082**	**0**	**21,36465**	**1525,89918**	**1213,485042**	**22820,14**	**2084,9374**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**33371,9082**

Covenant Key Sectors

B. Energy supply

Hide sections or rows as appropriate to your emission inventory.

B1. Certified green electricity

Certified green electricity	Renewable electricity [MWh]	CO_2 / CO_2 eq. Emission factor [t/MWh]
Purchases Guarantees of Origins (within the municipality boundaries)	NE	
Sales Guarantees of Origins (within the municipality boundaries)	NE	

B2. Local/distributed electricity production (Renewable energy only)

Local renewable electricity plants	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO_2 / CO_2 eq. emissions [t]
Wind	0	0,000	0
Hydroelectric	7551,36	0,361	2722,52412
Photovoltaics	0	0,478	0
Geothermal	0	0,000	0
Other	0	0,000	0
TOTAL	**7551,36**		**2722,52412**

B3. Local/distributed electricity production

Local electricity production plants	Electricity produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Other (ETS and large-scale plants > 20 MW not recommended)	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

B4. Local heat/cold production

Local heat/cold production plants	Heat/cold produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
District heating (heat-only)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

C. CO_2 emissions

C1. Please insert the CO_2 emission factors adopted [t/MWh]:

Click here to visualise fuel emission factors

Electricity		Heat/cold	Fossil fuels								Renewable energies					
National	Local		Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil	Biogas	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal
0,481	0,481		0,202	0,227	0,267	0,267	0,249									

C2. Please complete in case non-energy related sectors are included:

Click on the [+/-] buttons on the left to expand or collapse.

Non-energy related sectors		CO_2 eq. emissions [t]	Activity data (tons)
Waste management		**550,9201451**	**0**
	Solid waste disposal	550,9201451	
	Biological Treatment of Solid Waste	NE	
	Incineration and Open Burning of Waste	NE	
	Other	NE	
		CO_2 eq. emissions [t]	Activity data (m3)
Wastewater treatment and discharge		NE	
Other non-energy related such as fugitive emissions		NE	

Emission Inventory Summary

The emission inventory summary table is automatically generated in the online platform (*MyCovenant*).

Additional comments

500 chars left

Climate Change Risks and Vulnerabilities

HOME

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**	High	High	Increase	Increase	Long-therm
☑	**Extreme cold**	Moderate	Moderate	Increase	Increase	Long-therm
☑	**Heavy precipitation**	High	High	Increase	Increase	Long-therm
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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	High	Increase	Increase	Long-therm
	Flash / surface flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	River flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Moderate	Moderate	Increase	Increase	Long-therm
☑	**Storms**	High	High	Increase	Increase	Long-therm
	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**	Low	Low	No change	No change	Short-therm
	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**	Moderate	Moderate	Increase	Increase	Long-therm
	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**	Buildings	High	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑	**Extreme heat**	Health	Moderate	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☑	**Extreme heat**	Energy	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☑	**Extreme heat**	Transport	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☑	**Extreme heat**	Tourism	Low	% change in tourist flows / tourism activities

☐	Extreme cold	Buildings	High	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☐	Extreme cold	Health	Moderate	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☐	Heavy precipitation	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Heavy precipitation	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Heavy precipitation	Tourism	Low	% change in tourist flows / tourism activities
☐	Floods & sea level rise	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Floods & sea level rise	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Floods & sea level rise	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Water	Low	[Choose from Annex 3 or write down your own]
☐	Droughts & water scarcity	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Droughts & water scarcity	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☐	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	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Wild fires	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Water**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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**	[Choose from the list above]
☐	**Extreme cold**	[Choose from the list above]
☐	**Heavy precipitation**	[Choose from the list above]
☐	**Floods & sea level rise**	[Choose from the list above]
☐	**Droughts & water scarcity**	[Choose from the list above]
☐	**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

Action Plan

HOME

1) Action plan(s) and other related documents

1) Action plan(s)

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

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Sustainable Energy and Climate Action Plans (PAESC) Les Guilleries	The "Covenant of Mayors for Local Sustainable Energy" is the European Commission's first ambitious initiative to tackle climate change at the local	jul-22	Diputació de Girona and town halls	Integrated climate plan (ad	Equal to municipality's b	Catalan	☑
		[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?
SEAP monitoring report for all study municipalities	This report corresponds to the assessment of the actions implemented in the municipalities as well as the emissions monitoring inventory.	2016	External consultants	Emission inventory	Greater than municipality's bou	Data of the municipalities and the administration	Catalan	☑
IRE emissions reference inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑
ISE Emission Tracking Inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑

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				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	Renewable energy production	CO_2 reduction
						MWh/a	MWh/a	t CO_2/a
Municipal buildings, equipment/facilities	17	82%			18%	162,34		275,55
Tertiary (non municipal) buildings, equipment/facilities								
Residential buildings	3					353,24		169,92
Industry								
Transport	9	33%			67%	2044,72		1351,89
Waste	9	78%			22%	1057,58		767,33
Local Electricity Production	6					13,55	7133,45	1019,72
Local Heat/Cold Production	2	50%			50%	576,69		354,51
Others	4	75%			25%			378,78
TOTAL	50					4208,12	7133,45	4317,7

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				100%
Transport					
Energy					
Water	9				100%
Waste					
Land Use Planning	3				100%
Agriculture & Forestry	2				100%
Environment & Biodiversity					
Health	2				100%
Civil Protection & Emergency	2				100%
Tourism	2				100%
Education	1				100%
ICT (Information & communication technologies)					
Other	1				100%
TOTAL	24				

Key Actions

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promoting sustainable mobility in urban commuting

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: and raise awareness by reducing the avoidable traffic of motor vehicles through the interior of the municipality and at the same time mak

691 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

9) Total implementation costs: 700.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Transport

ⓘ 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]	shift to walking & c	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	Other	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts

Energy savings:	137,35	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	66,07	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promote a citizen renewable energy installation

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: It is proposed to promote a small solar park, with citizen participation and funding.

915 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

9) Total implementation costs: 50.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:	2700	MWh/a
CO_2 reduction:	19,54	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Implement the door-to-door collection system

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: The door-to-door collection system is proposed to improve recycling rates and reduce associated emissions.

894 characters left

6) Implementation timeframe

Start: 2022
End: 2025

7) Implementation status: Not started

8) Stakeholders involved: Citizens ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 181.126 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Waste

	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]	Other	aste & wastewater management
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	Grants and subsidies	Other

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:	572,68	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	275,46	t CO2/a

12) Vulnerable population group(s) targeted: All

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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

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: Collect and reuse rainwater. Deposits in public facilities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: stallation of water tanks on roofs, gardens, basements or other municipal spaces to collect water and reuse it in the facilities, for irrigatic

803 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 98.700 €

Source of funding: [Drop-down]

Investment costs: €

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]

	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
- 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] | [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

19) Sector(s): Water

20) Outcome(s) reached

Description: to collect and reuse rainwater in public facilities

948 characters left

Related indicator: m3 rainwater collected and reused | | m3

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 772.000 €

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]

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

HOME

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: Optimize, review and improve alert and communication systems with the population

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: ng and improving existing systems for alerting the public in the event of a risk or emergency, in order to implement self-protection meas

781 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

9) Total implementation costs: 1761 €

Source of funding:	[Drop-down]	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Civil protection & emergency

20) Outcome(s) reached

Description:	to create alert and communication systems with the population		
Related indicator:	nber of warning and communication systems with the popula		

939 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 2.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Training plan aimed at elected officials and municipal workers. Creation of the "Municipal Commission for Adaptation to Climate Change"

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: s proposed to carry out training and awareness plan for elected officials and the creation of a "Municipal Commission for adaptation an

613 characters left

6) Implementation timeframe

Start: 2022
End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 25.704 €

Source of funding: Regional funds and programmes
Investment costs: €
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]

	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
CO_2 reduction: t CO2/a

12) Vulnerable population group(s) targeted: All

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: Other

19) Sector(s): Education

20) Outcome(s) reached

Description: offer training to all municipal workers

961 characters left

Related indicator: number of municipal workers who have received the training

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 1.500.000 €

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]

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

HOME

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: Create an itinerant energy advice point

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: y advice point that will provide information on energy and water at home, aimed al all citizens. The fact that the service is aimed at all c

620 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

9) Total implementation costs: 60.000 €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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] [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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

21) Vulnerable population group(s) targeted: [Drop-down]
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: All
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 **(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

3) Origin of the action [Drop-down]

4) Responsible body

5) Short description

1000 characters left

6) Implementation timeframe

Start: [Drop-Down]
End: [Drop-Down]

7) Implementation status [Drop-Down]

8) Stakeholders involved [Drop-down]

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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 [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: [numerial 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] [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]

ANNEX 1 - Fuel Emission Factors Database

HOME

		Fossil fuels												Renewable energies															
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-Bitominous 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 [a]														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO_2/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 CO_2 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 CO_2/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,371	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 CO_2 eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,375	0,393	0,380	0,385	0,174	0,392	0,182 [d]		0,206 [e]		0,156 [f]		n.a.	0,106	0,013	0,416 [g]	0,184	n.a	n.a.	n.a. [h]

[s] if sustainability criteria during production are fulfilled
[ns] if sustainability criteria during production are not fulfilled

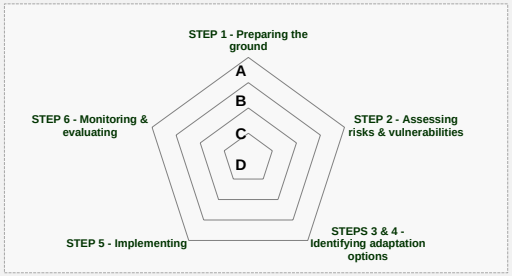
a. IPCC emission factor should be reported zero if the biofuels/biomass meet sustainability criteria; fossil fuel emission factors to be used if biofuels are unsustainable.(s) sustainable, (ns) not sustainable
b. Taking into consideration also the CH4 and the N2O emissions from combustion in stationary 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 an own emission factor if the circumstances are different. These 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 improvements 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 %



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 respondibilities assigned			
	Horizontal (i.e. accross sectoral departments) coordination mechanisms in place			
	Vertical (i.e. accross 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

ANNEX 3 - Indicators for Adaptation

HOME

ⓘ 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.

ⓘ Pease 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 km^2	
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)

Covenant of Mayors - Europe
SECAP template | Working document

The present template is a working document only. The official reporting to the Covenant of Mayors initiative shall be done using the online platform "*MyCovenant*".

Do not use this file for offical submission

SECAP template d'Espinelves

Strategy

HOME

Strategy

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

1000 chars left

2) Target(s) and commitment(s)

Mitigation					
CO_2 / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
	%	2020	[drop -down]	[drop -down]	
	%	2030	[drop -down]	[drop -down]	
		2050	[drop -down]	[drop -down]	

ⓘ 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.

MONITORING

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
		[drop -down]	[drop -down]	
		[drop -down]	[drop -down]	

ⓘ 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.

