

Monitoring Template

The monitoring template must be submitted every two years after the SEAP submission date. Having in mind that reporting every two years might put too much pressure on human or financial resources, you can decide to carry out emission inventories at least every four years. In this way, you can submit every two years an Action Reporting, i.e. a monitoring template without a monitoring emission inventory (MEI) and focused on the reporting of the status of implementation of your actions. However, every four years you must submit a Full Reporting, i.e. a monitoring template which includes all the three parts.



[Instructions SEAP guidebook](#)





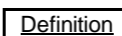
Signatory information:

Name:

Country:

Contact person:

Template caption:

-  Mandatory input cells
-  Optional input cells
-  Output cells
-  Pre-filled cells
-  Definition boxes (visible when clicking)

Template structure:

- ✓ Part I - My Overall Strategy
- ✓ Part II - My Emission Inventories
- ✓ Part III - My Sustainable Energy Action Plan

Follow the steps below (part I > II > III in this order):

- ✓ Step 1 - Fill in the form.
- ✓ Step 2 - Click on "Go to the next part".
- ✓ Step 3 - If any error is reported, please correct it.
- ✓ Step 4 - Click on "See report" and submit the SEAP online.

Fill in the SEAP template

Fill in the Monitoring template

See SEAP report

See Monitoring report

Submit online

Submit online

Part I - My Overall Strategy

My Overall Strategy

1) Overall CO₂ reduction target (%)

2020 target Long-term target

Baseline year Target year

Absolute reduction
 Per capita reduction

Population estimates by 2020

2) Vision

3) Coordination and organisational structures created/assigned

4) Staff capacity allocated

| | | |
|---|------------------------------------|---|
| SEAP preparation: | <u>Full-time equivalent job(s)</u> | SEAP implementation: |
| <input type="checkbox"/> Local authority | <input type="text"/> | <input type="checkbox"/> Local authority |
| <input type="checkbox"/> Local/regional energy agency | <input type="text"/> | <input type="checkbox"/> Local/regional energy agency |
| <input type="checkbox"/> External consultant | <input type="text"/> | <input type="checkbox"/> External consultant |
| <input type="checkbox"/> Covenant Territorial Coordinator | <input type="text"/> | <input type="checkbox"/> Covenant Territorial Coordinator |
| <input type="checkbox"/> Other | <input type="text"/> | <input type="checkbox"/> Other |

Nature of the staff allocated to SEAP implementation

5) Involvement of stakeholders and citizens

Part I - My Overall Strategy

6) Overall budget for your SEAP implementation

Budget spent so far for SEAP implementation

Budget spent so far (€)

Local authority

Other actors

Investment

Non-investment

Investment

Non-investment

Total

Overall budget foreseen for SEAP implementation (€)

Investment

Non-investment

Investment

Non-investment

Total

Time period 1990 2020 31 years

Time period 1990 2020 31 years

[Empty text box for overall budget details]

7) Financing sources used so far for SEAP implementation

Please specify the %:

Public

Local Authority's own resources

National Funds & Programmes

EU Funds & Programmes

Private

[Percentage input boxes]

[Empty text box for financing source details]

Part I - My Overall Strategy

8) Monitoring process

Please rate (little/fair/strong/not applicable) the main problems encountered during SEAP implementation, either overall or by key Covenant sector:

| | All sectors | Municipal | Tertiary | Residential | Transport |
|--|-------------|-----------|----------|-------------|-----------|
| 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 | | | | | |
| Incompability with national policy orientations | | | | | |
| Immature or high cost technologies | | | | | |

Main barriers to SEAP implementation

Additional comments

Part II - My Emission Inventories

Monitoring Emission Inventory

Results of your latest Monitoring Emission Inventory
(same reporting form as for the 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 and data sources

Results of the Emission Inventory

A. Final energy consumption

Please select the sectors included in your emission inventory:

- Buildings, equipment facilities and industries
 - Municipal buildings, equipment/facilities 
 - Tertiary (non municipal) buildings, equipment/facilities 
 - Residential buildings 
 - Public lighting
 - Industry
 - Industry Non-ETS
 - Industry ETS (not recommended)
- Transport 
 - Municipal fleet
 - Public transport
 - Private and commercial transport
- Agriculture, Forestry, Fisheries

