

Sustainable Energy and Climate Action Plan Template

The Sustainable Energy and Climate Action Plan (SECAP) template and its monitoring fields constitute the reporting framework of the Covenant of Mayors initiative. It has been developed by the Covenant of Mayors and Mayors Adapt Offices - together with the Joint Research Centre of the European Commission - and in collaboration with a group of practitioners from local and regional authorities. This Excel-based template is an offline working version of the official online template which has to be completed in English and submitted online via "My Covenant": http://www.eumayors.eu/sign-in_en.html. The online version of this template should be available as of 2017. Please note that it is not possible to import the data entered in this Excel into the online platform.


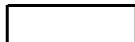


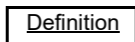



[Reporting Guidelines](#)
[SEAP guidebook](#)
[Urban Adaptation Support Tool](#)

Commitments:

- [2020 CO₂ reduction](#)
- [2030 CO₂ reduction](#)
- [Long-term CO₂ reduction](#)
- [Climate Adaptation](#)

Colour codes:

-  **Mandatory input cells**
-  **Optional input cells**
-  **Output cells**
-  **Pre-filled cells** (for the online version)
-  **Definitions** (visible when clicking)
-  **Monitoring fields**

Template Structure & Minimum Reporting Requirements:

Template Structure	Minimum Reporting Requirements			Link to Tab	
	At the registration stage	Within 2 years	Within 4 years (and then every 2 years)		
Strategy	optional	*	*	→	
Mitigation	Emission Inventories	optional	* (BEI)	* (MEI every 4 years)	→
	Mitigation Actions	optional	*	*	→
	Mitigation Report				→
	Monitoring Report				→
Adaptation	Adaptation Scoreboard	*	*	*	→
	Risks and Vulnerabilities	optional	*	*	→
	Adaptation Actions	optional	optional	* (min. 3 Benchmarks)	→
	Adaptation Report				→
Adaptation Indicators				→	

* mandatory

Objectives

- **IDENTIFY & ASSESS** local climate and energy challenges and priorities
- **MONITOR & REPORT** progress towards commitments
- **INFORM & SUPPORT** decision-makers
- **COMMUNICATE** results to general public
- **ENABLE** self-assessment & **FACILITATE** experience-sharing with peers
- **DEMONSTRATE** local achievements to policy-makers

Developed by: Covenant of Mayors & Mayors Adapt Offices, Joint Research Centre of the European Commission

Last update: July 2016



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Strategy

1) Vision

Szekszárd wishes to preserve and further develop its natural and constructed environment to have a livable city with high quality services, also being attractive for tourism, while operating it having the least harmful environmental effects. In order to ensure this future development, it assesses its energy consumption, emissions and potential renewable energy sources and takes them into account in planning and decision making processes that affect the future.

236 chars left

2) Commitments

Mitigation					
CO ₂ Target	Unit	Target Year	Base Year	Reduction Type	Population estimates in target year
20%	%	2020	2011	absolute	
	%	2030			
		[drop -down]	[drop -down]	[drop -down]	

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

① Add as many rows as necessary.

3) Coordination and organisational structures created/assigned

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4) Staff capacity allocated

Type	Plan Preparation		MONITORING Plan Implementation
		Full-time equivalent job(s)	
Local authority	x	0,5	x
<u>Covenant Coordinator</u>			
<u>Covenant Supporter</u>			
External consultant	x	1	
Other			
Total		1,5	

① Select x for the ones that are applicable.

700 chars left

5) Involvement of stakeholders and citizens

Type		Stakeholders involved	Level of involvement
Local authority's staff	<input checked="" type="checkbox"/>		Medium
External stakeholders at local level	<input checked="" type="checkbox"/>		Low
Stakeholders at other levels of governance			[drop-down]

Select x for the ones that are applicable.

700 chars left

6) Overall budget for implementation and financing sources

Source	Budget foreseen for plan implementation (€)					
	Mitigation			Adaptation		
		Investment (€)	Non-investment (€)		Investment (€)	Non-investment (€)
Local Authority's own resources	<input checked="" type="checkbox"/>			[Select x]		
Other actors:	<input checked="" type="checkbox"/>		0	[Select x]		
- National Funds & Programmes	<input checked="" type="checkbox"/>			[Select x]		
- EU Funds & Programmes	<input checked="" type="checkbox"/>			[Select x]		
- Private	<input checked="" type="checkbox"/>			[Select x]		
Total		0	0		0	0

Select x for the ones that are applicable.

Time period 2011 2020 years

700 chars left

Source	Budget spent so far for plan implementation (€)			
	Mitigation		Adaptation	
		Investment (€)	Non-investment (€)	
Local Authority's own resources	<input checked="" type="checkbox"/>			[Select x]
Other actors:	<input checked="" type="checkbox"/>	0	0	[Select x]
- National Funds & Programmes	<input checked="" type="checkbox"/>			[Select x]
- EU Funds & Programmes	<input checked="" type="checkbox"/>			[Select x]
- Private	<input checked="" type="checkbox"/>			[Select x]
Total		0	0	

Select x for the ones that are applicable.