1000 chars left

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	☐	☐		☐	☐	
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☐		☐	☐	
External consultant	☐	☐		☐	☐	
Other	☐	☐		☐	☐	
Total			0	Total		0

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

1000 chars left

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	☐		[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
External stakeholders at local level	☐	*Academia; Business & private sector; trade-union; citizens; NGO & civil society; Education sector; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
Stakeholders at other levels of governance	☐	*National government and/or agency(ies); Sub-national governments(s) and/or agencies; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*

ⓘ Select x for the ones that are applicable.

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

700 chars left

6) Budget

MONITORING

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)		Total (€)	Mitigation (%)	
	Adaptation (%)			Adaptation (%)	
Budget period					
From:		2012			
To:		2030			

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

ⓘ depending on signatories' selected time horizon (2020/2020)

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

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

700 chars left

7) Monitoring process

1000 chars left

Emission Inventory

HOME

Emission Inventory

ⓘ To be filled in only if your local authority is committed to mitigation.

ⓘ Copy as many "emission inventory" tabs as necessary. Minimun 1 "baseline emission inventory" (BEI) at the 1st reporting stage, minimum 1 "monitoring emission inventory" (MEI) every 4 years.

1) Inventory year: 2019

2) Population in the inventory year: 215

3) Emission factors
- ☑ IPCC (Intergovernmental Panel on Climate Change)
- ☐ LCA (Life Cycle Assessment)
- ☐ National/sub-national — Specify: _____ Source: _____

4) Emission reporting unit
- ☑ tonnes CO_2
- ☐ tonnes CO_2 equivalent

5) Methodological note

1000 chars left

A. Final energy consumption

ⓘ Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

ⓘ Please note that the following notation keys can be used in the table below: "NO" (not occuring), "IE" (included elsewhere), "NE" (not estimated) and "C" (confidential). More information in the Reporting Guidelines.

ⓘ Click on the [+/-] buttons on the left to expand or collapse. Hide rows as appropriate to your emission inventory.

Sector		FINAL ENERGY CONSUMPTION [MWh]																
				Fossil fuels								Renewable energies						
		Electricity	District heating and cooling	Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biogas	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities		**90,743**	**0**	**0**	**0**	**23,43**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**114,173**
	Municipal buildings, equipment/facilities	48,284	NE	NE	NE	23,43	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**71,714**
	Public lighting	42,459	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**42,459**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Tertiary (non municipal) buildings, equipment/facilities		**657,994**	**0**	**0**	**44,6862928**	**58,50449804**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**761,184791**
	Institutional buildings	657,994	0	0	44,6862928	58,50449804	0	0	0	0	0	0	0	0	0	0	0	**761,184791**
	Other	NE	0	o	NE	NE	0	0	0	0	0	0	0	0	0	0	0	**0**
Residential buildings		479,244	0	0	173,245903	327,7229282	0	0	0	0	0	0	0	0	0	0	0	**980,212831**
Industry	Non-ETS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	ETS (not recommended)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Buildings, equipment/facilities and industries not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**1227,981**	**0**	**0**	**217,932196**	**409,6574263**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1855,57062**
TRANSPORT																		
Municipal fleet		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Public transport		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Private and commercial transport		**0**	**0**	**0**	**0**	**0**	**2795,14853**	**200,68467**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2995,8332**
	Road	NE	NE	NE	NE	NE	2795,14853	200,68467	NE	NE	NE	NE	NE	NE	NE	NE	NE	**2995,8332**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local aviation	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Transport not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**0**	**0**	**0**	**0**	**0**	**2795,14853**	**200,68467**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2995,8332**
OTHER																		
Agriculture, Forestry, Fisheries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL		**1227,981**	**0**	**0**	**217,932196**	**409,6574263**	**2795,14853**	**200,68467**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4851,40382**

Covenant Key Sectors

B. Energy supply

ⓘ Hide sections or rows as appropriate to your emission inventory.

B1. Certified green electricity

Certified green electricity	Renewable electricity [MWh]	CO_2 / CO_2 eq. Emission factor [t/MWh]
Purchases Guarantees of Origins (within the municipality boundaries)	0	
Sales Guarantees of Origins (within the municipality boundaries)	0	

B2. Local/distributed electricity production (Renewable energy only)

Local renewable electricity plants	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO_2 / CO_2 eq. emissions [t]
Wind	0	0,000	0
Hydroelectric	0	0,000	0
Photovoltaics	0	0,000	0
Geothermal	0	0,000	0
Other	0	0,000	0
TOTAL	0		**0**

B3. Local/distributed electricity production

Local electricity production plants	Electricity produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other (ETS and large-scale plants > 20 MW not recommended)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

B4. Local heat/cold production

Local heat/cold production plants	Heat/cold produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
District heating (heat-only)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

C. CO_2 emissions

C1. Please insert the CO_2 emission factors adopted [t/MWh]:

ⓘ Click here to visualise fuel emission factors

Electricity		Heat/cold	Fossil fuels								Renewable energies					
National	Local		Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil	Biogas	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal
0,481	0,481		0,202	0,227	0,267	0,267	0,249									

C2. Please complete in case non-energy related sectors are included:

ⓘ Click on the [+/-] buttons on the left to expand or collapse.

Non-energy related sectors		CO_2 eq. emissions [t]	Activity data (tons)
Waste management		**22,27427283**	**0**
	Solid waste disposal	22,27427283	
	Biological Treatment of Solid Waste	NE	
	Incineration and Open Burning of Waste	NE	
	Other	NE	
		CO_2 eq. emissions [t]	Activity data (m3)
Wastewater treatment and discharge		NE	
Other non-energy related such as fugitive emissions		NE	

Emission Inventory Summary

ⓘ The emission inventory summary table is automatically generated in the online platform (*MyCovenant*).

Additional comments

500 chars left

Climate Change Risks and Vulnerabilities

HOME

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**	High	High	Increase	Increase	Long-therm
☑	**Extreme cold**	High	High	Increase	Increase	Long-therm
☑	**Heavy precipitation**	High	High	Increase	Increase	Long-therm
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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	High	Increase	Increase	Long-therm
	Flash / surface flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	River flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Low	Low	No change	No change	Long-therm
☑	**Storms**	Low	Low	No change	No change	Long-therm
	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**	High	High	Increase	Increase	Short-therm
	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**	Low	Low	No change	No change	Long-therm
	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**	Buildings	High	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑	**Extreme heat**	Health	High	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☑	**Extreme heat**	Energy	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☑	**Extreme heat**	Transport	Moderate	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☑	**Extreme heat**	Tourism	Low	% change in tourist flows / tourism activities

☐	Extreme cold	Buildings	High	Number of % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☐	Extreme cold	Health	High	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☐	Heavy precipitation	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Heavy precipitation	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Heavy precipitation	Tourism	Low	% change in tourist flows / tourism activities
☐	Floods & sea level rise	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Floods & sea level rise	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Floods & sea level rise	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Water	Low	[Choose from Annex 3 or write down your own]
☐	Droughts & water scarcity	Agriculture & forestry	Low	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Droughts & water scarcity	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☐	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	Agriculture & forestry	Low	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Wild fires	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Water**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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**	[Choose from the list above]
☐	**Extreme cold**	[Choose from the list above]
☐	**Heavy precipitation**	[Choose from the list above]
☐	**Floods & sea level rise**	[Choose from the list above]
☐	**Droughts & water scarcity**	[Choose from the list above]
☐	**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

Action Plan

HOME

1) Action plan(s) and other related documents

1) Action plan(s)

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

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Sustainable Energy and Climate Action Plans (PAESC) Les Guilleries	The "Covenant of Mayors for Local Sustainable Energy" is the European Commission's first ambitious initiative to tackle climate change at the local	jul-22	Diputació de Girona and town halls	Integrated climate plan (ad	Equal to municipality's b	Catalan	☑
		[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?
SEAP monitoring report for all study municipalities	This report corresponds to the assessment of the actions implemented in the municipalities as well as the emissions monitoring inventory.	2016	External consultants	Emission inventory	Greater than municipality's bou	Data of the municipalities and the administration	Catalan	☑
IRE emissions reference inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑
ISE Emission Tracking Inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑

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				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	Renewable energy production	CO_2 reduction
						MWh/a	MWh/a	t CO_2/a
Municipal buildings, equipment/facilities	17	76%			24%	9,54		54,04
Tertiary (non municipal) buildings, equipment/facilities								
Residential buildings	4				100%	32,01		15,4
Industry								
Transport	11	45%			55%	568,25		333,65
Waste	3	100%						13,52
Local Electricity Production	7				100%	43,59	454,68	264,61
Local Heat/Cold Production	1				100%	208,83		55,76
Others	1				100%			7
TOTAL	44					862,22	454,68	743,98

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				100%
Transport					
Energy					
Water	7				100%
Waste					
Land Use Planning	3				100%
Agriculture & Forestry	2				100%
Environment & Biodiversity					
Health	2				100%
Civil Protection & Emergency	2				100%
Tourism	2				100%
Education	1				100%
ICT (Information & communication technologies)					
Other	1				100%
TOTAL	22				

Key Actions

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promoting sustainable mobility in urban commuting

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: and raise awareness by reducing the avoidable traffic of motor vehicles through the interior of the municipality and at the same time mak

691 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

9) Total implementation costs: 700.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Transport

ⓘ 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]	shift to walking & c	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	Other	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts

Energy savings:	165,48	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	79,6	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Create local renewable energy communities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: council will create a local community of renewable energy that will start in municipal facilities with the aim of connecting the whole mur

844 characters left

6) Implementation timeframe

Start: 2022
End: 2030

7) Implementation status: Ongoing

8) Stakeholders involved: Citizens ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 150.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:	43,59	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	20,97	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Encourage the installation of photovoltaic solar energy in the residential and service sectors

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: Encourage the installation of photovoltaic solar energy in the residential sector and the services sector reporting on subsidies

872 characters left

6) Implementation timeframe

Start: 2023
End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Citizens ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 285.600 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

	Buildings	Public lighting	Transport	Industry	Electricity Production	Heat/cold Production	Other
Tool / Area of intervention:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	Photovoltaics	[drop-down]	aste & wastewater management
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	ants and subsic	[drop-down]	Other

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:	443,65	MWh/a
CO_2 reduction:	213,40	t CO2/a

12) Vulnerable population group(s) targeted: All

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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description: 1000 characters left

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

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

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]

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

HOME

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: Collect and reuse rainwater. Deposits in public facilities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: stallation of water tanks on roofs, gardens, basements or other municipal spaces to collect water and reuse it in the facilities, for irrigatic

803 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 98.700 €

Source of funding: [Drop-down]

Investment costs: €

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]

	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
- 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] | [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

19) Sector(s): Water

20) Outcome(s) reached

Description: to collect and reuse rainwater in public facilities

948 characters left

Related indicator: m3 rainwater collected and reused | | m3

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 772.000 €

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]