Part II - My Emission Inventories

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 | | | | | | | | | | | | | | | | | |
| <u>Municipal buildings, equipment/facilities</u> | | | | | | | | | | | | | | | | | 0 |
| <u>Tertiary (non municipal) buildings, equipment/facilities</u> | | | | | | | | | | | | | | | | | 0 |
| <u>Residential buildings</u> | | | | | | | | | | | | | | | | | 0 |
| <u>Public lighting</u> | | | | | | | | | | | | | | | | | 0 |
| <u>Industry</u> | <u>Non-ETS</u> | | | | | | | | | | | | | | | | 0 |
| | <u>ETS (not recommended)</u> | | | | | | | | | | | | | | | | 0 |
| Subtotal | | | | | | | | | | | | | | | | | 0 |
| TRANSPORT | | | | | | | | | | | | | | | | | |
| <u>Municipal fleet</u> | | | | | | | | | | | | | | | | | 0 |
| <u>Public transport</u> | | | | | | | | | | | | | | | | | 0 |
| <u>Private and commercial transport</u> | | | | | | | | | | | | | | | | | 0 |
| Subtotal | | | | | | | | | | | | | | | | | 0 |
| OTHER | | | | | | | | | | | | | | | | | |
| <u>Agriculture, Forestry, Fisheries</u> | | | | | | | | | | | | | | | | | 0 |
| TOTAL | | | | | | | | | | | | | | | | | 0 |

B. Energy supply

Please select when applicable:

- Municipal purchases of certified green electricity

Local/distributed electricity production:

- Wind
 Hydroelectric
 Photovoltaics
 Geothermal
 Combined Heat & Power
 Other

Local heat/cold production:

- Combined Heat & Power
 District heating (heat-only)
 Other

Part II - My Emission Inventories

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 | Biofuel | Plant oil | Other biomass | Solar thermal | Geothermal |
| BEI year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MEI year | | | | | | | | | | | | | | | | |

C2. Please tick the box in case non-energy related sectors are included:

| Non-energy related sectors | CO ₂ eq. emissions |
|-------------------------------|-------------------------------|
| <u>Waste management</u> | |
| <u>Waste water management</u> | |
| Other non-energy related | |

Part II - My Emission Inventories

Your Baseline Emission Inventory

| Sector | CO2 emissions [t]/ CO2 equivalent emissions [t] | | | | | | | | | | | | | | | Total | |
|--|---|-----------|--------------|------------|-------------|----------|----------|----------|----------|--------------------|--------------------|-----------|---------------|---------------|------------|----------|----------|
| | Electricity | Heat/cold | Fossil fuels | | | | | | | | Renewable energies | | | | | | |
| | | | Natural gas | Liquid gas | Heating Oil | Diesel | Gasoline | Lignite | Coal | Other fossil fuels | Biofuel | Plant oil | 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 |
| Tertiary (non municipal) buildings, equipment/facilities | | 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 |
| Municipal public lighting | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Industries | 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 |
| TRANSPORT | | | | | | | | | | | | | | | | | |
| Municipal fleet | | 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 |
| Private and commercial transport | | 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 |
| OTHER | | | | | | | | | | | | | | | | | |
| Agriculture, Forestry, Fisheries | | 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 |

Additional comments

Part III - My Sustainable Energy Action Plan

Sustainable Energy Action Plan

1) Title

2) Date of formal approval

3) Decision body approving the plan

4) SEAP webpage

5) Business-as-Usual projections by 2020 (if applicable)

| | | |
|---------------------------|----------------------|---------------------------|
| CO ₂ emissions | <input type="text"/> | t CO ₂ (eq.)/a |
| Final energy consumption | <input type="text"/> | MWh/a |

6) Methodological notes

7) Estimates of the impacts of actions in 2020 in relation to:

Part III - My Sustainable Energy Action Plan

Key Actions of the SEAP

Add action
 Delete action
 Edit action

/ Select / unselect action as Benchmark of Excellence

Minimum 3 Benchmarks of Excellences to be submitted at the monitoring stage

| Key Actions | Area of intervention | Policy instrument | Origin of the action | Responsible body | Implementation timeframe | | Status of implementation | Implementation cost spent so far € | Estimates in 2020 | | | |
|---|----------------------|-------------------|----------------------|------------------|--------------------------|-----|--------------------------|---------------------------------------|-------------------------|--------------------------------------|---|--|
| | | | | | Start | End | | | Energy savings MWh/a | Renewable energy production MWh/a | CO ₂ reduction t CO ₂ /a | |
| | | | | | | | | | | | | |
| MUNICIPAL BUILDINGS, EQUIPMENT/FACILITIES | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| TERTIARY BUILDINGS, EQUIPMENT/FACILITIES | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| RESIDENTIAL BUILDINGS | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| PUBLIC LIGHTING | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| INDUSTRY | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| TRANSPORT | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| LOCAL ELECTRICITY PRODUCTION | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| LOCAL HEAT/COLD PRODUCTION | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| OTHERS | | | | | | | | | | | | |
| [Name of the action] | | | | | | | | | | | | |
| <i>Estimated reduction not associated with any reported actions</i> | | | | | | | | | | | | |
| TOTAL | | | | | | | | 0 | 0 | 0 | 0 | |
| Sub-total Buildings, equipment/facilities and industries | | | | | | | | | | | | |

Implementation status of your actions (e.g. completed, ongoing...)