Time period 2011 2016

7) Monitoring process

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Please rate (little/fair/strong/not applicable) the main problems encountered during your action plan implementation, either overall or by sector.

	All sectors	Municipal	Tertiary	Residential	Transport	Adaptation
Limited financial sources						
Absence of / weak regulatory framework						
Lack of technical expertise						
Lack of support from stakeholders						
Lack of political support at other administrative levels						
Changes in the local political priorities						
Incompatibility with national policy orientations						
Immature or high cost technologies						

MONITORING

8) Assessment of the Adaptation Options

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9) Strategy in case of extreme climate events

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Baseline Emission Inventory

1) Inventory year

2) Number of inhabitants in the inventory year

3) Emission factors IPCC LCA (Life Cycle Assessment)

4) Emission reporting unit tonnes CO₂ tonnes CO₂ equivalent

5) Methodological notes

1000 chars left

A. Final energy consumption

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

Sector	FINAL ENERGY CONSUMPTION [MWh]															
	Electricity	Heat/cold	Fossil fuels								Renewable energies				Total	
			Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal		Geothermal
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																
<u>Municipal buildings, equipment/facilities</u>	1483	5481	5532	0	0	0	0	0	0	0	0	0	0	0	0	12496
<u>Tertiary (non municipal) buildings, equipment/facilities</u>	33686	15514	69661	0	0	0	0	0	0	0	0	0	0	0	0	118861
<u>Residential buildings</u>	35268	47790	93237	0	0	0	0	0	887	0	0	0	48804	0	0	225987
<u>Public lighting</u>	1452	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1452
<u>Industry</u>																
Subtotal	71889	68785	168431,0896	0	0	0	0	0	886,5	0	0	0	48804,4448	0	0	358796,034
TRANSPORT																
<u>Municipal fleet</u>	0	0	0	0	0	178	40	0	0	0	0	9	0			227
<u>Public transport</u>						16890						306				36413
<u>Private and commercial transport</u>	0	0	0	0	0	67782	28103	0	0	0	0	1585	0			97470
Subtotal	0	0	0	0	0	84850,28	28142,925	0	0	0	0	1900,050222	0	0	0	114893,253
OTHER																
<u>Agriculture, Forestry, Fisheries</u>																0
TOTAL	71889	68785	168431,0896	0	0	84850,28	28142,925	0	886,5	0	0	1900,050222	48804,4448	0	0	473689,287

🔑 Covenant Key Sectors

B. Energy supply

① Hide sections or rows as appropriate to your emission inventory.

B1. Municipal purchases of certified green electricity

Municipal purchases of certified green electricity	Renewable electricity purchased [MWh]	CO ₂ / CO ₂ eq. Emission factor [t/MWh]
Certified green electricity purchased	0	

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

Local renewable electricity plants (ETS and large-scale plants > 20 MWe not recommended)	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
TOTAL	0	0	0

B3. Local/distributed electricity production

Local electricity production plants (ETS and large-scale plants > 20 MW not recommended)	Electricity produced [MWh]		Energy carrier input [MWh]										CO ₂ / CO ₂ eq. emissions [t]			
			Fossil fuels					Waste	Plant oil	Other biomass	Other renewable	Other	Fossil sources	Renewable sources		
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal									
Combined Heat and Power																
Other																
TOTAL	0	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					Waste	Plant oil	Other biomass	Other renewable	Other	Fossil sources	Renewable sources		
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal									
Combined Heat and Power																
District heating (heat-only)			54345												10975,5162	
Other																
TOTAL	0	0	54345	0	0	0	0	0	0	0	0	0	0	10975,5162	0	

C. CO₂ emissions

C1. Please insert the CO₂ 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 fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal
0,360	0,360	0,228	0,202	0,000	0,000	0,171	0,249	0,000	0,346	0,000	0,000	0,000	0,007	0,000	0,000

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

Non-energy related sectors	CO ₂ eq. emissions [t]
Waste management	
Waste water management	
Other non-energy related	

Emission Inventory

Sector	CO ₂ emissions [t] / CO ₂ eq. emissions [t]															Total	
	Electricity	Heat/cold	Fossil fuels								Renewable energies						
			Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal		
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																	
Municipal buildings, equipment/facilities	534	1247	1117	0	0	0	0	0	0	0	0	0	0	0	0	0	2898
Tertiary (non municipal) buildings, equipment/facilities	12127	3530	14069	0	0	0	0	0	0	0	0	0	0	0	0	0	29726
Residential buildings	12696	10875	18830	0	0	0	0	0	307	0	0	0	329	0	0	0	43037
Public lighting	523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	523
Industry	Non-ETS	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
Subtotal	25880	15653	34016	0	0	0	0	0	307	0	0	0	329	0	0	0	76185
TRANSPORT																	
Municipal fleet	0	0	0	0	0	30	10	0	0	0	0	0	0	0	0	0	40
Public transport	0	0	0	0	0	2880	0	0	0	0	0	0	0	0	0	0	2880
Private and commercial transport	0	0	0	0	0	11558	7011	0	0	0	0	0	0	0	0	0	18569
Subtotal	0	0	0	0	0	14468	7021	0	0	0	0	0	0	0	0	0	21489
OTHER																	
Agriculture, Forestry, Fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER NON-ENERGY RELATED																	
Waste management																0	
Waste water management																0	
Other non-energy related																0	
TOTAL	25880	15653	34016	0	0	14468	7021	0	307	0	0	0	329	0	0	0	97674