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

HOME

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: Optimize, review and improve alert and communication systems with the population

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: ng and improving existing systems for alerting the public in the event of a risk or emergency, in order to implement self-protection meas

781 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

9) Total implementation costs: 1761 €

Source of funding:	[Drop-down]	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Civil protection & emergency

20) Outcome(s) reached

Description:	to create alert and communication systems with the population		
Related indicator:	nber of warning and communication systems with the popula		

939 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 2.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Training plan aimed at elected officials and municipal workers. Creation of the "Municipal Commission for Adaptation to Climate Change"

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: s proposed to carry out training and awareness plan for elected officials and the creation of a "Municipal Commission for adaptation an

613 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 25.704 €

Source of funding:	Regional funds and programmes	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Education

20) Outcome(s) reached

Description:	offer training to all municipal workers		
Related indicator:	number of municipal workers who have received the training		

961 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 1.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Create an itinerant energy advice point

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: y advice point that will provide information on energy and water at home, aimed al all citizens. The fact that the service is aimed at all c

620 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

9) Total implementation costs: 60.000 €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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] [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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

21) Vulnerable population group(s) targeted: [Drop-down]
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: All
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 **(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

3) Origin of the action [Drop-down]

4) Responsible body

5) Short description

1000 characters left

6) Implementation timeframe

Start: [Drop-Down]
End: [Drop-Down]

7) Implementation status [Drop-Down]

8) Stakeholders involved [Drop-down]

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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 [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: [numerial 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] [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]

ANNEX 1 - Fuel Emission Factors Database

HOME

		Fossil fuels												Renewable energies															
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-Bitominous 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 [a]														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO_2/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 CO_2 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 CO_2/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,371	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 CO_2 eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,375	0,393	0,380	0,385	0,174	0,392	0,182 [d]		0,206 [e]		0,156 [f]		n.a.	0,106	0,013	0,416 [g]	0,184	n.a	n.a.	n.a. [h]

[s] if sustainability criteria during production are fulfilled
[ns] if sustainability criteria during production are not fulfilled

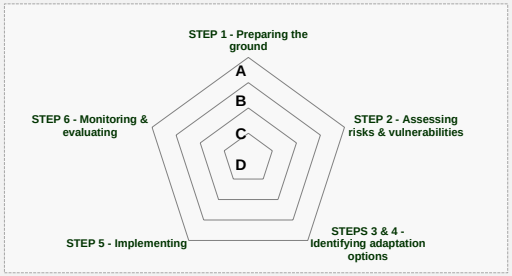
a. IPCC emission factor should be reported zero if the biofuels/biomass meet sustainability criteria; fossil fuel emission factors to be used if biofuels are unsustainable.(s) sustainable, (ns) not sustainable
b. Taking into consideration also the CH4 and the N2O emissions from combustion in stationary 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 an own emission factor if the circumstances are different. These 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 improvements 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 %



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 respondibilities assigned			
	Horizontal (i.e. accross sectoral departments) coordination mechanisms in place			
	Vertical (i.e. accross 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

ANNEX 3 - Indicators for Adaptation

HOME

ⓘ 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.

ⓘ Pease 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 km^2	
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)

Covenant of Mayors - Europe
SECAP template | Working document

The present template is a working document only. The official reporting to the Covenant of Mayors initiative shall be done using the online platform "*MyCovenant*".

Do not use this file for offical submission

SECAP template de Massanes

Strategy

HOME

Strategy

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

1000 chars left

2) Target(s) and commitment(s)

Mitigation					
CO_2 / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2005	absolute	
55%	%	2030	2005	absolute	
		2050	[drop -down]	[drop -down]	

ⓘ 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.

MONITORING

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
		[drop -down]	[drop -down]	
		[drop -down]	[drop -down]	

ⓘ 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.

1000 chars left

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	☐	☐		☐	☐	
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☐		☐	☐	
External consultant	☐	☐		☐	☐	
Other	☐	☐		☐	☐	
Total			0	Total		0

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

1000 chars left

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	☐		[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
External stakeholders at local level	☐	*Academia; Business & private sector; trade-union; citizens; NGO & civil society; Education sector; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
Stakeholders at other levels of governance	☐	*National government and/or agency(ies); Sub-national governments(s) and/or agencies; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*

ⓘ Select x for the ones that are applicable.

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

700 chars left

6) Budget

MONITORING

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)		Total (€)	Mitigation (%)	
	Adaptation (%)			Adaptation (%)	
Budget period					
From:		2012			
To:		2030			

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

ⓘ depending on signatories' selected time horizon (2020/2020)

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

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

700 chars left

7) Monitoring process

1000 chars left

Emission Inventory

HOME

Emission Inventory

ⓘ To be filled in only if your local authority is committed to mitigation.

ⓘ Copy as many "emission inventory" tabs as necessary. Minimun 1 "baseline emission inventory" (BEI) at the 1st reporting stage, minimum 1 "monitoring emission inventory" (MEI) every 4 years.

1) Inventory year: 2019

2) Population in the inventory year: 761

3) Emission factors
- ☑ IPCC (Intergovernmental Panel on Climate Change)
- ☐ LCA (Life Cycle Assessment)
- ☐ National/sub-national — Specify: ____ Source: ____

4) Emission reporting unit
- ☑ tonnes CO_2
- ☐ tonnes CO_2 equivalent

5) Methodological note

1000 chars left

A. Final energy consumption

ⓘ Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

ⓘ Please note that the following notation keys can be used in the table below: "NO" (not occuring), "IE" (included elsewhere), "NE" (not estimated) and "C" (confidential). More information in the Reporting Guidelines.

ⓘ Click on the [+/-] buttons on the left to expand or collapse. Hide rows as appropriate to your emission inventory.

Sector		FINAL ENERGY CONSUMPTION [MWh]																
				Fossil fuels								Renewable energies						
		Electricity	District heating and cooling	Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biogas	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities		**174,759**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	186,759
	Municipal buildings, equipment/facilities	127,359	NE	0	0	12	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**139,359**
	Public lighting	47,4	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**47,4**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Tertiary (non municipal) buildings, equipment/facilities		**816,726**	**0**	**0**	**19,2114945**	**25,724574**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	861,662069
	Institutional buildings	816,726	NE	0	19,2114945	25,724574	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**861,662069**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Residential buildings		1225,051	0	64,631	304,609477	356,3640534	0	0	0	0	0	0	0	0	0	0	0	1950,65553
Industry	Non-ETS	10019,094	0	41686,49	0	0	0	0	0	0	0	0	0	0	0	0	0	**51705,584**
	ETS (not recommended)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Buildings, equipment/facilities and industries not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		12235,63	0	41751,121	323,820972	394,0886274	0	0	0	0	0	0	0	0	0	0	0	54704,6606
TRANSPORT																		
Municipal fleet		**0**	**0**	**0**	**0**	**0**	**25,0512**	**2,63856**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	27,68976
	Road	NE	NE	NE	NE	NE	25,0512	2,63856	NE	NE	NE	NE	NE	NE	NE	NE	NE	**27,68976**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Public transport		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Private and commercial transport		**6,16**	**0**	**0**	**0**	**0**	**11669,9459**	**915,61201**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	12591,718
	Road	6,16	NE	NE	NE	NE	11669,9459	915,61201	NE	NE	NE	NE	NE	NE	NE	NE	NE	**12591,718**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local aviation	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Transport not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		6,16	0	0	0	0	11694,9971	918,25057	0	0	0	0	0	0	0	0	0	12619,4077
OTHER																		
Agriculture, Forestry, Fisheries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		12241,79	0	41751,121	323,820972	394,0886274	11694,9971	918,25057	0	0	0	0	0	0	0	0	0	67324,0683

Covenant Key Sectors

B. Energy supply

ⓘ Hide sections or rows as appropriate to your emission inventory.

B1. Certified green electricity

Certified green electricity	Renewable electricity [MWh]	CO_2 / CO_2 eq. Emission factor [t/MWh]
Purchases Guarantees of Origins (within the municipality boundaries)	0	
Sales Guarantees of Origins (within the municipality boundaries)	0	

B2. Local/distributed electricity production (Renewable energy only)

Local renewable electricity plants	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO_2 / CO_2 eq. emissions [t]
Wind	0	0,000	0
Hydroelectric	0	0,000	0
Photovoltaics	0	0,000	0
Geothermal	0	0,000	0
Other	0	0,000	0
TOTAL	0		**0**

B3. Local/distributed electricity production

Local electricity production plants	Electricity produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other (ETS and large-scale plants > 20 MW not recommended)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B4. Local heat/cold production

Local heat/cold production plants	Heat/cold produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
District heating (heat-only)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

C. CO_2 emissions

C1. Please insert the CO_2 emission factors adopted [t/MWh]:

ⓘ Click here to visualise fuel emission factors

Electricity		Heat/cold	Fossil fuels								Renewable energies					
National	Local		Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil	Biogas	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal
0,481	0,481		0,202	0,227	0,267	0,267	0,249									

C2. Please complete in case non-energy related sectors are included:

ⓘ Click on the [+/-] buttons on the left to expand or collapse.

Non-energy related sectors		CO_2 eq. emissions [t]	Activity data (tons)
Waste management		**361,5223853**	**0**
	Solid waste disposal	361,5223853	
	Biological Treatment of Solid Waste	NE	
	Incineration and Open Burning of Waste	NE	
	Other	NE	
		CO_2 eq. emissions [t]	Activity data (m3)
Wastewater treatment and discharge		NE	
Other non-energy related such as fugitive emissions		NE	

Emission Inventory Summary

ⓘ The emission inventory summary table is automatically generated in the online platform (*MyCovenant*).