Expected impacts of the actions implemented so far (completed or ongoing)

Add/Update a Key Action

| Sector | Pre-filled and non-editable name of sector | * mandatory fields |
|--------------------------------|--|--------------------|
| Name * | <input type="text"/> | |
| Area of intervention * | <input type="text"/> | |
| Policy instrument * | <input type="text"/> | |
| Origin of the action * | <input type="text"/> | |
| Responsible body * | <input type="text"/> | |
| Start time * | <input type="text"/> | |
| End time * | <input type="text"/> | |
| Status of implementation * | <input type="text"/> | |
| <u>Implementation cost [€]</u> | <input type="text"/> | |

Estimates in 2020

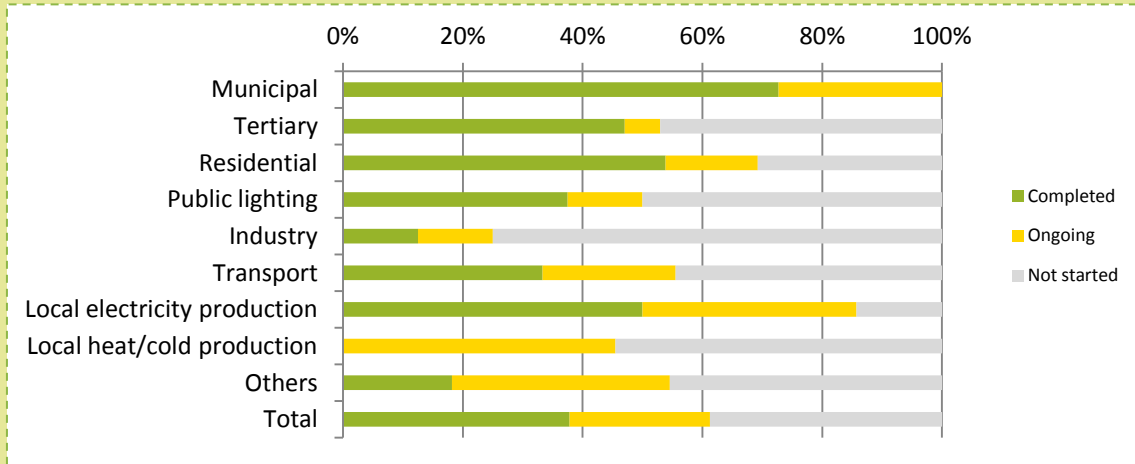
| | |
|-------------------------------------|----------------------|
| Energy savings [MWh/a] | <input type="text"/> |
| Renewable energy production [MWh/a] | <input type="text"/> |
| CO ₂ reduction [t/a] | <input type="text"/> |

Monitoring report

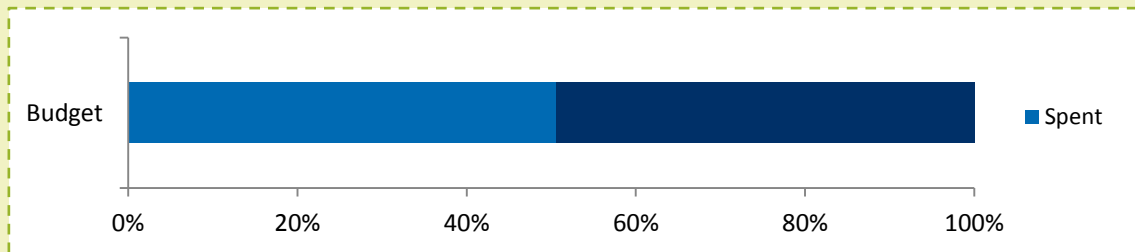
Graphical display of progress and results in a printable Synthesis Report