[Covenant Key Sectors](#)

Additional comments

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Monitoring Emission Inventory

① Copy as many "MEI" tabs for Monitoring Emission Inventories as necessary.

1) Inventory year

2) Number of inhabitants in the inventory year

3) Emission factors IPCC
 LCA (Life Cycle Assessment)

4) Emission reporting unit tonnes CO₂
 tonnes CO₂ equivalent

5) Methodological notes

1000 chars left

A. Final energy consumption

① Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

Sector	FINAL ENERGY CONSUMPTION [MWh]															Total
	Electricity	Heat/cold	Fossil fuels								Renewable energies					
			Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																
Municipal buildings, equipment/facilities	9534	4252	18752												148	32647
Tertiary (non municipal) buildings, equipment/facilities	22348	11705	31500													65553
Residential buildings	34484	33250	76441						862				47847			192884
Public lighting	881															881
Industry																0
																0
Subtotal	67247	49208	126693	0	0	0	0	0	862	0	0	0	47847	0	148	292005
TRANSPORT																
Municipal fleet						32	10					2				44
Public transport						10023	0					516				10540
Private and commercial transport	117					58043	46645					5368				110172
Subtotal	117	0	0	0	0	68098	46655	0	0	0	0	5887	0	0	0	120756
OTHER																
Agriculture, Forestry, Fisheries									1							0
TOTAL	67363,236	49207,77778	126692,5	0	0	68097,54	46654,85	0	862,38	0	0	5887,03	47847,2717	0	148,2	412760,785

Covenant Key Sectors

B. Energy supply

① Hide sections or rows as appropriate to your emission inventory.

B1. Municipal purchases of certified green electricity

Municipal purchases of certified green electricity	Renewable electricity purchased [MWh]	CO ₂ / CO ₂ eq. Emission factor [t/MWh]
Certified green electricity purchased	0	

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

Local renewable electricity plants (ETS and large-scale plants > 20 MWe not recommended)	Renewable electricity produced [MWh]	Emission factor [t/MWh produced]	CO ₂ / CO ₂ eq. emissions [t]
Wind	2		0
Hydroelectric	0		0
Photovoltaics	1164		0
Geothermal	0		0
TOTAL	1166		0

B3. Local/distributed electricity production

Local electricity production plants (ETS and large-scale plants > 20 MW not recommended)	Electricity produced [MWh]		Energy carrier input [MWh]										CO ₂ / CO ₂ eq. emissions [t]			
			Fossil fuels					Waste	Plant oil	Other biomass	Other renewable	Other	Fossil sources	Renewable sources		
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal									
Combined Heat and Power																
Other																
TOTAL	0	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					Waste	Plant oil	Other biomass	Other renewable	Other	Fossil sources	Renewable sources		
	from renewable sources	from non-renewable sources	Natural gas	Liquid gas	Heating oil	Lignite	Coal									
Combined Heat and Power																
District heating (heat-only)			49208												9938	
Other																
TOTAL	0	0	49208	0	0	0	0	0	0	0	0	0	0	9938	0	

C. CO₂ emissions

C1. Please insert the CO₂ 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 fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal
BEI	0,360	0,360	0,228	0,202	0,000	0,000	0,171	0,249	0,000	0,346	0,000	0,000	0,000	0,007	0,000	0,000
MEI	0,360	0,360	0,228	0,202	0,000	0,000	0,171	0,249	0,000	0,346	0,000	0,000	0,000	0,007	0,000	0,000

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

Non-energy related sectors	CO ₂ eq. emissions [t]
Waste management	
Waste water management	
Other non-energy related	