Additional comments

500 chars left

Climate Change Risks and Vulnerabilities

HOME

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**	High	High	Increase	Increase	Long-therm
☑	**Extreme cold**	Moderate	Moderate	Increase	Increase	Long-therm
☑	**Heavy precipitation**	Moderate	Moderate	Increase	Increase	Long-therm
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Moderate	Moderate	Increase	Increase	Long-therm
	Flash / surface flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	River flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Moderate	Moderate	Increase	Increase	Long-therm
☑	**Storms**	High	High	Increase	Increase	Long-therm
	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**	Low	Low	No change	No change	Short-therm
	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**	Moderate	Moderate	Increase	Increase	Long-therm
	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**	Buildings	Moderate	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑	**Extreme heat**	Health	Low	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☑	**Extreme heat**	Energy	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☑	**Extreme heat**	Transport	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☑	**Extreme heat**	Tourism	Low	% change in tourist flows / tourism activities

☐	Extreme cold	Buildings	Moderate	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☐	Extreme cold	Health	Low	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☐	Heavy precipitation	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Heavy precipitation	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Heavy precipitation	Tourism	Low	% change in tourist flows / tourism activities
☐	Floods & sea level rise	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Floods & sea level rise	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Floods & sea level rise	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Water	Low	[Choose from Annex 3 or write down your own]
☐	Droughts & water scarcity	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Droughts & water scarcity	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☐	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	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Wild fires	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Water**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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**	[Choose from the list above]
☐	**Extreme cold**	[Choose from the list above]
☐	**Heavy precipitation**	[Choose from the list above]
☐	**Floods & sea level rise**	[Choose from the list above]
☐	**Droughts & water scarcity**	[Choose from the list above]
☐	**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

Action Plan

HOME

1) Action plan(s) and other related documents

1) Action plan(s)

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

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Sustainable Energy and Climate Action Plans (PAESC) Les Guilleries	The "Covenant of Mayors for Local Sustainable Energy" is the European Commission's first ambitious initiative to tackle climate change at the local	jul-22	Diputació de Girona and town halls	Integrated climate plan (ad	Equal to municipality's b	Catalan	☑
		[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?
SEAP monitoring report for all study municipalities	This report corresponds to the assessment of the actions implemented in the municipalities as well as the emissions monitoring inventory.	2016	External consultants	Emission inventory	Greater than municipality's bou	Data of the municipalities and the administration	Catalan	☑
IRE emissions reference inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑
ISE Emission Tracking Inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑

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				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	Renewable energy production	CO_2 reduction
						MWh/a	MWh/a	t CO_2/a
Municipal buildings, equipment/facilities	14	64%			36%	170,08		270,8
Tertiary (non municipal) buildings, equipment/facilities	1				100%	11,14		5,36
Residential buildings	7	14%			86%	522,21		347,67
Industry								
Transport	6				100%	2572,39		1123,09
Waste	4	75%			25%	75,15		92,29
Local Electricity Production	8				100%	24,34	7124,07	3459,34
Local Heat/Cold Production	3	33%			67%	394,3		105,28
Others	3	67%			33%			98,38
TOTAL	46					3769,61	7124,07	5502,21

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				100%
Transport					
Energy					
Water	8				100%
Waste					
Land Use Planning	3				100%
Agriculture & Forestry	2				100%
Environment & Biodiversity					
Health	2				100%
Civil Protection & Emergency	2				100%
Tourism	2				100%
Education	1				100%
ICT (Information & communication technologies)					
Other	1				100%
TOTAL	23				

Key Actions

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promoting sustainable mobility in urban commuting

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: and raise awareness by reducing the avoidable traffic of motor vehicles through the interior of the municipality and at the same time mak

691 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

9) Total implementation costs: 700.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Transport

ⓘ 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]	shift to walking & c	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	Other	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts

Energy savings:	146,79	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	70,61	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promote a citizen renewable energy installation

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: It is proposed to promote a small solar park, with citizen participation and funding.

915 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

9) Total implementation costs: 50.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:	2700	MWh/a
CO_2 reduction:	684,48	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Create local renewable energy communities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: council will create a local community of renewable energy that will start in municipal facilities with the aim of connecting the whole mur

844 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

9) Total implementation costs: 150.000 €

Source of funding: [Drop-down]

Investment costs: €

Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:	24,34	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	11,71	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

Related indicator: [Please specify] | [numerial value] | [Unit]

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

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]

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

HOME

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: Collect and reuse rainwater. Deposits in public facilities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: stallation of water tanks on roofs, gardens, basements or other municipal spaces to collect water and reuse it in the facilities, for irrigatic

803 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 98.700 €

Source of funding: [Drop-down]

Investment costs: €

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]

	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
- 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] | [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

19) Sector(s): Water

20) Outcome(s) reached

Description: to collect and reuse rainwater in public facilities

948 characters left

Related indicator: m3 rainwater collected and reused | | m3

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 772.000 €

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]

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

HOME

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: Optimize, review and improve alert and communication systems with the population

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: ng and improving existing systems for alerting the public in the event of a risk or emergency, in order to implement self-protection meas

781 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

9) Total implementation costs: 1761 €

Source of funding:	[Drop-down]	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Civil protection & emergency

20) Outcome(s) reached

Description:	to create alert and communication systems with the population		
Related indicator:	nber of warning and communication systems with the popula		

939 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 2.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Training plan aimed at elected officials and municipal workers. Creation of the "Municipal Commission for Adaptation to Climate Change"

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: s proposed to carry out training and awareness plan for elected officials and the creation of a "Municipal Commission for adaptation an

613 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 25.704 €

Source of funding:	Regional funds and programmes	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Education

20) Outcome(s) reached

Description:	offer training to all municipal workers		
Related indicator:	number of municipal workers who have received the training		

961 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 1.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Create an itinerant energy advice point

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: y advice point that will provide information on energy and water at home, aimed al all citizens. The fact that the service is aimed at all c

620 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

9) Total implementation costs: 60.000 €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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] [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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

21) Vulnerable population group(s) targeted: [Drop-down]
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: All
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 **(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

3) Origin of the action [Drop-down]

4) Responsible body

5) Short description

1000 characters left

6) Implementation timeframe

Start: [Drop-Down]
End: [Drop-Down]

7) Implementation status [Drop-Down]

8) Stakeholders involved [Drop-down]

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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 [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: [numerial 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] [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]

ANNEX 1 - Fuel Emission Factors Database

HOME

		Fossil fuels												Renewable energies															
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-Bitominous 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 [a]														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO_2/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 CO_2 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 CO_2/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,371	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 CO_2 eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,375	0,393	0,380	0,385	0,174	0,392	0,182 [d]		0,206 [e]		0,156 [f]		n.a.	0,106	0,013	0,416 [g]	0,184	n.a	n.a.	n.a. [h]

[s] if sustainability criteria during production are fulfilled
[ns] if sustainability criteria during production are not fulfilled

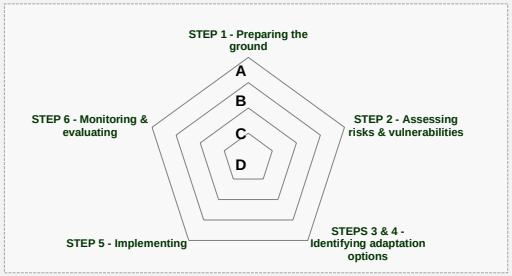
a. IPCC emission factor should be reported zero if the biofuels/biomass meet sustainability criteria; fossil fuel emission factors to be used if biofuels are unsustainable.(s) sustainable, (ns) not sustainable
b. Taking into consideration also the CH4 and the N2O emissions from combustion in stationary 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 an own emission factor if the circumstances are different. These 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 improvements 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 %



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 respondibilities assigned			
	Horizontal (i.e. accross sectoral departments) coordination mechanisms in place			
	Vertical (i.e. accross 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

ANNEX 3 - Indicators for Adaptation

HOME

ⓘ 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.

ⓘ Pease 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 km^2	
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)

Covenant of Mayors - Europe
SECAP template | Working document

The present template is a working document only. The official reporting to the Covenant of Mayors initiative shall be done using the online platform "*MyCovenant*".

Do not use this file for offical submission

SECAP template de Sant Hilari Sacalm

Strategy

HOME

Strategy

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

1000 chars left

2) Target(s) and commitment(s)

Mitigation					
CO_2 / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2005	absolute	
55%	%	2030	2005	absolute	
		2050	[drop -down]	[drop -down]	

ⓘ 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.

MONITORING

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
		[drop -down]	[drop -down]	
		[drop -down]	[drop -down]	

ⓘ 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.

1000 chars left

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	☐	☐		☐	☐	
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☐		☐	☐	
External consultant	☐	☐		☐	☐	
Other	☐	☐		☐	☐	
Total			0	Total		0

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

1000 chars left

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	☐		[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
External stakeholders at local level	☐	*Academia; Business & private sector; trade-union; citizens; NGO & civil society; Education sector; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
Stakeholders at other levels of governance	☐	*National government and/or agency(ies); Sub-national governments(s) and/or agencies; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*

ⓘ Select x for the ones that are applicable.

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

700 chars left

6) Budget

MONITORING

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)		Total (€)	Mitigation (%)	
	Adaptation (%)			Adaptation (%)	
Budget period					
From:		2012			
To:		2030			

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

ⓘ depending on signatories' selected time horizon (2020/2020)

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

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

700 chars left

7) Monitoring process

1000 chars left

Emission Inventory

HOME

Emission Inventory

ⓘ To be filled in only if your local authority is committed to mitigation.

ⓘ Copy as many "emission inventory" tabs as necessary. Minimun 1 "baseline emission inventory" (BEI) at the 1st reporting stage, minimum 1 "monitoring emission inventory" (MEI) every 4 years.

1) Inventory year: 2019

2) Population in the inventory year: 5627

3) Emission factors
- ☑ IPCC (Intergovernmental Panel on Climate Change)
- ☐ LCA (Life Cycle Assessment)
- ☐ National/sub-national — Specify: ____ Source: ____

4) Emission reporting unit
- ☑ tonnes CO_2
- ☐ tonnes CO_2 equivalent

5) Methodological note

1000 chars left

A. Final energy consumption

ⓘ Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

ⓘ Please note that the following notation keys can be used in the table below: "NO" (not occuring), "IE" (included elsewhere), "NE" (not estimated) and "C" (confidential). More information in the Reporting Guidelines.

ⓘ Click on the [+/-] buttons on the left to expand or collapse. Hide rows as appropriate to your emission inventory.

Sector		FINAL ENERGY CONSUMPTION [MWh]																
				Fossil fuels								Renewable energies						
		Electricity	District heating and cooling	Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biogas	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities		**1467,541**	**0**	**0**	**522,111695**	**110**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**678,586**	**0**	**0**	**2778,2387**
	Municipal buildings, equipment/facilities	1256,328	NE	0	522,111695	110	NE	NE	NE	NE	NE	NE	NE	NE	678,586	NE	NE	**2567,0257**
	Public lighting	211,213	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**211,213**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Tertiary (non municipal) buildings, equipment/facilities		**6834,915**	**0**	**0**	**996,611104**	**1396,429955**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9227,95606**
	Institutional buildings	6834,915	NE	0	996,611104	1396,429955	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**9227,95606**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Residential buildings		6301,847	0	0	2134,3637	6396,993503	0	0	0	0	0	0	0	0	0	0	0	**14833,2042**
Industry	Non-ETS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	ETS (not recommended)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Buildings, equipment/facilities and industries not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**14604,303**	**0**	**0**	**3653,0865**	**7903,423458**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**678,586**	**0**	**0**	**26839,399**
TRANSPORT																		
Municipal fleet		**0**	**0**	**0**	**0**	**0**	**4,4006**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,4006**
	Road	NE	NE	NE	NE	NE	4,4006	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**4,4006**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Public transport		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Private and commercial transport		**12,98**	**0**	**0**	**0**	**0**	**66563,6727**	**5998,8905**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72575,5432**
	Road	12,98	NE	NE	NE	NE	66563,6727	5998,8905	NE	NE	NE	NE	NE	NE	NE	NE	NE	**72575,5432**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local aviation	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Transport not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**12,98**	**0**	**0**	**0**	**0**	**66568,0733**	**5998,8905**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72579,9438**
OTHER																		
Agriculture, Forestry, Fisheries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL		**14617,283**	**0**	**0**	**3653,0865**	**7903,423458**	**66568,0733**	**5998,8905**	**0**	**0**	**0**	**0**	**0**	**0**	**678,586**	**0**	**0**	**99419,3428**

Covenant Key Sectors

B. Energy supply

ⓘ Hide sections or rows as appropriate to your emission inventory.

