

# The 10 key principles of a Sustainable Energy and Climate Action Plan

### Technical training on the Covenant of Mayors

JRC training for IUC contractors and FPI Programme managers

Brussels 13-14 February 2017



Joint Research Centre

#### The role of JRC



### Scientific-technical support to the development, implementation and monitoring of the CoM

- Research on existing methodologies and tools for the development of a SEAP
- Development of the guidebook "How to develop a (SEAP)"
- Continuous improvement of data collection process
- **Evaluation** of submitted SEAPs, with **feedback** to Covenant cities
- Development of a specific monitoring template & instructions for signatories
- Overall assessment of the initiative and publication of reports
- Capacity building (technical trainings for cities and regions)

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### **Energy policy in support of local and regional actors**



Covenant of Mayors is a platform for inter-institutional co-operation, built on the principles of **subsidiarity** 

### Common objectives and support is fixed at **EU level**, but **ACTION** takes place on the **local level**

"... By connecting with our European partners and reinforcing our commitment to such valuable initiatives as the Covenant of Mayors, we can work together in strengthening Europe's green economy..."

Emer Costello, Lord Mayor of Dublin (IR)





"...It is important for me to be encouraged by others and maybe encourage people by our experience..."

Bo Frank, Mayor, Växjö (SE)





#### The 10 key principles

The principles are linked to the commitments taken by Covenant signatories and constitute key ingredients of success. They are described in the Guidebook "How to develop a SEAP", Part I, which is currently being updated.















### Approval by the municipal council (or equivalent decision-making body)

Strong political support is essential to ensure the success of the process, from SE(C)AP design to implementation and monitoring



### The 10 key principles



# II. Commitment for a reduction of CO<sub>2</sub> emissions by at least 20% by 2020 and/or 40% by 2030

The SE(C)AP must specify the CO<sub>2</sub> reduction objective of the local authority. Ideally also:

- A longer-term target (e.g. to 2050)
- Targets on energy savings or on local energy production from renewables should be specified
- Sector-specific targets









#### **Example of CoM Cities' objectives**

#### Riga:

•44% emission reduction by 2020

#### **Ghent:**

- •20% emission reduction by 2020
- Carbon neutral by 2050

#### **Amsterdam:**

- •climate-neutral municipal organisation in 2015
- 40% emission reduction by 2020

#### Gothenburg:

- •21% emission reduction by 2020
- •<2 tons/capita by 2050</p>







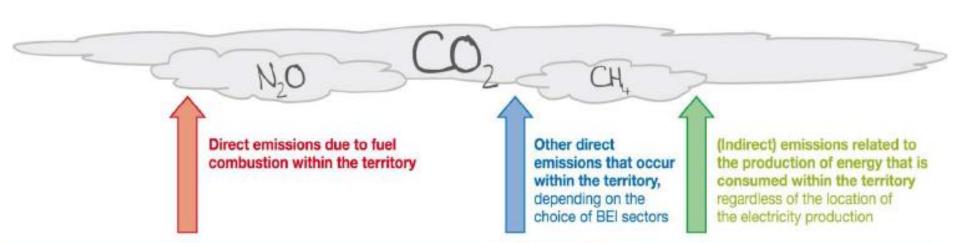


### III.CO<sub>2</sub> baseline emission inventory (BEI) and risks and vulnerabilities assessment (RVA)

A sound knowledge of the local situation is necessary  $\rightarrow$  carry out an assessment of the current framework which includes:

- CO<sub>2</sub> baseline emission inventory (BEI)
- Risks and vulnerabilities assessment (RVA)

The data collection process should be well documented



### The 10 key principles



### IV. Comprehensive measures that cover the key sectors of activity

The SEAP has to contain a coherent set of measures covering the key sectors of activity

Before starting the elaboration of actions and measures, the establishment of a longterm vision with clear objectives is highly recommended.



### The 10 key principles



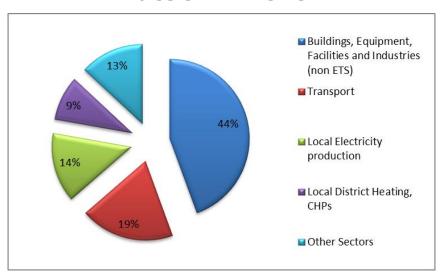
### Priority areas for action EU CoM: Measures in the field of EE and RES

The choice of sectors to tackle and of specific measures to implement is entirely left to the responsibility of the Signatory, depending on:

- political mandate of the Mayor
- national framework (regulations, grants, incentives, etc.)
- size of the local authority

   (availability of human & financial resources, expertise, etc.)

