Sustainable Energy Action Plan (SEAP) template

This is a working version for Covenant signatories to help in data collection. However the on-line SEAP template available in the Signatories' Corner (password restricted area) at: http://members.eumayors.eu/ is the only REQUIRED template that all the signatories have to fill in at the same time when submitting the SEAP in their own (national) language.

OVERALL STRATEGY

1) Overall CO2 emission reduction target

☐
☑ 20,35% (%) by **2020**

? Instructions

Please tick the corresponding box:

Absolute reduction

Per capita reduction

2) Long-term vision of your local authority (please include priority areas of action, main trends and challenges)

Photovoltaic systems in city council buildings, street lighting and traffic lights eficiency, energy eficiency plans for the city council buildings, urban mobility, awareness campaigns for the citizens, ...

3) Organisational and financial aspects

Coordination and organisational structures created/assigned	Environmental department from the council
Staff capacity allocated	Preparation: 0,6 Implementation: 0,5
Involvement of stakeholders and citizens	Internal: Meetings with the city council politicians and technicians // External: Surveys to citizens and presentations Preparation: Meetings and presentations Implementation: Presentations, campains and monitoring plan
Overall estimated budget	3.480.210 €
Foreseen financing sources for the investments within your action plan	Canet de Mar Council budget, european funds, diferent catalan and spanish funds
Planned measures for monitoring and follow up	Implementation report every second year, indicators developed by Xarxa de ciutats i pobles cap a la sostenibilitat

Go to the second part of the SEAP template -> dedicated to your Baseline Emission Inventory!

More information: www.eumayors.eu.

Sustainable Energy Action Plan (SEAP) template

BASELINE EMISSION INVENTORY

1) Inventory year 2005

For Covenant signatories who calculate their CO2 emissions per capita, please precise here the number of inhabitants during the inventory year: 12.429

Instructions

2) Emission factors

Please tick the corresponding box:

- ☑ Standard emission factors in line with the IPCC principles
- ☐ LCA (Life Cycle Assessment) factors

Emission reporting unit

Please tick the corresponding box:

- ☐ CO2 emissions
- ☑ CO2 equivalent emissions

3) Key results of the Baseline Emission Inventory

Green cells are compulsory fields **Grey fields are non editable**

A. Final energy consumption

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

Category	FINAL ENERGY CONSUMPTION [MWh]															
			Fossil fuels								Renewable energies					
	Electricity	Heat/cold	Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES:																
Municipal buildings, equipment/facilities	594,3		173,0			156,2								23,06		946,5
Tertiary (non municipal) buildings, equipment/facilities	5.080,0			741,4		1.239,5										7.060,9
Residential buildings	22.352,1		17.274,6	2.385,40		1.922,0										43.934,1
Municipal public lighting	1.589,2															1.589,2
Industries (excluding industries involved in the EU Emission trading scheme - ETS)																
Subtotal buildings, equipments/facilities and industries	29.615,6	0,0	17.447,6	3.126,8	0,0	3.317,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	23,1	0,0	53.530,8
TRANSPORT:																
Municipal fleet						1.397,2										1.397,2
Public transport						30,9										30,9
Private and commercial transport				23,70		67.999,7										68.023,4
Subtotal transport	0,0	0,0	0,0	23,7	0,0	69.427,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	69.451,4
Total	**29.615,6**	**0,0**	**17.447,6**	**3.150,5**	**0,0**	**72.745,5**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**23,1**	**0,0**	**122.982,2**

Municipal purchases of certified green electricity (if any) **[MWh]:**	-
CO2 emission factor for certified green electricity purchases (for LCA approach)**:**	-