B1. Certified green electricity

Certified green electricity	Renewable electricity [MWh]	CO_2 / CO_2 eq. Emission factor [t/MWh]
Purchases Guarantees of Origins (within the municipality boundaries)	NE	
Sales Guarantees of Origins (within the municipality boundaries)	NE	

B2. Local/distributed electricity production (Renewable energy only)

Local renewable electricity plants	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO_2 / CO_2 eq. emissions [t]
Wind	0	0,000	0
Hydroelectric	0	0,312	0
Photovoltaics	332,698	0,468	155,8500752
Geothermal	0	0,000	0
Other	0	0,000	0
TOTAL	**0**		**155,8500752**

B3. Local/distributed electricity production

Local electricity production plants	Electricity produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other (ETS and large-scale plants > 20 MW not recommended)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

B4. Local heat/cold production

Local heat/cold production plants	Heat/cold produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
District heating (heat-only)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

C. CO_2 emissions

C1. Please insert the CO_2 emission factors adopted [t/MWh]:

ⓘ Click here to visualise fuel emission factors

Electricity		Heat/cold	Fossil fuels								Renewable energies					
National	Local		Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil	Biogas	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal
0,481	0,481		0,202	0,227	0,267	0,267	0,249									

C2. Please complete in case non-energy related sectors are included:

ⓘ Click on the [+/-] buttons on the left to expand or collapse.

Non-energy related sectors		CO_2 eq. emissions [t]	Activity data (tons)
Waste management		**882,8803918**	**0**
	Solid waste disposal	882,8803918	
	Biological Treatment of Solid Waste	NE	
	Incineration and Open Burning of Waste	NE	
	Other	NE	
		CO_2 eq. emissions [t]	Activity data (m3)
Wastewater treatment and discharge		NE	
Other non-energy related such as fugitive emissions		NE	

Emission Inventory Summary

ⓘ The emission inventory summary table is automatically generated in the online platform (*MyCovenant*).

Additional comments

500 chars left

Climate Change Risks and Vulnerabilities

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**	High	High	Increase	Increase	Long-therm
☑	**Extreme cold**	High	High	Increase	Increase	Long-therm
☑	**Heavy precipitation**	High	High	Increase	Increase	Long-therm
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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	High	Increase	Increase	Long-therm
	Flash / surface flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	River flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Low	Low	No change	No change	Long-therm
☑	**Storms**	High	High	Increase	Increase	Long-therm
	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**	Low	Low	No change	No change	Short-therm
	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**	Low	Low	No change	No change	Long-therm
	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**	Buildings	High	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑	**Extreme heat**	Health	High	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☑	**Extreme heat**	Energy	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☑	**Extreme heat**	Transport	Moderate	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☑	**Extreme heat**	Tourism	Low	% change in tourist flows / tourism activities

☐	Extreme cold	Buildings	High	Number of % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☐	Extreme cold	Health	High	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☐	Heavy precipitation	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Heavy precipitation	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Heavy precipitation	Tourism	Low	% change in tourist flows / tourism activities
☐	Floods & sea level rise	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐	Floods & sea level rise	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	Floods & sea level rise	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Water	Low	[Choose from Annex 3 or write down your own]
☐	Droughts & water scarcity	Agriculture & forestry	Low	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Droughts & water scarcity	Tourism	Low	% change in tourist flows / tourism activities
☐	Droughts & water scarcity	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☐	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	Agriculture & forestry	Low	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
☐	Wild fires	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
☐	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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Water**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**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**	[Choose from the list above]
☐	**Extreme cold**	[Choose from the list above]
☐	**Heavy precipitation**	[Choose from the list above]
☐	**Floods & sea level rise**	[Choose from the list above]
☐	**Droughts & water scarcity**	[Choose from the list above]
☐	**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

Action Plan

HOME

1) Action plan(s) and other related documents

1) Action plan(s)

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

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Sustainable Energy and Climate Action Plans (PAESC) Les Guilleries	The "Covenant of Mayors for Local Sustainable Energy" is the European Commission's first ambitious initiative to tackle climate change at the local	jul-22	Diputació de Girona and town halls	Integrated climate plan (ad	Equal to municipality's b	Catalan	☑
		[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?
SEAP monitoring report for all study municipalities	This report corresponds to the assessment of the actions implemented in the municipalities as well as the emissions monitoring inventory.	2016	External consultants	Emission inventory	Greater than municipality's bou	Data of the municipalities and the administration	Catalan	☑
IRE emissions reference inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑
ISE Emission Tracking Inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑

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				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	Renewable energy production	CO_2 reduction
						MWh/a	MWh/a	t CO_2/a
Municipal buildings, equipment/facilities	30	90%			10%	806,53		978,04
Tertiary (non municipal) buildings, equipment/facilities	4	50%			50%	333,69		276,64
Residential buildings	6	17%			83%	3930,19		2090,43
Industry								
Transport	9	22%			78%	9368,37		3714,78
Waste	5	80%			20%	601,89		861,84
Local Electricity Production	10	10%			90%	185,84	6243	7853,8
Local Heat/Cold Production	4	50%			50%	5842,69	10,22	1679,12
Others	7	86%			14%			991,69
TOTAL	75					21069,2	6253,22	18446,34

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				100%
Transport					
Energy					
Water	6				100%
Waste					
Land Use Planning	3				100%
Agriculture & Forestry	2				100%
Environment & Biodiversity					
Health	2				100%
Civil Protection & Emergency	2				100%
Tourism	2				100%
Education	1				100%
ICT (Information & communication technologies)					
Other	1				100%
TOTAL	21				

Key Actions

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promoting sustainable mobility in urban commuting

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: and raise awareness by reducing the avoidable traffic of motor vehicles through the interior of the municipality and at the same time mak

691 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

9) Total implementation costs: 700.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Transport

ⓘ 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]	shift to walking & c	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	Other	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts

Energy savings:	3629,95	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	192,84	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promote a citizen renewable energy installation

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: It is proposed to promote a small solar park, with citizen participation and funding.

915 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

9) Total implementation costs: 50.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:	2700	MWh/a
CO_2 reduction:	1.242,20	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Create local renewable energy communities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: council will create a local community of renewable energy that will start in municipal facilities with the aim of connecting the whole mur

844 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

9) Total implementation costs: 150.000 €

Source of funding:	[Drop-down]	
Investment costs:		€
Non-investment costs:		€

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:	185,84	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	89,39	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description: 1000 characters left

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

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

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]

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

HOME

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: Collect and reuse rainwater. Deposits in public facilities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: stallation of water tanks on roofs, gardens, basements or other municipal spaces to collect water and reuse it in the facilities, for irrigatic

803 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 98.700 €

Source of funding: [Drop-down]

Investment costs: €

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]

	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
- 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] | [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

19) Sector(s): Water

20) Outcome(s) reached

Description: to collect and reuse rainwater in public facilities

948 characters left

Related indicator: m3 rainwater collected and reused | | m3

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 772.000 €

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]

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

HOME

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: Optimize, review and improve alert and communication systems with the population

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: ng and improving existing systems for alerting the public in the event of a risk or emergency, in order to implement self-protection meas

781 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

9) Total implementation costs: 1761 €

Source of funding:	[Drop-down]	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Civil protection & emergency

20) Outcome(s) reached

Description:	to create alert and communication systems with the population		
Related indicator:	nber of warning and communication systems with the popula		

939 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 2.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Training plan aimed at elected officials and municipal workers. Creation of the "Municipal Commission for Adaptation to Climate Change"

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: s proposed to carry out training and awareness plan for elected officials and the creation of a "Municipal Commission for adaptation an

613 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 25.704 €

Source of funding:	Regional funds and programmes	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Education

20) Outcome(s) reached

Description:	offer training to all municipal workers		
Related indicator:	number of municipal workers who have received the training		

961 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 1.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Create an itinerant energy advice point

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: y advice point that will provide information on energy and water at home, aimed al all citizens. The fact that the service is aimed at all c

620 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

9) Total implementation costs: 60.000 €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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] [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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

21) Vulnerable population group(s) targeted: [Drop-down]
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: All
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 **(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

3) Origin of the action [Drop-down]

4) Responsible body

5) Short description

1000 characters left

6) Implementation timeframe

Start: [Drop-Down]
End: [Drop-Down]

7) Implementation status [Drop-Down]

8) Stakeholders involved [Drop-down]

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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 [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: [numerial 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] [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]

ANNEX 1 - Fuel Emission Factors Database

HOME

		Fossil fuels												Renewable energies															
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-Bitominous 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 [a]														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO_2/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 CO_2 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 CO_2/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,371	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 CO_2 eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,375	0,393	0,380	0,385	0,174	0,392	0,182 [d]		0,206 [e]		0,156 [f]		n.a.	0,106	0,013	0,416 [g]	0,184	n.a	n.a.	n.a. [h]

[s] if sustainability criteria during production are fulfilled
[ns] if sustainability criteria during production are not fulfilled

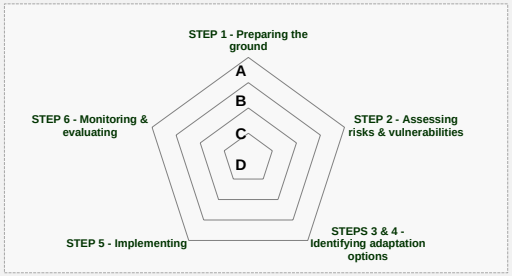
a. IPCC emission factor should be reported zero if the biofuels/biomass meet sustainability criteria; fossil fuel emission factors to be used if biofuels are unsustainable.(s) sustainable, (ns) not sustainable
b. Taking into consideration also the CH4 and the N2O emissions from combustion in stationary 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 an own emission factor if the circumstances are different. These 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 improvements 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 %



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 respondibilities assigned			
	Horizontal (i.e. accross sectoral departments) coordination mechanisms in place			
	Vertical (i.e. accross 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

ANNEX 3 - Indicators for Adaptation

HOME

ⓘ 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.

ⓘ Pease 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 km^2	
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)

Covenant of Mayors - Europe
SECAP template | Working document

The present template is a working document only. The official reporting to the Covenant of Mayors initiative shall be done using the online platform "*MyCovenant*".

Do not use this file for offical submission

SECAP template de Santa Coloma de Farners

Strategy

HOME

Strategy

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

1000 chars left

2) Target(s) and commitment(s)

Mitigation					
CO_2 / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2005	absolute	
55%	%	2030	2005	absolute	
		2050	[drop -down]	[drop -down]	

ⓘ 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.

