

The Mediterranean City 2014,

The Adaptation Strategies to Global Environmental Change in the Mediterranean City and the

Role of Global Earth Observations

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Covenant of Mayors Initiative: Transition to an Energy Efficient Low Carbon Future

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Outline

- 1. What is the CoM?**
- 2. The CoM Step by step**
- 3. Opportunities for signatories**
- 4. CoM step up**

What is the CoM?



Aim of the CoM Initiative

Mayors commit to:

Go beyond EU energy and climate objectives

- at least 20% CO₂ reduction in their respective territories **by 2020**
- Define a **Baseline Emission Inventory (BEI)**
- Prepare a **Sustainable Energy Action Plan (SEAP)**
- Implement their Action Plan and report periodically on progress
- Involve citizens and other stakeholders
- Adapt city structures and allocate sufficient resources
- Encourage other cities to join



How to develop a Sustainable Energy Action Plan

What is the CoM?



What we would like to see in signatories' territories in 2020

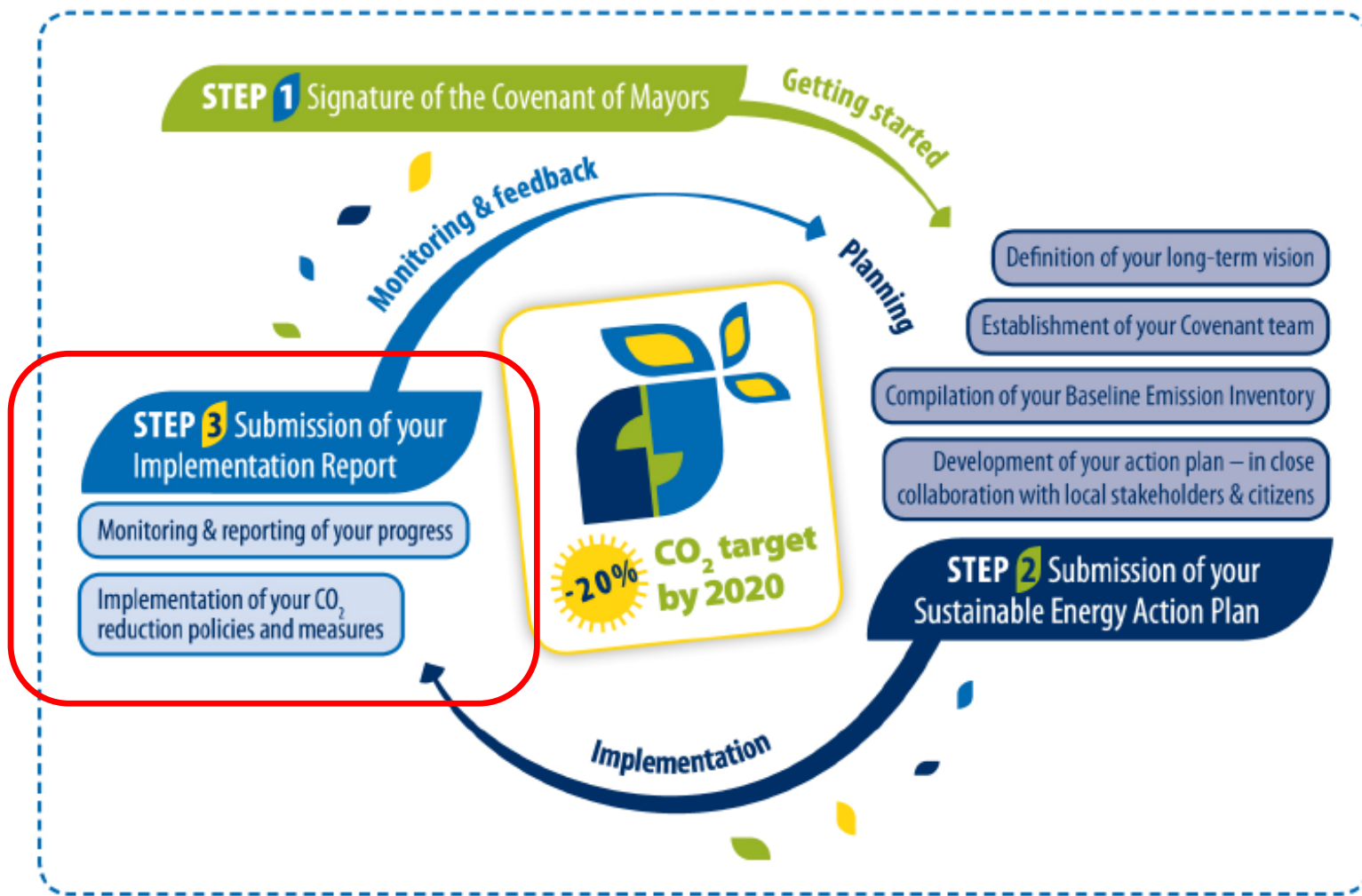
- Lower CO₂ emissions per capita (tCO₂ per capita/year) – possibly for each key Covenant sector
- Higher energy efficiency in buildings (kWh/m² year)
- Higher efficiency in transport (kWh/p km)
- Increased production of electricity and heat from renewable sources (MWh/year)
- Increased share of energy consumed in the territory coming from Local Energy production (%)
- Economic savings and local reinvestments
- Better opportunities for local jobs