B. CO2 or CO2 equivalent emissions

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

Category	CO2 emissions [t]/ CO2 equivalent emissions [t]															
			Fossil fuels								Renewable energies					
	Electricity	Heat/cold	Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES:																
Municipal buildings, equipment/facilities	285,9		35,1			41,4								5,2		367,6
Tertiary (non municipal) buildings, equipement/facilities	2.443,5			181,5		328,5										2.953,5
Residential buildings	10.751,4		3.503,1	564,9		507,1										15.326,5
Municipal public lighting	764,4															764,4
Industries (excluding industries involved in the EU Emission trading scheme - ETS)																0,0
Subtotal buildings, equipments/facilities and industries	14.245,2	0,0	3.538,2	746,4	0,0	876,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	5,2	0,0	19.412,0
TRANSPORT:																
Municipal fleet						374,6										374,6
Public transport						8,2										8,2
Private and commercial transport				5,6		18.048,7										18.054,3
Subtotal transport	0,0	0,0	0,0	5,6	0,0	18.431,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	18.437,1
OTHER:																
Waste management																7.143,2
Waste water management																2.644,0
Please specify here your other emissions																
Total	**14.245,2**	**0,0**	**3.538,2**	**752,0**	**0,0**	**19.308,4**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**5,2**	**0,0**	**47.636,3**

Corresponding CO2-emission factors in [t/MWh]	0,481		0,203	0,237		0,264										
CO2 emission factor for electricity not produced locally [t/MWh]	0,481															

C. Local electricity production and corresponding CO2 emissions

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

Locally generated electricity (excluding ETS plants , and all plants/units > 20 MW)	Locally generated electricity [MWh]	Energy carrier input [MWh]											CO2 / CO2-eq emissions [t]	Corresponding CO2-emission factors for electricity production in [t/MWh]
		Fossil fuels					Steam	Waste	Plant oil	Other biomass	Other renewable	other		
		Natural gas	Liquid gas	Heating oil	Lignite	Coal								
Wind power														
Hydroelectric power													0,00	
Photovoltaic													0,00	
Combined Heat and Power														
Other *Please specify: Incinerator*	1.444,30												694,71	0,481
Total	1.444,30												694,71	

D. Local heat/cold production (district heating/cooling, CHPs…) and corresponding CO2 emissions

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

Locally generated heat/cold	Locally generated heat/cold [MWh]	Energy carrier input [MWh]										CO2 / CO2-eq emissions [t]	Corresponding CO2-emission factors for heat/cold production in [t/MWh]
		Fossil fuels					Waste	Plant oil	Other biomass	Other renewable	other		
		Natural gas	Liquid gas	Heating oil	Lignite	Coal							
Combined Heat and Power													
District Heating plant(s)													
Other *Please specify:* _____													
Total	0											0	

4) Other CO2 emission inventories

If other inventory(ies) have been carried out, please click here ->

Otherwise go to the last part of the SEAP template -> dedicated to your Sustainable Energy Action Plan

More information: www.eumayors.eu.

Sustainable Energy Action Plan (SEAP) template

EMISSION INVENTORY (2)

1) Inventory year 2007

For Covenant signatories who calculate their CO2 emissions per capita, please precise here the number of inhabitants during the inventory year: 13.181

Instructions

2) Emission factors

Please tick the corresponding box:

- ☑ Standard emission factors in line with the IPCC principles
- ☐ LCA (Life Cycle Assessment) factors

Emission reporting unit

Please tick the corresponding box:

- ☐ CO2 emissions
- ☑ CO2 equivalent emissions

3) Key results of the Baseline Emission Inventory

Green cells are compulsory fields **Grey fields are non editable**

A. Final energy consumption

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

Category	FINAL ENERGY CONSUMPTION [MWh]															
			Fossil fuels								Renewable energies					
	Electricity	Heat/cold	Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Plant oil	Biofuel	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES:																
Municipal buildings, equipment/facilities	852,5		205,0			91,5								23,1		1.172,0
Tertiary (non municipal) buildings, equipment/facilities	7.044,6			543,4		1.139,2										8.727,2
Residential buildings	23.188,6		26.618,6	1952,2		1.844,2										53.603,6
Municipal public lighting	1.768,6															1.768,6
Industries (excluding industries involved in the EU Emission trading scheme - ETS)																0,0
Subtotal buildings, equipments/facilities and industries	32.854,3	0,0	26.823,6	2.495,6	0,0	3.074,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	23,1	0,0	65.271,4
TRANSPORT:																
Municipal fleet						1.397,2										1.397,2
Public transport						30,9										30,9
Private and commercial transport				19,4		72.913,1										72.932,5
Subtotal transport	0,0	0,0	0,0	19,4	0,0	74.341,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	74.360,5
Total	**32.854,3**		**26.823,6**	**2.515,0**		**77.416**								**23,1**		**139.631,9**