MONITORING

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
		[drop -down]	[drop -down]	
		[drop -down]	[drop -down]	

ⓘ 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.

1000 chars left

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	☐	☐		☐	☐	
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☐		☐	☐	
External consultant	☐	☐		☐	☐	
Other	☐	☐		☐	☐	
Total			0	Total		0

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

1000 chars left

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	☐		[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
External stakeholders at local level	☐	*Academia; Business & private sector; trade-union; citizens; NGO & civil society; Education sector; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
Stakeholders at other levels of governance	☐	*National government and/or agency(ies); Sub-national governments(s) and/or agencies; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*

ⓘ Select x for the ones that are applicable.

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

700 chars left

6) Budget

MONITORING

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)		Total (€)	Mitigation (%)	
	Adaptation (%)			Adaptation (%)	
Budget period					
From:		2012			
To:		2030			

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

ⓘ depending on signatories' selected time horizon (2020/2020)

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

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

700 chars left

7) Monitoring process

1000 chars left

Emission Inventory

HOME

Emission Inventory

ⓘ To be filled in only if your local authority is committed to mitigation.

ⓘ Copy as many "emission inventory" tabs as necessary. Minimun 1 "baseline emission inventory" (BEI) at the 1st reporting stage, minimum 1 "monitoring emission inventory" (MEI) every 4 years.

1) Inventory year: 2019

2) Population in the inventory year: 13143

3) Emission factors
- ☑ IPCC (Intergovernmental Panel on Climate Change)
- ☐ LCA (Life Cycle Assessment)
- ☐ National/sub-national — Specify: ____ Source: ____

4) Emission reporting unit
- ☑ tonnes CO_2
- ☐ tonnes CO_2 equivalent

5) Methodological note

1000 chars left

A. Final energy consumption

ⓘ Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

ⓘ Please note that the following notation keys can be used in the table below: "NO" (not occuring), "IE" (included elsewhere), "NE" (not estimated) and "C" (confidential). More information in the Reporting Guidelines.

ⓘ Click on the [+/-] buttons on the left to expand or collapse. Hide rows as appropriate to your emission inventory.

Sector		FINAL ENERGY CONSUMPTION [MWh]																
				Fossil fuels								Renewable energies						
		Electricity	District heating and cooling	Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biogas	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities		**2379,1776**	**0**	**366,792**	**0**	**589,701**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**193,21**	**0**	**0**	**3528,8806**
	Municipal buildings, equipment/facilities	872,611	NE	366,792	NE	589,701	NE	NE	NE	NE	NE	NE	NE	NE	193,21	NE	NE	**2022,314**
	Public lighting	1506,5666	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**1506,5666**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Tertiary (non municipal) buildings, equipment/facilities		**18255,09**	**0**	**2705,264**	**486,974589**	**656,6391781**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22103,9678**
	Institutional buildings	18255,09	NE	2705,264	486,974589	656,6391781	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**22103,9678**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Residential buildings		17540,158	0	21111,915	941,786654	3836,005492	0	0	0	0	0	0	0	0	0	0	0	**43429,8651**
Industry	Non-ETS	13486,5	0	3007,201	0	0	0	0	0	0	0	0	0	0	0	0	0	**16493,701**
	ETS (not recommended)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Buildings, equipment/facilities and industries not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**51660,9256**	**0**	**27191,172**	**1428,76124**	**5082,34567**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**193,21**	**0**	**0**	**85556,4145**
TRANSPORT																		
Municipal fleet		**0**	**0**	**0**	**0**	**0**	**160,8974**	**19,74872**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**180,64612**
	Road	NE	NE	NE	NE	NE	160,8974	19,74872	NE	NE	NE	NE	NE	NE	NE	NE	NE	**180,64612**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Public transport		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Private and commercial transport		**39,38**	**0**	**0**	**0**	**0**	**118987,766**	**10896,249**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**129923,395**
	Road	39,38	NE	NE	NE	NE	118987,766	10896,249	NE	NE	NE	NE	NE	NE	NE	NE	NE	**129923,395**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local aviation	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Transport not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**39,38**	**0**	**0**	**0**	**0**	**119148,663**	**10915,998**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**130104,041**
OTHER																		
Agriculture, Forestry, Fisheries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL		**51700,3056**	**0**	**27191,172**	**1428,76124**	**5082,34567**	**119148,663**	**10915,998**	**0**	**0**	**0**	**0**	**0**	**0**	**193,21**	**0**	**0**	**215660,456**

Covenant Key Sectors

B. Energy supply

ⓘ Hide sections or rows as appropriate to your emission inventory.

B1. Certified green electricity

Certified green electricity	Renewable electricity [MWh]	CO_2 / CO_2 eq. Emission factor [t/MWh]
Purchases Guarantees of Origins (within the municipality boundaries)	0	
Sales Guarantees of Origins (within the municipality boundaries)	0	

B2. Local/distributed electricity production (Renewable energy only)

Local renewable electricity plants	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO_2 / CO_2 eq. emissions [t]
Wind	0	0,000	0
Hydroelectric	0	0,000	0
Photovoltaics	435,15	0,475	206,8359901
Geothermal	0	0,000	0
Other	0	0,000	0
TOTAL	0		**206,8359901**

B3. Local/distributed electricity production

Local electricity production plants	Electricity produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other (ETS and large-scale plants > 20 MW not recommended)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B4. Local heat/cold production

Local heat/cold production plants	Heat/cold produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
District heating (heat-only)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

C. CO_2 emissions

C1. Please insert the CO_2 emission factors adopted [t/MWh]:

ⓘ Click here to visualise fuel emission factors

Electricity		Heat/cold	Fossil fuels								Renewable energies					
National	Local		Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil	Biogas	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal
0,481	0,481		0,202	0,227	0,267	0,267	0,249									

C2. Please complete in case non-energy related sectors are included:

ⓘ Click on the [+/-] buttons on the left to expand or collapse.

Non-energy related sectors		CO_2 eq. emissions [t]	Activity data (tons)
Waste management		**4417,121825**	**0**
	Solid waste disposal	4417,121825	
	Biological Treatment of Solid Waste	NE	
	Incineration and Open Burning of Waste	NE	
	Other	NE	
		CO_2 eq. emissions [t]	Activity data (m3)
Wastewater treatment and discharge		NE	
Other non-energy related such as fugitive emissions		NE	

Emission Inventory Summary

ⓘ The emission inventory summary table is automatically generated in the online platform (*MyCovenant*).

Additional comments

500 chars left

Climate Change Risks and Vulnerabilities

HOME

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**	High	High	Increase	Increase	Long-therm
☐	**Extreme cold**	Moderate	Moderate	Increase	Increase	Long-therm
☐	**Heavy precipitation**	High	High	Increase	Increase	Long-therm
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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	High	Increase	Increase	Long-therm
	Flash / surface flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	River flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Moderate	Moderate	Increase	Increase	Long-therm
☐	**Storms**	High	High	Increase	Increase	Long-therm
	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**	High	High	Increase	Increase	Short-therm
	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**	High	High	Increase	Increase	Long-therm
	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**	Buildings	High	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☐ **Extreme heat**	Health	Moderate	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☐ **Extreme heat**	Energy	High	[Choose from Annex 3 or write down your own]
☐ **Extreme heat**	Land use planning	High	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☐ **Extreme heat**	Transport	Moderate	[Choose from Annex 3 or write down your own]
☐ **Extreme heat**	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☐ **Extreme heat**	Tourism	Moderate	% change in tourist flows / tourism activities

Extreme cold	Buildings	High	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
Extreme cold	Health	Moderate	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
Heavy precipitation	Land use planning	High	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
Heavy precipitation	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
Heavy precipitation	Tourism	Moderate	% change in tourist flows / tourism activities
Floods & sea level rise	Land use planning	High	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
Floods & sea level rise	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
Floods & sea level rise	Tourism	Moderate	% change in tourist flows / tourism activities
Droughts & water scarcity	Water	Low	[Choose from Annex 3 or write down your own]
Droughts & water scarcity	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
Droughts & water scarcity	Tourism	Moderate	% change in tourist flows / tourism activities
Droughts & water scarcity	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
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	Agriculture & forestry	Moderate	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
Wild fires	Civil protection & emergency	Moderate	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Water	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
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	[Choose from the list above]
Extreme cold	[Choose from the list above]
Heavy precipitation	[Choose from the list above]
Floods & sea level rise	[Choose from the list above]
Droughts & water scarcity	[Choose from the list above]
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

Action Plan

HOME

1) Action plan(s) and other related documents

1) Action plan(s)

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

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Sustainable Energy and Climate Action Plans (PAESC) Les Guilleries	The "Covenant of Mayors for Local Sustainable Energy" is the European Commission's first ambitious initiative to tackle climate change at the local	jul-22	Diputació de Girona and town halls	Integrated climate plan (ad	Equal to municipality's b	Catalan	☑
		[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?
SEAP monitoring report for all study municipalities	This report corresponds to the assessment of the actions implemented in the municipalities as well as the emissions monitoring inventory.	2016	External consultants	Emission inventory	Greater than municipality's bou	Data of the municipalities and the administration	Catalan	☑
IRE emissions reference inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑
ISE Emission Tracking Inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑

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 (MONITORING)				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	Renewable energy production	CO_2 reduction
						MWh/a	MWh/a	t CO_2/a
Municipal buildings, equipment/facilities	17	76%			24%	1745,96		3114,99
Tertiary (non municipal) buildings, equipment/facilities								
Residential buildings	6				100%	8760		4399,6
Industry	1				100%	8048,04		3871,11
Transport	10	30%			70%	21374,08		12256,47
Waste	5	80%			20%	941,47		934,78
Local Electricity Production	11	27%			73%	485,4	17426,27	11499,94
Local Heat/Cold Production	4	25%			75%	10748,01		4359,34
Others	6	83%			17%	485,4		5733,32
TOTAL	60					52588,36	17426,27	46169,55

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 (MONITORING)			
		Completed (%)	On-going (%)	Postponed (%)	Not-started (%)
Buildings	2				100%
Transport					
Energy					
Water	6				100%
Waste					
Land Use Planning	3				100%
Agriculture & Forestry	2				100%
Environment & Biodiversity					
Health	2				100%
Civil Protection & Emergency	2				100%
Tourism	2				100%
Education	1				100%
ICT (Information & communication technologies)					
Other	1				100%
TOTAL	21				

Key Actions

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promoting sustainable mobility in urban commuting

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: and raise awareness by reducing the avoidable traffic of motor vehicles through the interior of the municipality and at the same time mak

691 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

9) Total implementation costs: 700.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Transport

ⓘ 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]	shift to walking & c	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	Other	[drop-down]	[drop-down]	[drop-down]	[drop-down]

11) Estimated impacts

Energy savings:	717,52	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	345,13	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promote a citizen renewable energy installation

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: It is proposed to promote a small solar park, with citizen participation and funding.