The Covenant step-by-step



The adherence to the CoM initiates a process within the local authority



Σχέδιο Δράσης Αειφόρου Ενέργειας Δήμου Νεάπολης-Συκεών



	Ηλεκτρική Ενέργεια	Φυσικό Αέριο	Υγραέριο	Πετρέλαιο Θέρμανσης	Πετρέλαιο κίνησης	Βενζίνη	Βιοκαύσιμα	Βιομάζα	Ηλιοθερμική	ΣΥΝΟΛΟ
Δημοτικά Κτίρια	3.529	7.423		485						11.437
Κτίρια τριτογενή	27.991	9.698	1.094	144.575						183.358
Κατοικίες	112.324	100.695		313.424				4.453	19.813	550.709
Δημοτικός φωτισμός	4.726									4.726
Δημοτικός στόλος					2.147	347	138			2.632
Δημόσιες μεταφορές					1.684		108			1.792
Ιδιωτικές & εμπορικές μεταφορές			42		2.774	68.802	179			71.797
ΣΥΝΟΛΟ	148.570	117.816	1.136	458.484	6.605	69.149	425	4.453	19.813	826.451

Πίνακας 2. Κατανάλωση ενέργειας (MWh) στο Δήμο Νεάπολης-Συκεών το 2010, ανά μορφή ενέργειας και κατηγορία χρήσης

	Ηλεκτρική Ενέργεια	Φυσικό Αέριο	Υγραέριο	Πετρέλαιο Θέρμανσης	Πετρέλαιο κίνησης	Βενζίνη	Βιοκαύσιμα	Βιομάζα	Ηλιοθερμική	ΣΥΝΟΛΟ
Δημοτικά Κτίρια	4.055	1.499	-	129	-	-	-	-	-	5.684
Κτίρια τριτογενή	32.162	1.959	248	38.602	-	-	-	-	-	72.971
Κατοικίες	129.060	20.340	-	83.684	-	-	-	-	-	233.085
Δημοτικός φωτισμός	5.430	-	-	-	-	-	-	-	-	5.430
Δημοτικός στόλος	-	-	-	-	573	86	-	-	-	660
Δημόσιες μεταφορές	-	-	-	-	450	-	-	-	-	450
Ιδιωτικές & εμπορικές μεταφορές	-	-	10	-	741	17.132	-	-	-	17.882
ΣΥΝΟΛΟ	170.707	23.799	258	122.415	1.764	17.218	-	-	-	336.160

Πίνακας 3. Εκπομπές CO2 (ton) στο Δήμο Νεάπολης-Συκεών το 2010, ανά μορφή ενέργειας και κατηγορία χρήσης



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ΣΧΕΔΙΟ ΔΡΑΣΗΣ ΑΕΙΦΟΡΟΥ ΕΝΕΡΓΕΙΑΣ ΔΗΜΟΥ ΝΕΑΠΟΛΗΣ-ΣΥΚΕΩΝ

WP4 "CoM Sustainable Action Plan Definition"

Task 4.1 "Realisation of the SEAP and their formal acceptance by the Municipalities' Mayors"



Opportunities for CoM signatories?



KEY WORDS

- Lower CO₂ emissions
- Higher Energy Efficiency
- Local and regional level
- Simplicity and flexibility

**Energy efficiency and Local Authorities,
A big opportunity for change**

**Transition to an
Energy Efficient Low carbon Future**



Energy efficiency directive (2012/27/EU)

*[...] Shifting to a more energy-efficient economy should also accelerate the spread of **innovative technological solutions** and **improve the competitiveness** of industry in the Union, boosting **economic growth** and creating **high quality jobs** in several sectors related to energy efficiency.*

Many of the measures described in the directive can help Covenant Signatories to identify new opportunities to meet their local targets and devise Smart solutions



Main measures

- Strategy to mobilise investment in the renovation of buildings [art. 4]
- Central government buildings: 3% of the total floor area to be renovated each year [art. 5]
- Promote energy audits and Energy Management Systems (EN ISO 50001) [art. 8]
- Smart meters [art. 9]
- Promotion of efficiency in district heating and cooling, CHP [art. 14]
- Demand response [art.15]
- Energy services [art.18]



From the CoM to Smart Cities

The CoM is a “platform” for sustainable energy and climate policy at local level: it encompasses the fundamental **governance challenges** and provides a methodological and scientific **framework for action**.

The CoM is the living laboratory of energy/climate policy at local level: **smart solutions** are already planned in several SEAPs

The Smart Cities initiative could help the CoM signatories to better devise, implement and integrate the most advanced low carbon solutions, allowing them to set **more ambitious objectives**.

Covenant is a basis for **systemic, integrated sustainable energy evolution**, while Smart cities can be a **part of the solution** to help this evolution materialize.

Thank you for your attention

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