Emission Inventory

Sector	CO ₂ emissions [t] / CO ₂ eq. emissions [t]															Total	
	Electricity	Heat/cold	Fossil fuels							Renewable energies							
			Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal		
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																	
Municipal buildings, equipment/facilities	3432	968	3787	0	0	0	0	0	0	0	0	0	0	0	0	0	8187
Tertiary (non municipal) buildings, equipment/facilities	8045	2664	6362	0	0	0	0	0	0	0	0	0	0	0	0	0	17071
Residential buildings	12414	7567	15438	0	0	0	0	0	298	0	0	0	322	0	0	0	36039
Public lighting	317	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	317
Industry	Non-ETS	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
Subtotal	24209	11198	25587	0	0	0	0	0	298	0	0	0	322	0	0	0	61614
TRANSPORT																	
Municipal fleet	0	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	8
Public transport	0	0	0	0	0	1709	0	0	0	0	0	0	0	0	0	0	1709
Private and commercial transport	42	0	0	0	0	9897	11637	0	0	0	0	0	0	0	0	0	21576
Subtotal	42	0	0	0	0	11611	11639	0	0	0	0	0	0	0	0	0	23293
OTHER																	
Agriculture, Forestry, Fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER NON-ENERGY RELATED																	
Waste management																	0
Waste water management																	0
Other non-energy related																	0
TOTAL	24251	11198	25587	0	0	11611	11639	0	298	0	0	0	322	0	0	0	84907

[Covenant Key Sectors](#)

Additional comments

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Monitoring Emission Inventory

① Copy as many "MEI" tabs for Monitoring Emission Inventories as necessary.

1) Inventory year

[drop-down]

2) Number of inhabitants in the inventory year

3) Emission factors

- IPCC
 LCA (Life Cycle Assessment)

4) Emission reporting unit

- tonnes CO₂
 tonnes CO₂ equivalent

5) Methodological notes

0

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A. Final energy consumption

① Please note that for separating decimals dot [.] is used. No thousand separators are allowed.

Sector	FINAL ENERGY CONSUMPTION [MWh]															Total	
	Electricity	Heat/cold	Fossil fuels								Renewable energies						
			Natural gas	Liquid gas	Heating oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal		
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																	
Municipal buildings, equipment/facilities																	0
Tertiary (non municipal) buildings, equipment/facilities																	0
Residential buildings																	0
Public lighting																	0
Industry	Non-ETS																0
	ETS (not recommended)																0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRANSPORT																	
Municipal fleet																	0
Public transport																	0
Private and commercial transport																	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER																	
Agriculture, Forestry, Fisheries																	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Covenant Key Sectors

C. CO₂ emissions

C1. Please insert the CO₂ 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 fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal
BEI	0,360	0,360	0,228	0,202	0,000	0,000	0,171	0,249	0,000	0,346	0,000	0,000	0,000	0,007	0,000	0,000
MEI																

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

Non-energy related sectors	CO ₂ eq. emissions [t]
Waste management	
Waste water management	
Other non-energy related	

Emission Inventory

Sector	CO ₂ emissions [t] / CO ₂ eq. emissions [t]															Total		
	Electricity	Heat/cold	Fossil fuels							Renewable energies								
			Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal			
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES																		
Municipal buildings, equipment/facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tertiary (non municipal) buildings, equipment/facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Residential buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Public lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Industry	Non-ETS	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	
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TRANSPORT																		
Municipal fleet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Public transport	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Private and commercial transport	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	
OTHER																		
Agriculture, Forestry, Fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OTHER NON-ENERGY RELATED																		
Waste management																		0
Waste water management																		0
Other non-energy related																		0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[Covenant Key Sectors](#)

Additional comments

0

499 chars left

Mitigation Actions

Action Plan

1) Title: Monitoring of the Sustainable Energy Action Plan of Szekszárd

2) Date of formal approval: 19 June 2018

3) Decision body approving the plan: Local Government of Szekszárd, Economic and Financial Committee

4) SECAP webpage: []

Business-as-Usual projections by 2030 (if applicable)	CO ₂ emissions (t CO ₂ (eq.)/a)	Final energy consumption (MWh/a)	Municipal	Residential	Tertiary	Industry	Transport	Others
	0	0						

Business-as-Usual projections by long-term target year (if applicable)	CO ₂ emissions (t CO ₂ (eq.)/a)	Final energy consumption (MWh/a)	Municipal	Residential	Tertiary	Industry	Transport	Others
	0	0						

Ⓜ Hide rows as appropriate to the time horizon(s) of your action plan.

6) Methodological notes: [] 500 chars left

Estimates of the impacts of actions in 2020 in relation to: MEI 1 (option 2)

Key Actions

- Ⓜ Please start by providing your totals by sector and add your key actions afterwards.
- Ⓜ Add as many rows for your key actions as necessary.