915 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

9) Total implementation costs: 50.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:	2700	MWh/a
CO_2 reduction:	3.297,84	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Advice and audits energy in the sector industrial, efficiency training energy

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: of industrial processes whithin 4 strategics lines: energy efficiency, use of TIC, renewables energy systems, avoiding waste generation

819 characters left

6) Implementation timeframe

Start: 2022
End: 2030

7) Implementation status: Not started

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

Additional comments

9) Total implementation costs: 1.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Industry

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:	8048,04	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	3.871,11	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

Related indicator:

[Please specify]	[numerial value]	[Unit]

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

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]

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

HOME

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: Collect and reuse rainwater. Deposits in public facilities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: stallation of water tanks on roofs, gardens, basements or other municipal spaces to collect water and reuse it in the facilities, for irrigatic

803 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 98.700 €

Source of funding: [Drop-down]

Investment costs: €

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]

	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
- 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] | [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

19) Sector(s): Water

20) Outcome(s) reached

Description: to collect and reuse rainwater in public facilities

948 characters left

Related indicator: m3 rainwater collected and reused | | m3

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 772.000 €

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]

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

HOME

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: Optimize, review and improve alert and communication systems with the population

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: ng and improving existing systems for alerting the public in the event of a risk or emergency, in order to implement self-protection meas

781 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

9) Total implementation costs: 1761 €

Source of funding:	[Drop-down]	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Civil protection & emergency

20) Outcome(s) reached

Description:	to create alert and communication systems with the population		
Related indicator:	nber of warning and communication systems with the popula		

939 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 2.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Training plan aimed at elected officials and municipal workers. Creation of the "Municipal Commission for Adaptation to Climate Change"

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: s proposed to carry out training and awareness plan for elected officials and the creation of a "Municipal Commission for adaptation an

613 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 25.704 €

Source of funding:	Regional funds and programmes	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Education

20) Outcome(s) reached

Description:	offer training to all municipal workers		
Related indicator:	number of municipal workers who have received the training		

961 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 1.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Create an itinerant energy advice point

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: y advice point that will provide information on energy and water at home, aimed al all citizens. The fact that the service is aimed at all c

620 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

9) Total implementation costs: 60.000 €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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] [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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

21) Vulnerable population group(s) targeted: [Drop-down]
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: All
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 **(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

3) Origin of the action [Drop-down]

4) Responsible body

5) Short description

1000 characters left

6) Implementation timeframe

Start: [Drop-Down]
End: [Drop-Down]

7) Implementation status [Drop-Down]

8) Stakeholders involved [Drop-down]

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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 [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: [numerial 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] [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]

ANNEX 1 - Fuel Emission Factors Database

HOME

		Fossil fuels												Renewable energies															
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-Bitominous 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 [a]														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO_2/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 CO_2 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 CO_2/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,371	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 CO_2 eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,375	0,393	0,380	0,385	0,174	0,392	0,182 [d]		0,206 [e]		0,156 [f]		n.a.	0,106	0,013	0,416 [g]	0,184	n.a	n.a.	n.a. [h]

[s] if sustainability criteria during production are fulfilled
[ns] if sustainability criteria during production are not fulfilled

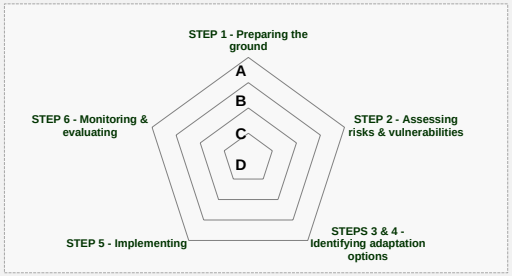
a. IPCC emission factor should be reported zero if the biofuels/biomass meet sustainability criteria; fossil fuel emission factors to be used if biofuels are unsustainable.(s) sustainable, (ns) not sustainable
b. Taking into consideration also the CH4 and the N2O emissions from combustion in stationary 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 an own emission factor if the circumstances are different. These 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 improvements 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 %



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 respondibilities assigned			
	Horizontal (i.e. accross sectoral departments) coordination mechanisms in place			
	Vertical (i.e. accross 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

ANNEX 3 - Indicators for Adaptation

HOME

ⓘ 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.

ⓘ Pease 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 km^2	
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)

Covenant of Mayors - Europe
SECAP template | Working document

The present template is a working document only. The official reporting to the Covenant of Mayors initiative shall be done using the online platform "*MyCovenant*".

Do not use this file for offical submission

SECAP template de Susqueda

Strategy

HOME

Strategy

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

1000 chars left

2) Target(s) and commitment(s)

Mitigation					
CO_2 / GHG target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2005	absolute	
55%	%	2030	2005	absolute	
		2050	[drop -down]	[drop -down]	

ⓘ 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.

MONITORING

Adaptation				
Goal	Unit (% or other)	Target year	Base Year	Progress towards target
		[drop -down]	[drop -down]	
		[drop -down]	[drop -down]	

ⓘ 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.

1000 chars left

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	☐	☐		☐	☐	
Other level(s) of governance (e.g. Covenant coordinator or supporter)	☐	☐		☐	☐	
External consultant	☐	☐		☐	☐	
Other	☐	☐		☐	☐	
Total			0	Total		0

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

1000 chars left

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	☐		[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
External stakeholders at local level	☐	*Academia; Business & private sector; trade-union; citizens; NGO & civil society; Education sector; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*
Stakeholders at other levels of governance	☐	*National government and/or agency(ies); Sub-national governments(s) and/or agencies; Other (specify)*	[drop-down]	*Survey ; Workshop; Focus group; Citizen jury; Other (specify)*	*Information ; Consultation; Advice; Co-production; Co-decision; Implementation*

ⓘ Select x for the ones that are applicable.

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

700 chars left

6) Budget

MONITORING

Overall budget foreseen for plan implementation			Budget spent so far		
Total (€)	Mitigation (%)		Total (€)	Mitigation (%)	
	Adaptation (%)			Adaptation (%)	
Budget period					
From:		2012			
To:		2030			

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

ⓘ depending on signatories' selected time horizon (2020/2020)

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

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

700 chars left

7) Monitoring process

1000 chars left

Emission Inventory

HOME

Emission Inventory

To be filled in only if your local authority is committed to mitigation.

Copy as many "emission inventory" tabs as necessary. Minimun 1 "baseline emission inventory" (BEI) at the 1st reporting stage, minimum 1 "monitoring emission inventory" (MEI) every 4 years.

1) Inventory year: 2005

2) Population in the inventory year: 113

3) Emission factors
- [x] IPCC (Intergovernmental Panel on Climate Change)
- [ ] LCA (Life Cycle Assessment)
- [ ] National/sub-national — Specify: ____ Source: ____

4) Emission reporting unit
- [x] tonnes CO_2
- [ ] tonnes CO_2 equivalent

5) Methodological note

1000 chars left

A. Final energy consumption

Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

Please note that the following notation keys can be used in the table below: "NO" (not occuring), "IE" (included elsewhere), "NE" (not estimated) and "C" (confidential). More information in the Reporting Guidelines.

Click on the [+/-] buttons on the left to expand or collapse. Hide rows as appropriate to your emission inventory.

Sector		FINAL ENERGY CONSUMPTION [MWh]																
				Fossil fuels								Renewable energies						
		Electricity	District heating and cooling	Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biogas	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities		**11,147**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11,147**
	Municipal buildings, equipment/facilities	8,278	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**8,278**
	Public lighting	2,869	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**2,869**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Tertiary (non municipal) buildings, equipment/facilities		**463,2**	**0**	**0**	**32,14**	**195,4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**690,74**
	Institutional buildings	463,2	0	0	32,14	195,4	0	0	0	0	0	0	0	0	0	0	0	**690,74**
	Other	NE	0	o	NE	NE	0	0	0	0	0	0	0	0	0	0	0	**0**
Residential buildings		202,82	0	0	63,11	80,7	0	0	0	0	0	0	0	0	0	0	0	**346,63**
Industry	Non-ETS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	ETS (not recommended)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Buildings, equipment/facilities and industries not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**677,167**	**0**	**0**	**95,25**	**276,1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1048,517**
TRANSPORT																		
Municipal fleet		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Public transport		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Road	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Private and commercial transport		**0**	**0**	**0**	**0**	**0**	**1855,8**	**257,94**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2113,74**
	Road	NE	NE	NE	NE	NE	1855,8	257,94	NE	NE	NE	NE	NE	NE	NE	NE	NE	**2113,74**
	Rail	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local and domestic waterways	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Local aviation	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
	Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	**0**
Transport not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**0**	**0**	**0**	**0**	**0**	**1855,8**	**257,94**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2113,74**
OTHER																		
Agriculture, Forestry, Fisheries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other not allocated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL		**677,167**	**0**	**0**	**95,25**	**276,1**	**1855,8**	**257,94**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3162,257**

Covenant Key Sectors

B. Energy supply

Hide sections or rows as appropriate to your emission inventory.

B1. Certified green electricity

Certified green electricity	Renewable electricity [MWh]	CO_2 / CO_2 eq. Emission factor [t/MWh]
Purchases Guarantees of Origins (within the municipality boundaries)	NE	
Sales Guarantees of Origins (within the municipality boundaries)	NE	

B2. Local/distributed electricity production (Renewable energy only)

Local renewable electricity plants	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO_2 / CO_2 eq. emissions [t]
Wind	0	0,000	0
Hydroelectric	317584	-218,312	-69332458,3
Photovoltaics	0	0,000	0
Geothermal	0	0,000	0
Other	0	0,000	0
TOTAL	**0**		**-69332458,3**

B3. Local/distributed electricity production

Local electricity production plants	Electricity produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other (ETS and large-scale plants > 20 MW not recommended)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

B4. Local heat/cold production

Local heat/cold production plants	Heat/cold produced [MWh]		Energy carrier input [MWh]										CO_2 / CO_2 eq. emissions [t]	
			Fossil fuels											
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal	Waste	Plant oil	Other biomass	Biogas	Other renewable	Other	Fossil sources	Renewable sources
Combined Heat and Power	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
District heating (heat-only)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

C. CO_2 emissions

C1. Please insert the CO_2 emission factors adopted [t/MWh]:

Click here to visualise fuel emission factors

Electricity		Heat/cold	Fossil fuels								Renewable energies					
National	Local		Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil	Biogas	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal
0,481	0,481		0,202	0,227	0,267	0,267	0,249									

C2. Please complete in case non-energy related sectors are included:

Click on the [+/-] buttons on the left to expand or collapse.

Non-energy related sectors		CO_2 eq. emissions [t]	Activity data (tons)
Waste management		**15,36**	**0**
	Solid waste disposal	15,36	
	Biological Treatment of Solid Waste	NE	
	Incineration and Open Burning of Waste	NE	
	Other	NE	
		CO_2 eq. emissions [t]	Activity data (m3)
Wastewater treatment and discharge		NE	
Other non-energy related such as fugitive emissions		NE	

Emission Inventory Summary

The emission inventory summary table is automatically generated in the online platform (*MyCovenant*).