Breakdown of expected GHG emissions reduction by field of action in 2020





Covenant of Mayors for Climate & Energy

### The 10 key principles



#### But also...

- Strategic urban planning:
  - The SE(C)AP can be an instrument to prevent rapid and uncontrolled city growth, by promoting mixed land use and encouraging sustainable mobility.

Ex. Stockholm: efficient social planning, anticipating the increased demand for housing and transportation

- Working with citizens and stakeholders:
  - The SE(C)AP development and implementation requires coordination with citizens and other actors, consensusbuilding approaches, reduced duplication of efforts.

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### The 10 key principles

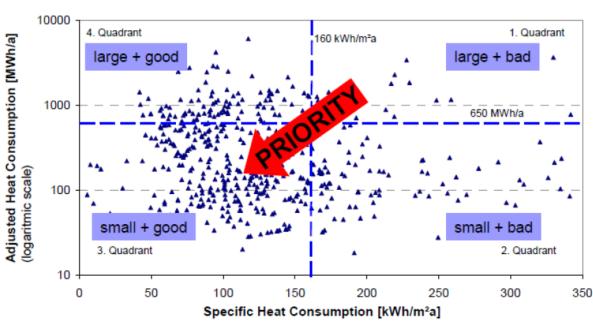
Example
Munich (1

Munich (1,4 million inh.): Energy saving

Commission

concept

50 % of the city's municipal buildings stock examined to identify potential for energy savings



Highest priority given to the renovation of properties in quadrant 1: high relative saving potential, but also a high absolute saving potential.





#### **Example**

**Riga (700000 inh.):** ICT solutions for smart and efficient regulation of heat supply and consumption







### V. Strategies and actions until 2020 or 2030 (and possibly beyond)

The plan must contain a clear outline of the strategic actions that the local authority intends to take in order to reach its commitments in 2020 or 2030. It has to contain:

- Long-term strategy and goals
- Detailed measures for the next 3-5 years which translate the long-term strategy and goals into actions, with assigned responsibilities, cost estimations, impact estimations





#### Example

#### Stockholm (830000 inh.):

- 90 % of buses will be powered by renewable fuels before the end of 2020
- 100% of newly registered private cars should be independent of fossil fuels by 2020
- The bus fleet will be fossil fuel-free by 2025









### VI. Mobilization of all municipal departments involved

- The SE(C)AP should outline which structures are in place or will be organised in order to implement the actions and follow the results.
- It should also specify what are the human resources made available.

#### **Example**

4) Staff capacity allocated	SEAP preparation*:		
		Full-time equiva	alent job(s)
	Local authority	8	
	Local/regional energy agency		
	✓ External consultant	5	
	✓ Covenant Territorial Coordinator	1	
	Other		

In each municipality/city, different civil servants are involved in CoM. In total 1 FTE is reached by each participating municipality/city with less than 15.000 inhabitants for SEAP preparation and implementation. Municipalities and cities with more than 15.000 inhabitants reach 2 FTE.

### The 10 key principles



#### **Example**

The city management office is responsible for the administration of the SEAP and the Environment and health administration is responsible for developing and following up the SEAP.

Consultants aid in conducting background research and communication with some stakeholders.

A steering committee for development of the SEAP consists of representatives from the city management office, city development administration, traffic and waste administration, city planning administration and real estate administration.





### VII. Engagement of all relevant stakeholders and empowerment of citizens

The plan has to describe how the civil society has been involved in its elaboration, and how they will be involved in implementation and follow up.





Build support from STAKEHOLDERS: if they support the SEAP nothing should stop it!









#### Sonderborg (75000 inh.): Project ZERO

Shift in focus in the elaboration and implementation of their plan:



**From:** the municipality initiating and proposing actions consulting the stakeholders

**To:** the municipality takes the role of a partner together with all interested parties in developing a vision for the local community



Public-private partnership called ProjectZERO:

**ZEROcarbon community by 2029:** 

CO<sub>2</sub>-neutral growth and sustainable urban development













#### **VIII.Financing**

A plan cannot be implemented without financial resources. The plan should identify the key financing resources that will be used to finance the actions

#### **Example**

7) Foreseen financing sources for the implementation of your SEAP

Please specify the %

Local Authority's own resources
National Funds and Programmes
EU Funds and Programmes

Please specify the %

54

2 National Funds and Programmes

Please specify the %

Private





#### IX. Monitoring and reporting

The SE(C)AP should contain a brief outline on how the local authority intends to ensure the follow-up of the actions and monitor the results

- For each action, progress based indicators should be defined
- Regular adjustments of the actions based on new opportunities/findings







#### X. SE(C)AP submission and filling the template

Covenant signatories commit to:

- submitting their SEAPs within 1-year following adhesion
- submitting their SECAPs within 2-year following adhesion

The SE(C)AP must be uploaded in national language via the Covenant of Mayor's website + online SEAP template in English.