Municipal purchases of certified green electricity (if any) **[MWh]:**	-
CO2 emission factor for certified green electricity purchases (for LCA approach)**:**	-

B. CO2 or CO2 equivalent emissions

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

Category	CO2 emissions [t]/ CO2 equivalent emissions [t]															
			Fossil fuels								Renewable energies					
	Electricity	Heat/cold	Natural gas	Liquid gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other fossil fuels	Biofuel	Plant oil	Other biomass	Solar thermal	Geothermal	Total
BUILDINGS, EQUIPMENT/FACILITIES AND INDUSTRIES:																
Municipal buildings, equipment/facilities	377,7		41,6			24,2								5,2		448,7
Tertiary (non municipal) buildings, equipement/facilities	3.139,7			135,6		301,2										3.576,5
Residential buildings	10.272,5		5.398,0	462,3		486,6										16.619,4
Municipal public lighting	764,4															764,4
Industries (excluding industries involved in the EU Emission trading scheme - ETS)																
Subtotal buildings, equipments/facilities and industries	14.554,3	0,0	5.439,6	597,9	0,0	811,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	5,2	0,0	21.409,0
TRANSPORT:																
Municipal fleet						374,6										374,6
Public transport						8,2										8,2
Private and commercial transport				4,6		19.394,7										19.399,3
Subtotal transport	0,0	0,0	0,0	4,6	0,0	19.777,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	19.782,1
OTHER:																
Waste management																6.257,6
Waste water management																3.238,1
Please specify here your other emissions																
Total	**14.554,3**	**0,0**	**5.439,6**	**597,9**	**0,0**	**811,9**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**5,2**	**0,0**	**50.686,8**

Corresponding CO2-emission factors in [t/MWh]	0,443		0,203	0,237		0,264										
CO2 emission factor for electricity not produced locally [t/MWh]	0,443															

C. Local electricity production and corresponding CO2 emissions

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

Locally generated electricity (excluding ETS plants , and all plants/units > 20 MW)	Locally generated electricity [MWh]	Energy carrier input [MWh]											CO2 / CO2-eq emissions [t]	Corresponding CO2-emission factors for electricity production in [t/MWh]
		Fossil fuels					Steam	Waste	Plant oil	Other biomass	Other renewable	other		
		Natural gas	Liquid gas	Heating oil	Lignite	Coal								
Wind power													**0**	
Hydroelectric power													**0**	
Photovoltaic													**0**	
Combined Heat and Power													**0**	
Other *Please specify: Incinerator*	**1.269,90**												**562,57**	**0,443**
Total	**1.269,9**												**562,5657**	

D. Local heat/cold production (district heating/cooling, CHPs…) and corresponding CO2 emissions

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

Locally generated heat/cold	Locally generated heat/cold [MWh]	Energy carrier input [MWh]										CO2 / CO2-eq emissions [t]	Corresponding CO2-emission factors for heat/cold production in [t/MWh]
		Fossil fuels					Waste	Plant oil	Other biomass	Other renewable	other		
		Natural gas	Liquid gas	Heating oil	Lignite	Coal							
Combined Heat and Power													
District Heating plant(s)													
Other *Please specify: _____*													
Total													

Go to the last part of the SEAP template -> dedicated to your Sustainable Energy Action Plan!

More information: www.eumayors.eu.