Additional comments

500 chars left

Climate Change Risks and Vulnerabilities

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**	High	High	Increase	Increase	Long-therm
☑	**Extreme cold**	High	High	Increase	Increase	Long-therm
☑	**Heavy precipitation**	High	High	Increase	Increase	Long-therm
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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	High	Increase	Increase	Long-therm
	Flash / surface flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	River flood	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	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**	Low	Low	No change	No change	Long-therm
☑	**Storms**	High	High	Increase	Increase	Long-therm
	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**	Low	Low	No change	No change	Short-therm
	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**	Low	Low	No change	No change	Long-therm
	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**	Buildings	Moderate	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
☑	**Extreme heat**	Health	High	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
☑	**Extreme heat**	Energy	High	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
☑	**Extreme heat**	Transport	Low	[Choose from Annex 3 or write down your own]
☑	**Extreme heat**	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
☑	**Extreme heat**	Tourism	Low	% change in tourist flows / tourism activities

Extreme cold	Buildings	Moderate	Number of % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events
Extreme cold	Health	High	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)
Heavy precipitation	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
Heavy precipitation	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
Heavy precipitation	Tourism	Low	% change in tourist flows / tourism activities
Floods & sea level rise	Land use planning	Moderate	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls
Floods & sea level rise	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
Floods & sea level rise	Tourism	Low	% change in tourist flows / tourism activities
Droughts & water scarcity	Water	Low	[Choose from Annex 3 or write down your own]
Droughts & water scarcity	Agriculture & forestry	Low	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
Droughts & water scarcity	Tourism	Low	% change in tourist flows / tourism activities
Droughts & water scarcity	Environment & biodiversity	Low	% of areas affected by soil erosion / soil quality degradation
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	Agriculture & forestry	Low	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)
Wild fires	Civil protection & emergency	Low	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events
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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
Water	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
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]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
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	[Choose from the list above]
Extreme cold	[Choose from the list above]
Heavy precipitation	[Choose from the list above]
Floods & sea level rise	[Choose from the list above]
Droughts & water scarcity	[Choose from the list above]
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

Action Plan

HOME

1) Action plan(s) and other related documents

1) Action plan(s)

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

Title	Short description	Date of formal approval	Decision body approving the plan	Nature of the document	Scope / Boundary	Language	Published?
Sustainable Energy and Climate Action Plans (PAESC) Les Guilleries	The "Covenant of Mayors for Local Sustainable Energy" is the European Commission's first ambitious initiative to tackle climate change at the local	jul-22	Diputació de Girona and town halls	Integrated climate plan (ad	Equal to municipality's b	Catalan	☑
		[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?
SEAP monitoring report for all study municipalities	This report corresponds to the assessment of the actions implemented in the municipalities as well as the emissions monitoring inventory.	2016	External consultants	Emission inventory	Greater than municipality's bou	Data of the municipalities and the administration	Catalan	☑
IRE emissions reference inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑
ISE Emission Tracking Inventory	Data on CO2 emissions and consumption in each municipality	2021	Diputació de Girona	Emission inventory	Equal to municipality's bounda	Emissions inventory	Catalan	☑

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				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	Renewable energy production	CO_2 reduction
						MWh/a	MWh/a	t CO_2/a
Municipal buildings, equipment/facilities	3					13,958		12,66
Tertiary (non municipal) buildings, equipment/facilities								
Residential buildings	2					61,85		29,75
Industry								
Transport	3					28,52		46,14
Waste	1					1,58		0,76
Local Electricity Production	4						154	84,27
Local Heat/Cold Production	1					53,55		14,3
Others								
TOTAL	14					159,458	154	187,88

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				100%
Transport					
Energy					
Water	7				100%
Waste					
Land Use Planning	3				100%
Agriculture & Forestry	2				100%
Environment & Biodiversity					
Health	2				100%
Civil Protection & Emergency	2				100%
Tourism	2				100%
Education	1				100%
ICT (Information & communication technologies)					
Other	1				100%
TOTAL	22				

Key Actions

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promoting measures for the use of the electric and hybrid vehicle

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: Promoting measures for the use of the electric and hybrid vehicle

935 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

9) Total implementation costs: 5.000 €

Source of funding: [Drop-down]

Investment costs: €

Non-investment costs: €

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]	Other	[drop-down]	[drop-down]	[drop-down]	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	Grants and subsidie	[drop-down]	[drop-down]	[drop-down]	[drop-down]

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:	18,71	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	9	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Promote the renewal of boilers

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: Promote the replacement of fossil fuel boilers with renewable technologies

926 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

9) Total implementation costs: 122.400 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Heat/Cold Production

	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]	Other	[drop-down]
Policy instrument:	[drop-down]	[drop-down]	[drop-down]	[drop-down]	[drop-down]	Grants and subsidies	[drop-down]

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:	53,55	MWh/a
Renewable energy production:		MWh/a
CO_2 reduction:	14,3	t CO2/a

12) Vulnerable population group(s) targeted: All

13) Financial savings: €

14) Life expectancy of the action: 10 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]

19) Sector(s): [Drop-down]

20) Outcome(s) reached

Description:

1000 characters left

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

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

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]

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

HOME

Key actions

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

1) Type of action

- [x] Mitigation
- [ ] Adaptation
- [ ] Energy poverty

ⓘ Only in combination with 'Mitigation' and/or 'Adaptation' actions

2) Title of the action: Encourage the installation of photovoltaic solar energy in the residential and service sectors

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: Encourage the installation of photovoltaic solar energy in the residential sector and the services sector reporting on subsidies

872 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

9) Total implementation costs: 304.000 €

Source of funding: [Drop-down]
Investment costs: €
Non-investment costs: €

A. Mitigation

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

10) Sector: Local Electricity Production

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

ⓘ To be filled in only for the concerned sector

11) Estimated impacts

Energy savings:		MWh/a
Renewable energy production:	154	MWh/a
CO_2 reduction:	74,00	t CO2/a

12) Vulnerable population group(s) targeted: All

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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description: 1000 characters left

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

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

HOME

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: Collect and reuse rainwater. Deposits in public facilities

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: stallation of water tanks on roofs, gardens, basements or other municipal spaces to collect water and reuse it in the facilities, for irrigatic

803 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 98.700 €

Source of funding: [Drop-down]

Investment costs: €

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]

	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
- 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] | [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

19) Sector(s): Water

20) Outcome(s) reached

Description: to collect and reuse rainwater in public facilities

948 characters left

Related indicator: m3 rainwater collected and reused | | m3

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 772.000 €

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]

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

HOME

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: Optimize, review and improve alert and communication systems with the population

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: ng and improving existing systems for alerting the public in the event of a risk or emergency, in order to implement self-protection meas

781 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

9) Total implementation costs: 1761 €

Source of funding:	[Drop-down]	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Civil protection & emergency

20) Outcome(s) reached

Description:	to create alert and communication systems with the population		
Related indicator:	nber of warning and communication systems with the popula		

939 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 2.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Training plan aimed at elected officials and municipal workers. Creation of the "Municipal Commission for Adaptation to Climate Change"

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: s proposed to carry out training and awareness plan for elected officials and the creation of a "Municipal Commission for adaptation an

613 characters left

6) Implementation timeframe: Start: 2022; End: 2030

7) Implementation status: Not started

8) Stakeholders involved: Sub-national governments(s) and/or agency(ies) ⓘ Insert additional rows as needed

Additional comments

9) Total implementation costs: 25.704 €

Source of funding:	Regional funds and programmes	
Investment costs:		€
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]

	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
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]	[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: Other

19) Sector(s): Education

20) Outcome(s) reached

Description:	offer training to all municipal workers		
Related indicator:	number of municipal workers who have received the training		

961 characters left

21) Vulnerable population group(s) targeted: All

22) Avoided cost: 1.500.000 €

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]

28) Outcome(s) reached

Description:			
Related indicator:	[Please specify]	[numerial value]	[Unit]

1000 characters left

Further information

30) Weblink: www.

31) Video link: www.

32) Picture: [upload]

Key Actions

HOME

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: Create an itinerant energy advice point

3) Origin of the action: Local authority

4) Responsible body: Mayor

5) Short description: y advice point that will provide information on energy and water at home, aimed al all citizens. The fact that the service is aimed at all c

620 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

9) Total implementation costs: 60.000 €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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] [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]
19) Sector(s): [Drop-down]
20) Outcome(s) reached

Description:

1000 characters left

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

21) Vulnerable population group(s) targeted: [Drop-down]
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: All
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 **(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

3) Origin of the action [Drop-down]

4) Responsible body

5) Short description

1000 characters left

6) Implementation timeframe

Start: [Drop-Down]
End: [Drop-Down]

7) Implementation status [Drop-Down]

8) Stakeholders involved [Drop-down]

ⓘ For multiple choice, insert additional rows as needed

Additional comments

9) Total implementation costs €

Source of funding: [Drop-down]
Investment costs: €
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]

	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
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 [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: [numerial 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] [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]

ANNEX 1 - Fuel Emission Factors Database

HOME

		Fossil fuels												Renewable energies															
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-Bitominous 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 [a]														(s)	(ns)	(s)	(ns)	(s)	(ns)	-	-	(s)	(ns)	-	-	-	-
IPCC	t CO_2/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 CO_2 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 CO_2/MWh	0,221	n.a.	n.a.	0,292	0,292	0,299	0,368	0,379	0,366	0,371	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 CO_2 eq./MWh	0,237	n.a.	n.a.	0,305	0,305	0,307	0,375	0,393	0,380	0,385	0,174	0,392	0,182 [d]		0,206 [e]		0,156 [f]		n.a.	0,106	0,013	0,416 [g]	0,184	n.a	n.a.	n.a. [h]

[s] if sustainability criteria during production are fulfilled
[ns] if sustainability criteria during production are not fulfilled

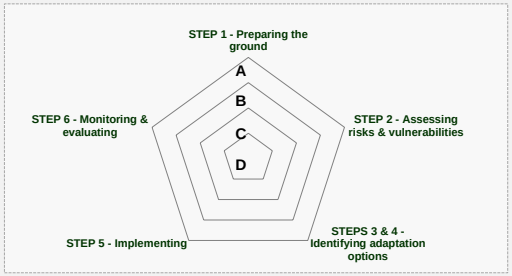
a. IPCC emission factor should be reported zero if the biofuels/biomass meet sustainability criteria; fossil fuel emission factors to be used if biofuels are unsustainable.(s) sustainable, (ns) not sustainable
b. Taking into consideration also the CH4 and the N2O emissions from combustion in stationary 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 an own emission factor if the circumstances are different. These 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 improvements 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 %



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 respondibilities assigned			
	Horizontal (i.e. accross sectoral departments) coordination mechanisms in place			
	Vertical (i.e. accross 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

ANNEX 3 - Indicators for Adaptation

HOME

ⓘ 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.

ⓘ Pease 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 km^2	
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)