Your SEAP implementation progress

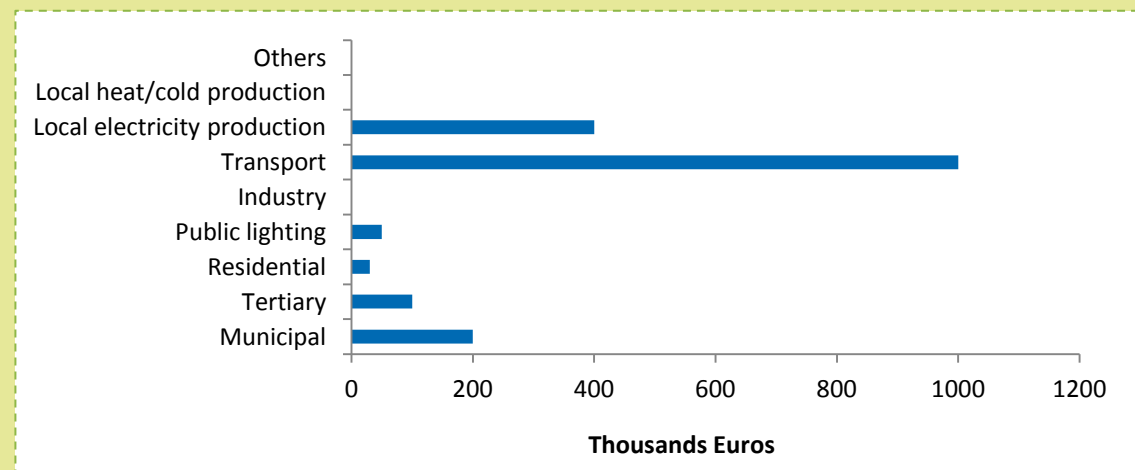
1) Status of implementation of actions



2) Overall budget spent

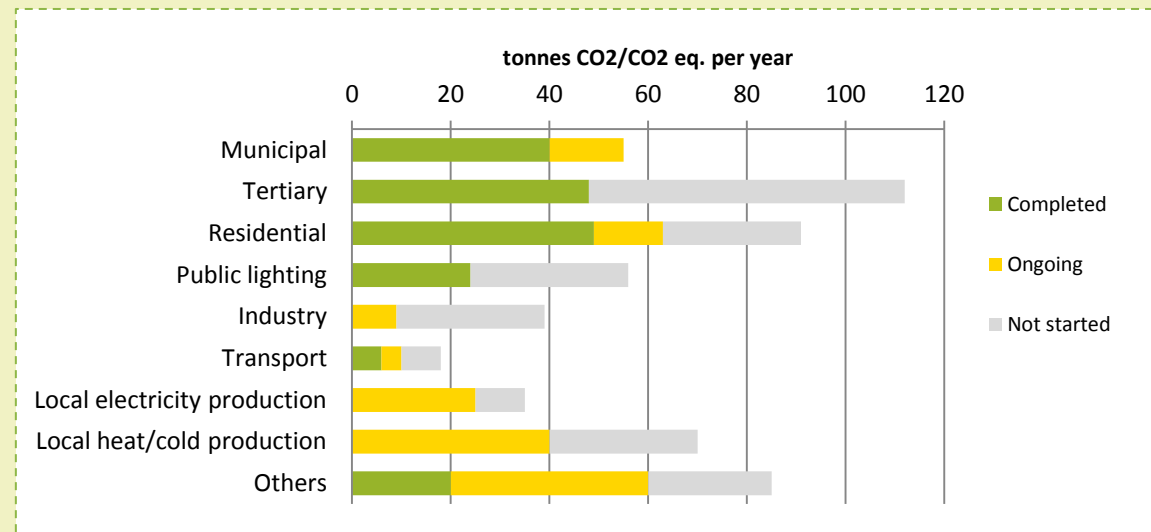
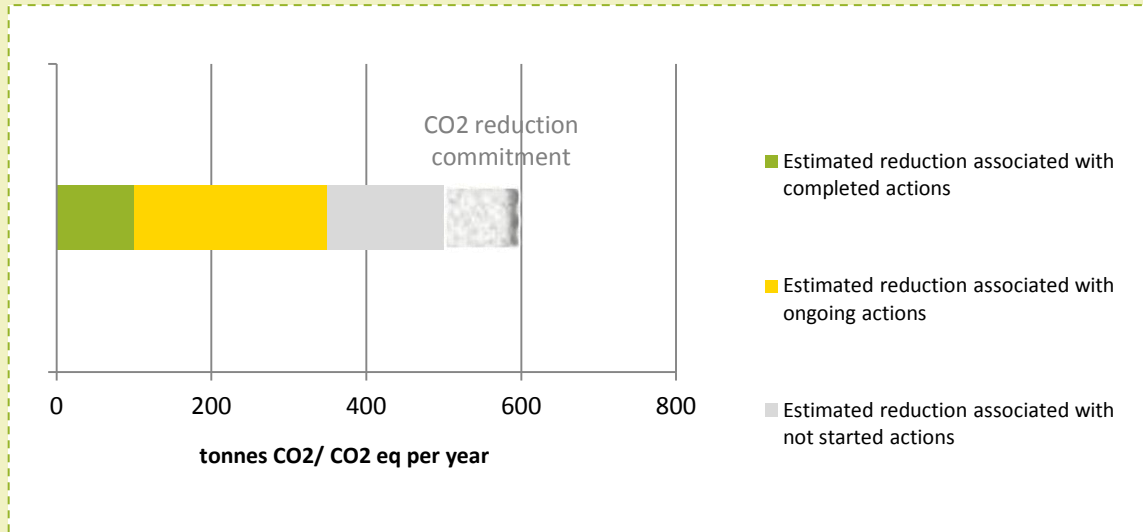