SECTORS *& fields of action*	KEY actions/measures per field of action	Responsible department, person or company (in case of involvement of 3rd parties)	Implementation [start & end time]	Estimated costs per action/measure	Expected energy saving per measure [MWh/a]	Expected renewable energy production per measure [MWh/a]	Expected CO2 reduction per measure [t/a]	Energy saving target per sector [MWh] in 2020	Local renewable energy production target per sector [MWh]	CO2 reduction target per sector [t] in 2020
BUILDINGS, EQUIPMENT / FACILITIES & INDUSTRIES:								**3.722,22**		1.441,83
Municipal buildings, equipment/facilities	1. Replacing existing lamps for others highers efficiency 2. Installation high efficiency fluorescent 3. Replacing conventional ballasts for electronic ones 4. Improvement of the control of the lighting 5.Instalation automatic stop devices in lighting 6. Replacement of the diesel boilers or old gas boilers for efficiency ones 7. Improvement heating control (with thermostats and thermosthatic valves) 8. insulation of hot water pipes in units without heating 9 Reduction thermal's losses with the replacement of simple crystal enclosures for double one 10. Installation solar energy systems for obtaining hot water 11. Reduction thermal's losses in the buildings access 12. Regulation the temperature of municipal buildings to 21ºC in winter and 25ºC in summer 13. Reducing the number of computer towers through sharing them 14. Authomatic turn off of the computers 15. Implementation of a system power management in municipal buildings 16. Designation of energetic responsibles in municipal buildings 17. Implementation of a municipal system power management and design a energetic manager 18. Performing periodic audits to the municipal buildings 19. Preparation of a manual of best practices in the municipal buildings 20. Do a awarness campaign for the council workers with the energetic results of the different buidings 21. Train in the adoption of environmental criteria in decision making and projects development and actions in the different areas of the City Administration	1. Public planification 2. Public planification 3.Public planification 4. Public planification 5. Public planification 6. Public planification 7. Public planification 8. Public planification 9. Public planification 10. Public planification 11, Public planification 12. Public planification 13. IT Department 14. IT Department 15. Public planification 16. Public planification 17. Public planification 18. Public planification 19. Environmental Department 20. Public planification 21. Public planification	1. 2013-2015 2. 2013-2015 3. 2016-2020 4. 2016-2020 5. 2010-2012 6. 2016-2020 7. 2013-2015 8. 2013-2015 9. 2016-2020 10. 2016-2020 11. 2013-2015 12. 2010-2012 13. 2010-2012 14. 2013-2015 15. 2013-2015 16. 2010-2012 17. 2010-2012 18. 2016-2020 19. 2010-2012 20. 2013-2015 21. 2010-2012	1. 8130 2. - 3. 46000 4. - 5. 4530 6. 15000 7. 4000 8. 100 9. 1800 10. 49350 11. 100 12. - 13. 6000 14. 3000 15. 11400 16. 4000 17. - 18. 10000 19. - 20. 1000 21. -			1. 3,47 2. - 3. 11,55 4. 0,58 5. 1,4 6. - 7. 5,84 8. 1,87 9. 0,21 10. 2,35 10. 5,28 11. 0,49 12. 2,35 13. 1,65 14. 0,84 15. 9,32 16. 2,36 17. 9,13 18. 2,4 19. 1,52 20. 1,52 21. 3,04			
Tertiary (non municipal) buildings, equipment/facilities	1.Stimulate energetic manager in service companies	1. Public planification	1. 2013-2015	1. -			1. 39,88			
Residential buildings	1. Replacing incandescent lamps for low consumption 2. Replacing domestic appliances for efficcient ones	1. Environmental Department 2.Environmental Department	1. 2013-2015 2.2016-2020	1. - 2. -			1. 261,52 2. 854,14			
Municipal public lighting	1. Replacing mercury vapor lamps for sodium vapor ones 2. Installation astronomic clocks 3. Installing double standard ballast 4. Replacement of Christmas lights for more efficient ones 5. Replacement of the optical properties of LED technology for traffic lights	1.Public planification 2. Environment Department 3. Environment Department 4. Environment Department 5. Environment Department	1. 2016-2020 2. 2010-2012 3. 2016-2020 4. 2016-2020 5. 2013-2015	1. 246700 2.3100 3. 93000 4. - 5. 30000			1. 165,63 2. 4,49 3. 38,33 4. 3,06 5.9,84			
Industries (excluding industries involved in the EU Emission trading scheme - ETS) & Small and Medium Sized Enterprises (SMEs)										
Other - please specify: _____										
TRANSPORT:								**711,23**		5.804,06
Municipal fleet	1. Renovation municipal fleet vehicles for another vehicles more efficiency 2. Development efficient driving's courses	1. Environmental Department 2. Government Department	1. 2016-2020 2. 2010-2012	1. - 2. -			1. 4,86 2. 7,91			
Public transport	1. Promote the public transport instead of private one	1.Environmnetal Department	1. 2013-2015	1. -			1. 358,98			
Private and commercial transport	1.Replacing vehicles for the improvement of the energetic efficiency oft the private and commercial vehicles	1.Environmnetal Department	1. 2016-2020	1. -			1. 5432,31			
Other - please specify: _____										
LOCAL ELECTRICITY PRODUCTION:								**269,64**	**703,51**	882,05
Hydroelectric power										
Wind power										
Photovoltaic	1. Electricity generation from sunlihgt by installing photovoltaic on municipal	1. Environment Department	1. 2013-2015	1. 2875000			1. 278,35			
Combined Heat and Power										
Other - please specify: Sensibilitzation_____	1. Create an inventory of the renewal energy existing systems in private sector	1. Environment Department	1. 2013-2015	1. -			1. 603,7			