Key Actions	Area of intervention	Policy instrument	Origin of the action	Responsible body	Implementation time frame		Status of implementation	MONITORING		Estimates in 2020				
					Start	End		Implementation cost spent so far	Implementation cost	Energy savings	Renewable energy production	CO ₂ reduction		
													€	€
MUNICIPAL BUILDINGS, EQUIPMENT/FACILITIES														
retrofitting 9 public buildings	Building envelope	Public procurement	Other (national, regional, ...)	Szekszárd Local Government, Strategic	2017	2020	Ongoing			841		182		
door and window replacement of 7 public buildings	Building envelope	Public procurement	Other (national, regional, ...)	Szekszárd Local Government, Strategic	2017	2020	Ongoing			463		100		
modernisation of heating systems of 5 public buildings	Energy efficiency in space heating and hot water	Public procurement	Other (national, regional, ...)	Szekszárd Local Government, Strategic	2017	2020	Ongoing			337		68		
modernisation of indoor lightning system of 9 public buildings	Energy efficient lighting systems	Public procurement	Other (national, regional, ...)	Szekszárd Local Government, Strategic	2017	2020	Ongoing			12		4		
solar collectors on 5 public buildings	Renewable energy for space heating and hot water	Public procurement	Other (national, regional, ...)	Szekszárd Local Government, Strategic	2017	2020	Ongoing				53	12		
Estimated reduction not associated with any reported actions										0	0	0	0	0
TERTIARY BUILDINGS, EQUIPMENT/FACILITIES														
technological efficiency development, electricity savings	Other	Energy management	Not possible to say	service sector's players	2017	2020	Ongoing			670		241		
technological efficiency development, natural gas savings	Other	Energy management	Not possible to say	service sector's players	2017	2020	Ongoing			1181		269		
solar collectors on tertiary sector buildings	Renewable energy for space heating and hot water	Energy management	Not possible to say	service sector's players	2017	2020	Ongoing				106	24		
heat pump systems in tertiary sector buildings	Renewable energy for space heating and hot water	Energy management	Not possible to say	service sector's players	2017	2020	Ongoing				459	89		
Estimated reduction not associated with any reported actions										0	0	0	0	0
RESIDENTIAL BUILDINGS														
solar collectors	Renewable energy for space heating and hot water	Energy management	Not possible to say	residential	2017	2020	Ongoing				307	70		
heat pumps	Renewable energy for space heating and hot water	Energy management	Not possible to say	residential	2017	2020	Ongoing				499	92		
complex building reconstructions	Integrated action (all above)	Energy management	Other (national, regional, ...)	residential	2017	2020	Ongoing			1652		355		
replacing large household equipments (mainly refrigerators)	Energy efficient electrical appliances	Energy management	Other (national, regional, ...)	residential	2017	2020	Ongoing			644		232		
eco circles (energy and resource saving communities)	Information and Communication Technologies	Awareness raising / training	Local authority	Szekszárd Local Government, Strategic	2018	2020	Not started			361		82		
Estimated reduction not associated with any reported actions										0	0	0	0	0
PUBLIC LIGHTING														
modernisation of public lighting system	Energy efficiency	Public procurement	Other (national, regional, ...)	Szekszárd Local Government, Strategic	2017	2020	Ongoing			137		49		
Estimated reduction not associated with any reported actions										0	0	0	0	0
TRANSPORT														
10 electric buses	Electric vehicles (incl. infrastructure)	Public procurement	Other (national, regional, ...)	regional transportation company, Municipality	2019	2030	Not started			2007		203		
development of cycle paths, promotion of bicycle traffic	Modal shift to walking & cycling	Transport / mobility planning regulation	Other (national, regional, ...)	Szekszárd Local Government, Strategic	2017	2020	Ongoing			413		81		
Estimated reduction not associated with any reported actions										0	0	0	0	0
LOCAL ELECTRICITY PRODUCTION														
photovoltaics on 16 public buildings	Photovoltaics	Public procurement	Other (national, regional, ...)	Szekszárd Local Government, Strategic	2017	2020	Ongoing				871	313		
residential photovoltaic power investments	Photovoltaics	Awareness raising / training	Not possible to say	residential	2017	2020	Ongoing				1286	463		
residential wind power investments	Wind power	Awareness raising / training	Not possible to say	residential	2018	2020	Not started				16	6		
service sector photovoltaic power investments	Photovoltaics	Other	Not possible to say	tertiary sector's players	2017	2020	Ongoing				507	183		
industrial scale photovoltaic power plants (public and private)	Photovoltaics	Land use planning	Other (national, regional, ...)	private companies, Szekszárd Local Government, Strategic	2017	2020	Ongoing				13148	4733		
Estimated reduction not associated with any reported actions										0	0	0	0	0
LOCAL HEAT/COLD PRODUCTION														
Estimated reduction not associated with any reported actions										0	0	0	0	0
OTHERS														
green roofs and green walls	Urban regeneration	Other	Not possible to say	private companies, Szekszárd Local Government, Strategic	2018	2020	Not started			594		150		
Estimated reduction not associated with any reported actions										0	0	0	0	0
TOTAL								0	0	9312	17252	8001		

*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

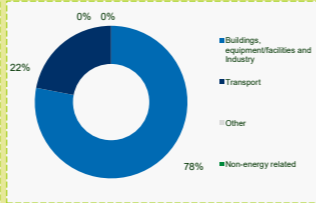
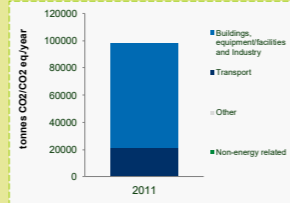
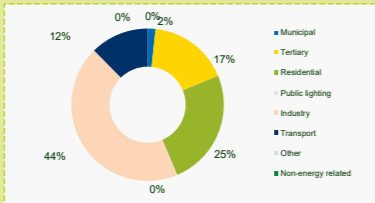
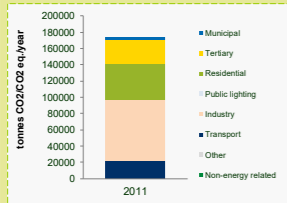
Key Results of the Baseline Emission Inventory