3) Money spent per sector



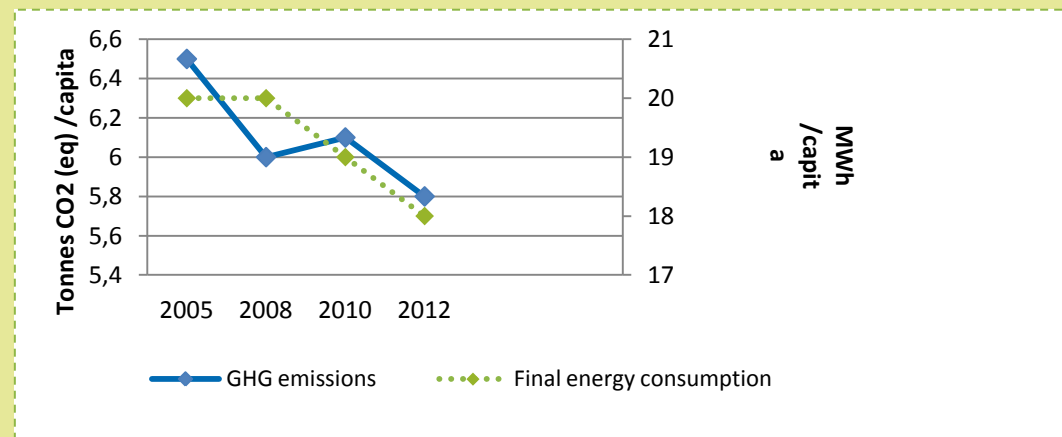
Monitoring report

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



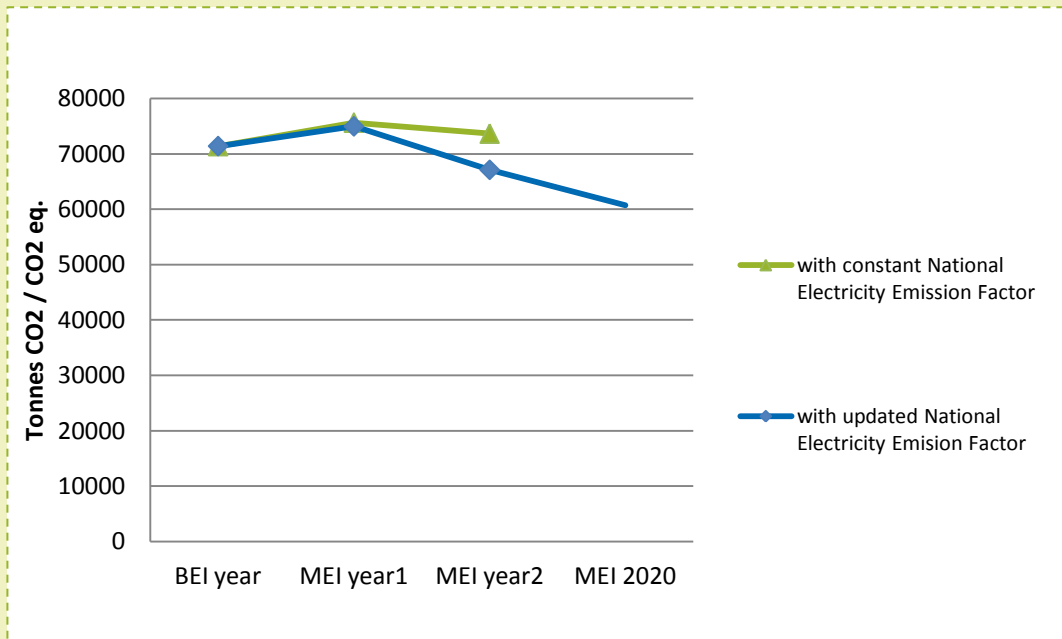
Your performance towards energy sustainability