LOCAL DISTRICT HEATING / COOLING, CHPs:										-
Combined Heat and Power										
District heating plant										
Other - please specify:_____										
LAND USE PLANNING:									**3.548,24**	1.018,03
Strategic urban planning	1. Incorporate criteria of sustainability in the urban developement planning 2. Introduction a bioclimatic architecture criteria in new buildings	1. Environmental Department 2. Environmental Department	1. 2010-2012 2. 2010-2012	1. - 2. -			1. 2.			
Transport / mobility planning	1. Promote the bicycle use 2. Continue introducing the points of the School ways Plan 3. Promote urban mobility by food	1. Environmental Department 2. Environmental Department 3. Environmental Department	1. 2016-2020 2. 2010-2012 3. 2010-2012	1. - 2. - 3. -			1. 30,83 2. 89,75 3. 897,45			
Standards for refurbishment and new development										
Other - please specify: _____										
PUBLIC PROCUREMENT OF PRODUCTS AND SERVICES:									**187,52**	72,61
Energy efficiency requirements/standards	1.Promote green prurchasing manual of Canet de Mar	1. Environment Department	1. 2010-2012	1. -			1. 3,08			
Renewable energy requirements/standards	1. Incorporating green prurchasing criteria in Consell Comarcal del Maresme	1. Environment Department	1. 2013-2015	1. -			1. 69,53			
Other - please specify: _____										
WORKING WITH THE CITIZENS AND STAKEHOLDERS:									**327,00**	101,72
Advisory services										
Financial support and grants	1, Bonus the purchase of hybrid and electrical vehicles in the municipal taxes	1. Intervention Department	1. 2016-2020	1. -			1. -			
Awareness raising and local networking	1. Create a environmental channel in the town web to promote reference information 2. Distribution of energy savings associated with the implementation of renewable energy 3. Development a communication campaign of PAES 4. Development a campaign for education in sustainable mobility 5. Conducting an information campaign and promotion of efficiency energy in homes 6. Promote car sharing in the town	1. Environment Department 2. Environment Department 3. Environment Department 4. Environment Department 5. Environment Department 6. Environment Department	1. 2013-2015 2. 2012-2015 3. 2012-2015 4. 2009-2012	1. - 2. 13000 3. 15000 4. - 5. - 6.-			1. - 2. 8,43 3. 8,43 4. 0,54 5.84,32 6. -			
Training and education	1. Stimulating the participation in energetic efficiency in the schools									
Other - please specify: _____										
OTHER SECTOR(S) - *Please specify: _____*									**532,46**	372,91
Other - Please specify: Waste management and water management	1. Improve the waste collection 2. Continue with the installation of saving water systems in municipal buildings 3. Development a campaign to advice the activities and companies in the town to reduce the water consumption 4. Development a campaign to the citizens and distribute water reduction systems	1. Civil Participation Department 2. Civil Participation Departmen 3. Civil Participation Departmen	1. 2010-2012 2. 2010-2012 3. 2013-2015 4. 2013-2015	1. 20000 2. 3. 4. 20000			1. 165,25 2. 6,47 3. 21,94 4. 179,25			
					TOTAL:				**9.298,31**	**703,51** 9.693,21