The template has to be filled carefully with sufficient level of detail, and should reflect the content of the SE(C)AP.





#### Discussion



An adaptation of the 10 key principles might be needed in order to better suit the different reality of local authorities in **other regions of the world**, compared to EU signatory cities.

### Which key principles are already applicable?

Which ones need to be reconsidered?







### FIGURES ON THE COVENANT OF MAYORS





# Local authorities having signed up to the CoM

6201 signatories (representing 6926 local authorities) cover 213 million inhabitants, with 86% of the CoM population from EU-28:

Commission

- •5767 signatories (covering 83% of the CoM population) have committed to develop a mitigation plan
- •434 have committed to develop an adaptation strategy (412 of which combined with a mitigation plan)





# Commitments based on submitted SEAPs

5491 plans submitted (5403 in the analysed sample):

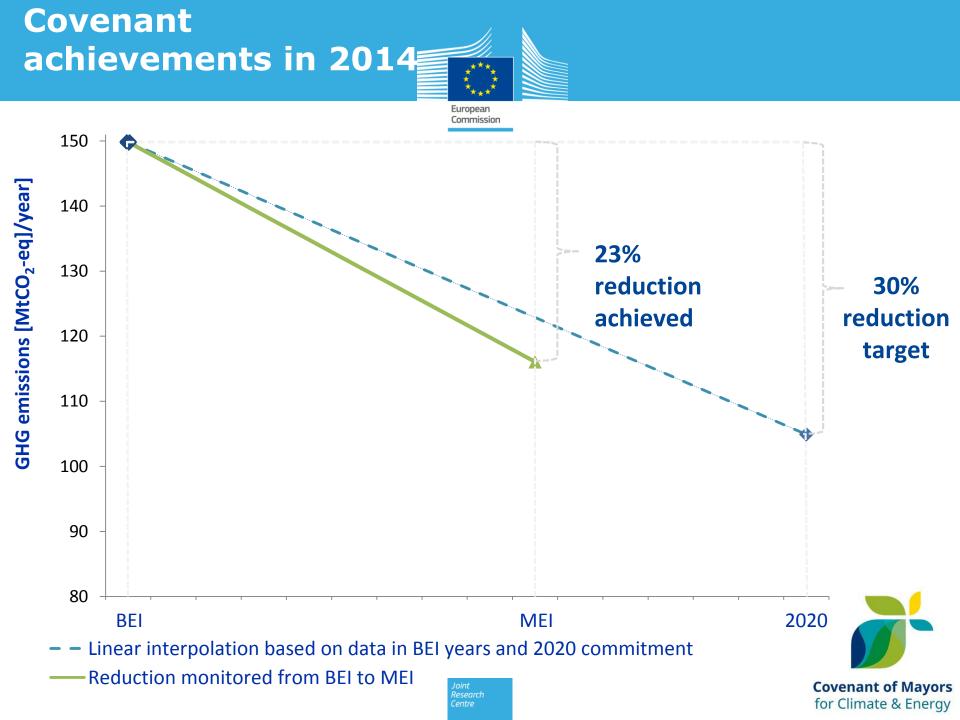
 overall emission reduction commitment of 27% by 2020, almost 7 percentage points higher than the minimum target of 20%

Commission

• EU-28 CoM signatories commitment may represent 31% of the overall EU-28 GHG emission reduction target by 2020 compared to 2005







#### **GHG** emissions decrease



Emissions related to electricity consumption fell by 17 % due to:

- •a less-carbon-intensive fuel mix
- more efficient electricity generation power plants

Emissions in buildings from heating and cooling fell by 36 %:

- •lower energy consumption levels due to improved energy efficiency in buildings
- more efficient local heat production from district heating networks
- •increasing shares of renewable resources in decentralised localheating production

Emissions in the transport sector fell by 7 % driven by:

- more efficient vehicles
- •an increase in the share of biofuels shift towards public transportation and electric mobility