5) Greenhouse gas emissions and final energy consumption per capita

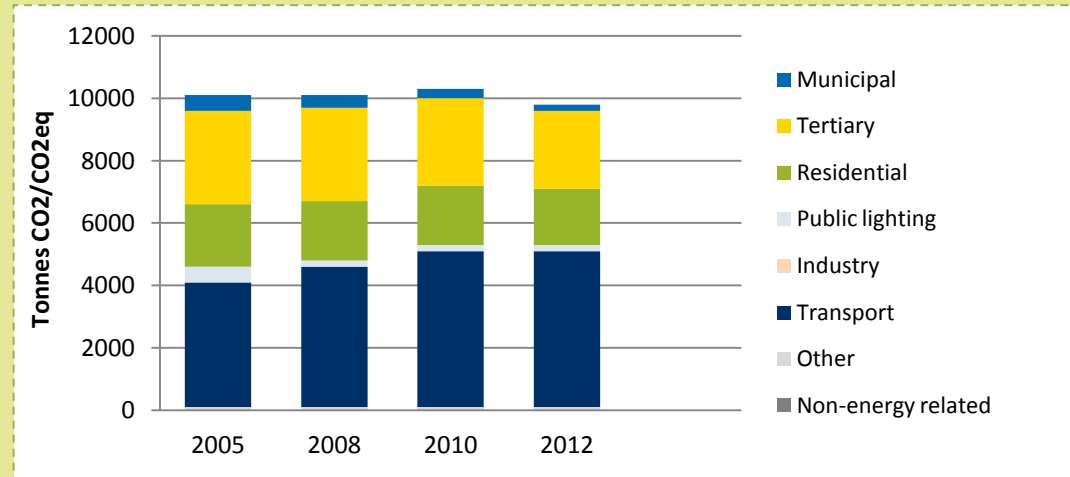


Monitoring report

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

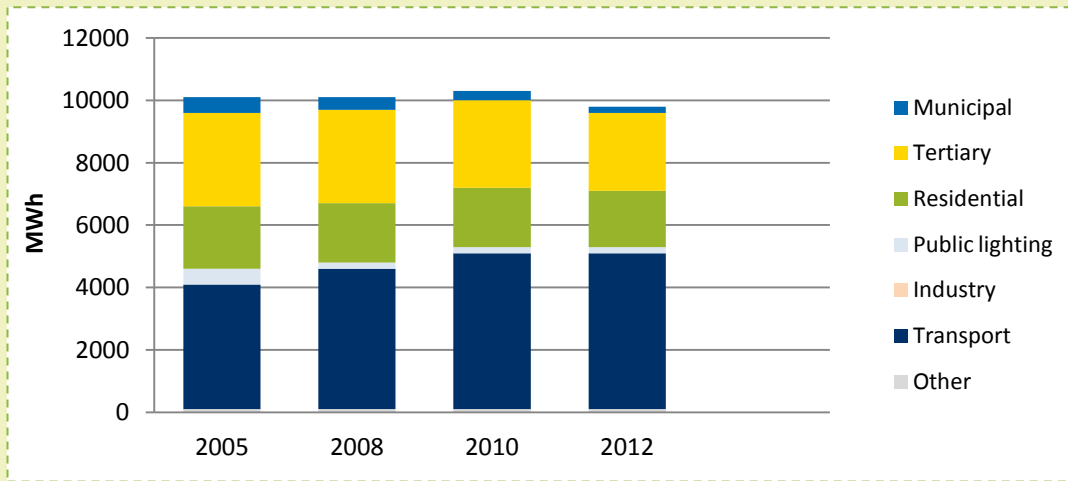


7) Greenhouse gas emissions per sector

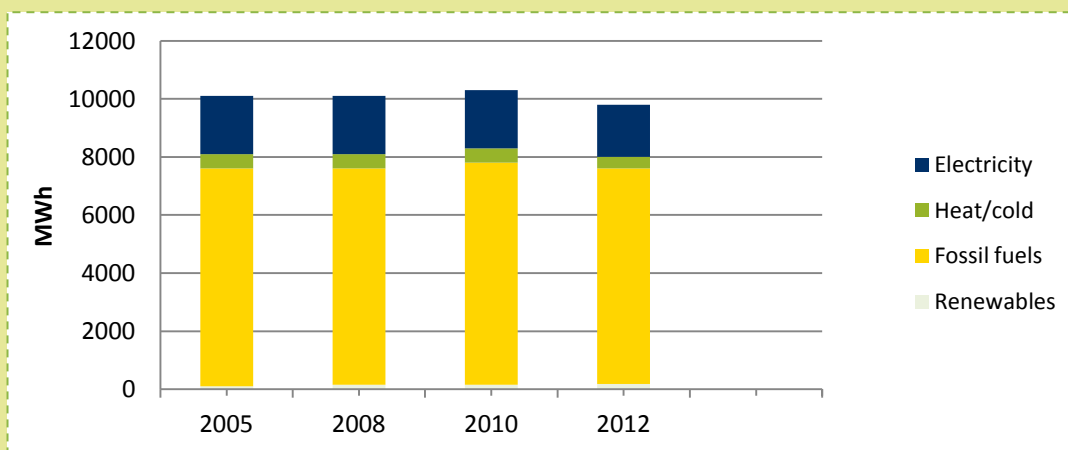