Baseline year: 2011

1) Greenhouse gas emissions and final energy consumption per capita

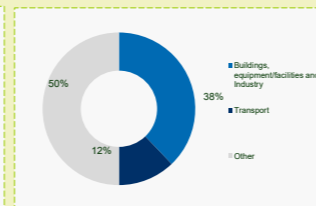
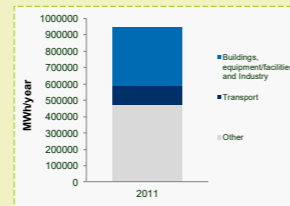
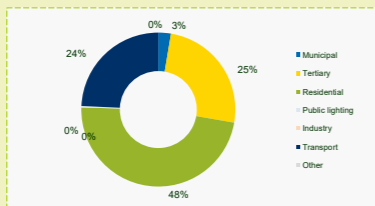
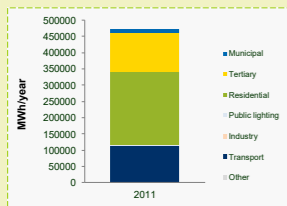
Emission factor	t CO ₂ (eq.) /capita	MWh/capita
	2,8	13,8

2) Greenhouse gas emissions per sector



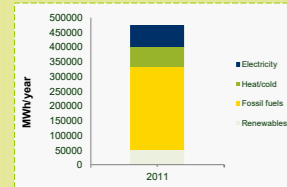
Municipal	2898
Tertiary	29726
Residential	43037
Public lighting	0
Industry	76185
Transport	21489
Other	0
Non-energy related	0
Buildings, equipment/facilities and industry	76185
Transport	21489
Other	0
Non-energy related	0

3) Final energy consumption per sector



Municipal	12496
Tertiary	118861
Residential	225987
Public lighting	1452
Industry	0
Transport	114893
Other	0
Buildings, equipment/facilities and industry	358796
Transport	114893
Other	473689

4) Final energy consumption per energy carrier

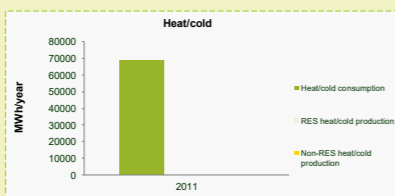
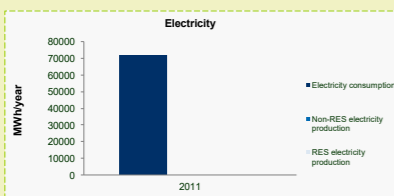


Electricity	71889
Heat/cold	68785
Fossil fuels	282311
Renewables	50704

* Renewables - for non-electricity uses.
** The energy mix of heat/cold and electricity is not identified.

5) Local energy production

Share of local energy production to overall final energy consumption
11%



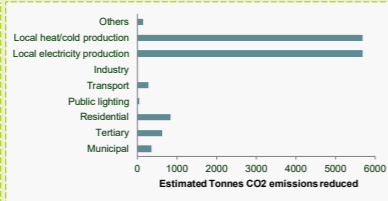
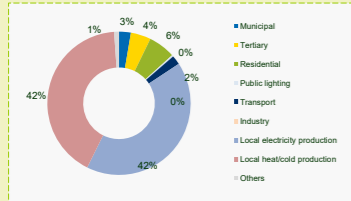
Electricity consumption	71889
Non-RES electricity production	0
RES electricity production	0
Heat/cold consumption	68785
RES heat/cold production	0
Non-RES heat/cold production	0
Other renewables	50704
Final energy consumption	473689

Key elements of the SECAP on climate mitigation

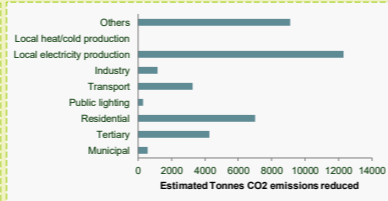
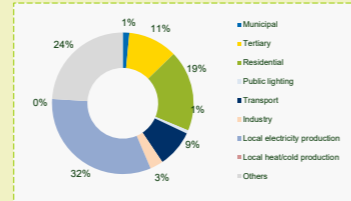
6) Greenhouse gas emissions reduction target

Time horizon	Reduction Target	tonnes CO ₂ (eq.) to be reduced
2020	20%	19335
2030	0%	0
[drop -down]	0%	0