Monitoring report

8) Final energy consumption per sector



9) Final energy consumption per energy carrier



* Renewables - for non-electricity uses.

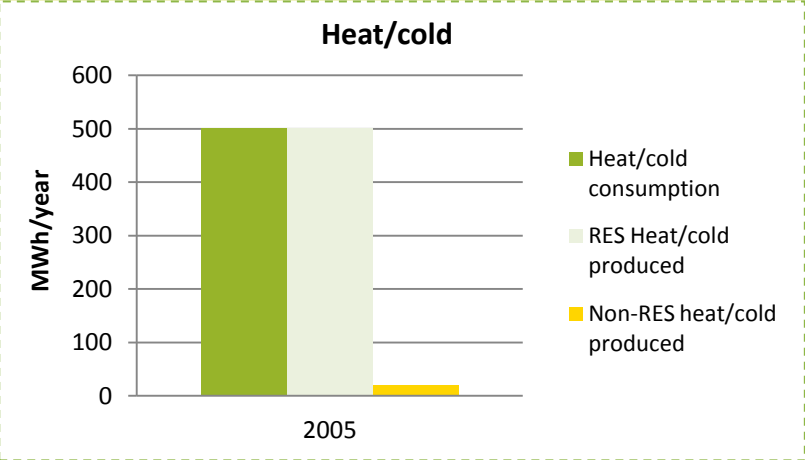
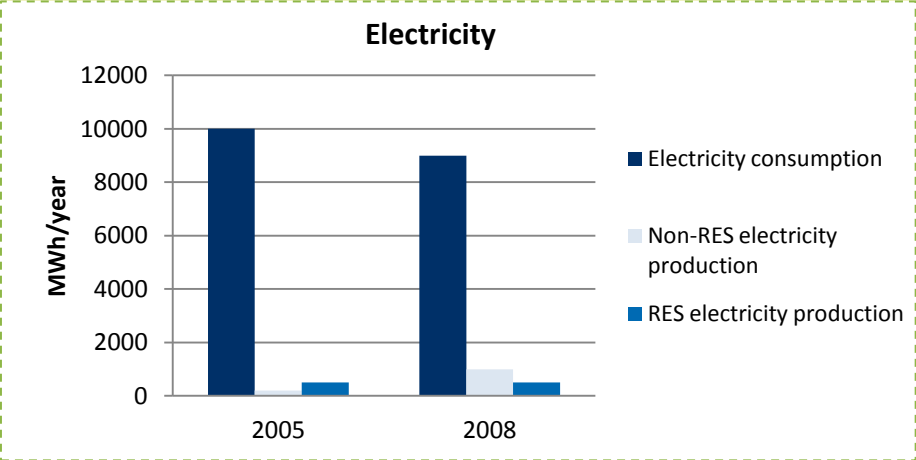
** The energy mix of heat/cold and electricity is not identified.

Monitoring report

10) Local energy production

Share of local energy production to overall final energy consumption

7%



Comments:

Categories

| A AREA OF INTERVENTION | | B POLICY INSTRUMENT | | C Origin of the action | |
|--|--|---------------------------|--|--|--|
| A1 Municipal - Residential - Tertiary Buildings | | B1 Buildings | | C1 Local authority C2 Covenant Territorial Coordinator C3 Other (national, regional,...) C4 Not possible to say | |
| A11 | Building envelope | B11 | Awareness raising / training | | |
| A12 | Renewable energy for space heating and hot water | B12 | Energy management | | |
| A13 | Energy efficiency in space heating and hot water | B13 | Energy certification / labelling | | |
| A14 | Energy efficient lighting systems | B14 | Energy suppliers obligations | | |
| A15 | Energy efficient electrical appliances | B15 | Energy / carbon taxes | | |
| A16 | Integrated action (all above) | B16 | Grants and subsidies | | |
| A17 | Information and Communication Technologies | B17 | Third party financing. PPP | | |
| A18 | Behavioural changes | B18 | Public procurement | | |
| A19 | Other | B19 | Building standards | | |
| | | B110 | Land use planning regulation | | |
| | | B111 | Not applicable | | |
| | | B112 | Other | | |
| A2 Public Lighting | | B2 Public Lighting | | | |
| A21 | Energy efficiency | B21 | Energy management | | |
| A23 | Integrated renewable power | B22 | Energy suppliers obligations | | |
| A24 | Information and Communication Technologies | B23 | Third party financing. PPP | | |
| A25 | Other | B24 | Public procurement | | |
| | | B25 | Not applicable | | |
| | | B26 | Other | | |
| A3 Industry | | B3 Industry | | | |
| A31 | Energy efficiency in industrial processes | B31 | Awareness raising / training | | |
| A32 | Energy efficiency in buildings | B32 | Energy management | | |
| A33 | Renewable energy | B33 | Energy certification / labelling | | |
| A34 | Information and Communication Technologies | B34 | Energy performance standards | | |
| A35 | Other | B35 | Energy / carbon taxes | | |
| | | B36 | Grants and subsidies | | |
| | | B37 | Third party financing. PPP | | |
| | | B38 | Not applicable | | |
| | | B39 | Other | | |
| A4 Municipal - Public - Private Transport | | B4 Transport | | | |
| A41 | Cleaner/efficient vehicles | B41 | Awareness raising/training | | |
| A42 | Electric vehicles (incl. infrastructure) | B42 | Integrated ticketing and charging | | |
| A43 | Modal shift to public transport | B43 | Grants and subsidies | | |
| A44 | Modal shift to walking & cycling | B44 | Road pricing | | |
| A45 | Car sharing/pooling | B45 | Land use planning regulation | | |
| A46 | Improvement of logistics and urban freight transport | B46 | Transport / mobility planning regulation | | |
| A47 | Road network optimisation | B47 | Public procurement | | |
| A48 | Mixed use development and sprawl containment | B48 | Voluntary agreements with stakeholders | | |
| A49 | Information and Communication Technologies | B49 | Not applicable | | |
| A410 | Eco-driving | B410 | Other | | |
| A411 | Other | | | | |

Categories

A5 Local Electricity Production

| | |
|-----|-------------------------|
| A51 | Hydroelectric power |
| A52 | Wind power |
| A53 | Photovoltaics |
| A54 | Biomass power plant |
| A55 | Combined Heat and Power |
| A56 | Smart grids |
| A57 | Other |

B5 Local Electricity Production

| | |
|-----|------------------------------|
| B51 | Awareness raising / training |
| B52 | Energy suppliers obligations |
| B53 | Grants and subsidies |
| B54 | Third party financing. PPP |
| B55 | Building standards |
| B56 | Land use planning |
| B57 | Not applicable |
| B58 | Other |

A6 Local heat/cold Production

| | |
|-----|--|
| A61 | Combined Heat and Power |
| A62 | District heating/cooling plant |
| A63 | District heating/cooling network (new, expansion, refurbishment) |
| A64 | Other |

B6 Local heat/cold Production

| | |
|-----|------------------------------|
| B61 | Awareness raising / training |
| B62 | Energy suppliers obligations |
| B63 | Grants and subsidies |
| B64 | Third party financing. PPP |
| B65 | Building standards |
| B66 | Land use planning regulation |
| B67 | Not applicable |
| B68 | Other |

A7 Other

| | |
|-----|----------------------------------|
| A71 | Urban regeneration |
| A72 | Waste & wastewater management |
| A73 | Tree planting in urban areas |
| A74 | Agriculture and forestry related |
| A75 | Other |

B7 Other

| | |
|-----|------------------------------|
| B71 | Awareness raising / training |
| B72 | Land use planning |
| B73 | Not applicable |
| B74 | Other |