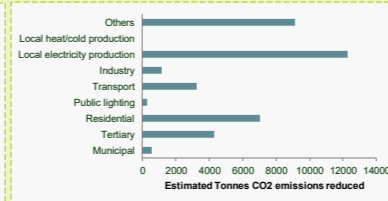
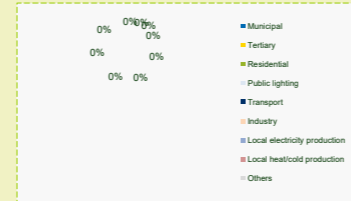
7) Estimated greenhouse gas emissions reduction per sector in 2020



Estimated greenhouse gas emissions reduction per sector in 2030

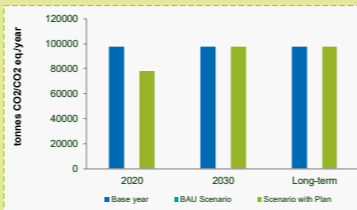
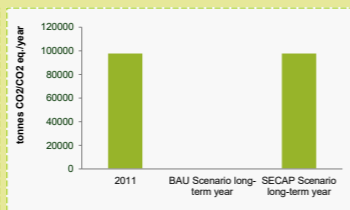
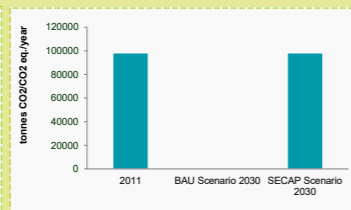
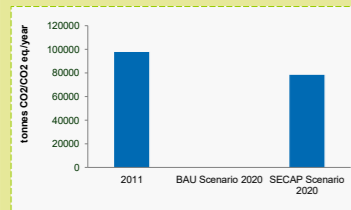


Estimated greenhouse gas emissions reduction per sector in long-term target year



	2020	2030	drop -down
Municipal	366	565,3346	0
Tertiary	623	4276,653	0
Residential	831	7022,352	0
Public lighting	49	288	0
Transport	284	3244,922	0
Industry	0	1143,713	0
Local electricity production	5698	12295,63	0
Local heat/cold production	5698	0	0
Others	150	9120,44	0

8) Expected evolution in terms of greenhouse gas emissions



2011	97673.82
BAU Scenario 2020	0
SECAP Scenario 2020	78139.06
2011	97673.82
BAU Scenario 2030	0
SECAP Scenario 2030	97673.82
2011	97673.82
BAU Scenario long-term year	0
SECAP Scenario long-term year	97673.82

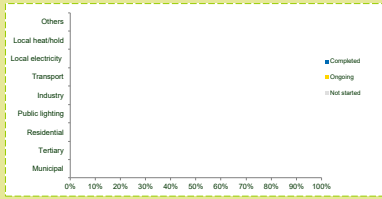
Comments:

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Your implementation progress

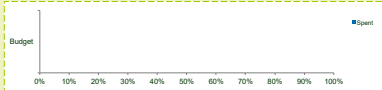
① This report refers to the monitoring of the mitigation part of the SECAP.

1) Status of implementation of actions



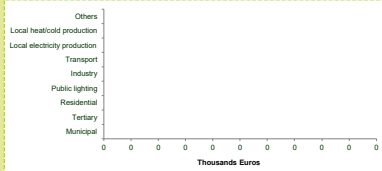
	Municipal	Tertiary	Residential	Public lighting	Industry	Transport	Local electricity	Local heat/cold	Others
Completed	0	0	0	0	0	0	0	0	0
Ongoing	0	0	0	0	0	0	0	0	0
Not started	0	0	0	0	0	0	0	0	0
Postponed	0	0	0	0	0	0	0	0	0

2) Overall budget spent



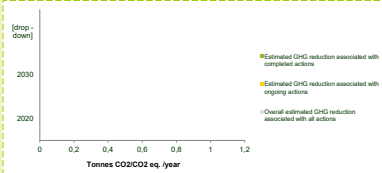
Budget	€
Spent	0
Remaining	0

3) Money spent per sector



	€
Municipal	0
Tertiary	0
Residential	0
Public lighting	0
Industry	0
Transport	0
Local electricity production	0
Local heat/cold production	0
Others	0

4) Estimated greenhouse gas emissions reduction according to the implementation status of the actions

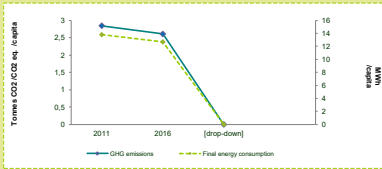


	2020	2030	[drop -down]
Estimated GHG reduction associated with completed actions			
Estimated GHG reduction associated with ongoing actions			
Estimated GHG reduction associated with not started actions			
Overall estimated GHG reduction associated with all actions	8001	37957,85	0

① Insert the values according to the status of implementation of your actions.

Your performance towards energy sustainability and climate mitigation

5) Greenhouse gas emissions and final energy consumption per capita

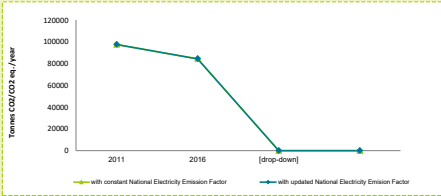


Insert the values according to the number of MEs included.

year	tonnes/capita
2011	2.84786537
2016	2.61027214
[drop-down]	#####

year	MWh/capita
2011	13.81
2016	12.69
[drop-down]	#####

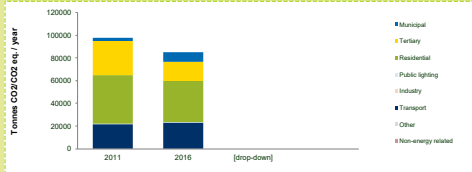
6) Greenhouse gas emissions (influence of the National Electricity Emission Factor)



year	Input National Electricity Emission Factor	Constant emission factor	Yearly updated emission factor	GHG emissions with constant national emission factor	GHG emissions with updated national emission factor
2011	0.36	0.36	-	97674	97674
2016	0.36	0.353769	0.353769	84487	84487
[drop-down]	0	#####	#####	#####	#####

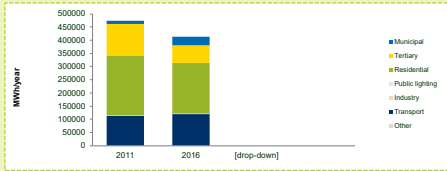
* Total GHG emission according to constant National Electricity Emission Factor has been calculated in order to show the effect on emission reduction expressed by the changing of National Power grid mix and not directly related to actions within the action plan.

7) Greenhouse gas emissions per sector



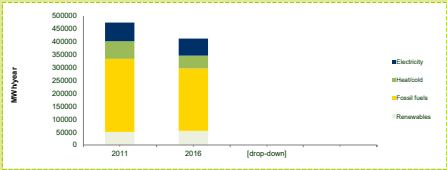
	2011	2016	[drop-down]
Municipal	2958	8197	0
Tertiary	29726	17071	0
Residential	43037	36039	0
Public lighting	523	317	0
Industry	0	0	0
Transport	21489	23293	0
Other	0	0	0
Non-energy related	0	0	0

8) Final energy consumption per sector



	2011	2016	[drop-down]
Municipal	12496	32647	0
Tertiary	11861	65553	0
Residential	229287	192884	0
Public lighting	1452	861	0
Industry	0	0	0
Transport	114893	120756	0
Other	0	0	0

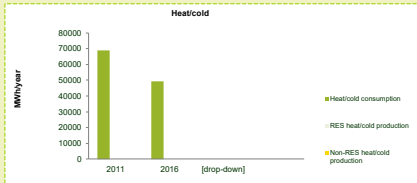
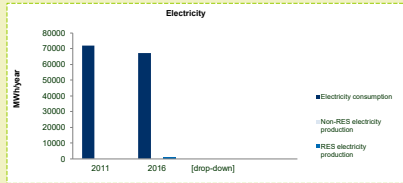
9) Final energy consumption per energy carrier



	2011	2016	[drop-down]
Renewables	50704	53883	0
Fossil fuels	282311	242307	0
Heat/cold	68785	49208	0
Electricity	71889	67363	0

* Renewables: for non-electricity uses.
 ** The energy mix of heat/cold and electricity is not identified.

10) Local energy production



	2011	2016	[drop-down]
RES electricity production	0	1166	0
Non-RES electricity production	0	0	0
RES heat/cold production	0	0	0
Non-RES heat/cold production	0	0	0
Electricity consumption	71889	67363.24	0
Heat/cold consumption	68785	49207.78	0

Comments:

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Fuel Emission Factors Database

HOME

CoM Template Energy carriers	Fossil fuels											Renewable energies														
	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	Liquefied Petroleum Gases	Natural Gas Liquids	Gas/Diesel oil	Gas/Diesel oil	Motor gasoline	Lignite	Anthracite	Other Bituminous Coal	Sub-Bituminous Coal	Municipal Wastes (non-biomass fraction)	Peat	Other Liquid Biofuels	Biogasoline		Biodiesels		Biogas	Municipal Wastes (Biomass Fraction)	Wood		Wood Waste	Other Primary solid biomass			
Sustainability criteria ¹⁾													(f)	(m)	(f)	(m)	(f)	(m)		(f)	(m)					
IPCC	0.202	0.227	0.231	0.267	0.267	0.248	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	-	-
LCA	0.202	0.227	0.232	0.268	0.268 ⁽¹⁾	0.250 ⁽¹⁾	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	-	-
	0.221	n.a.	n.a.	0.292	0.292	0.299	0.388	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. ⁽²⁾
	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 ⁽²⁾		0.206 ⁽¹⁾		0.156 ⁽¹⁾	n.a.	0.106	0.013	0.416 ⁽¹⁾	0.184	n.a.	n.a.	n.a. ⁽²⁾

¹⁾ if sustainability criteria during production are fulfilled
⁽¹⁾ 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 (a) 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 CO₂e, 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 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.
- h.