MAYORS IN ACTION
FOR A SUSTAINABLE FUTURE

Handbook for Covenant Supporters and Coordinators

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Co-funded by the Intelligent Energy Europe Programme of the European Union

Empowering Covenant of Mayors Coordinators and Supporters to assist municipalities in implementing and monitoring their Sustainable Energy Action Plan

MAYORS IN ACTION
FOR A SUSTAINABLE FUTURE

Environmental sustainability

"development that meets the needs and aspirations of the present without compromising the ability of future generations to meet their own needs"

This objective must be achieved, while continuing to pursue a more sustainable economic growth and development.

Handbook:

It has been prepared in the framework of the European project **MAYORS in ACTION** -to assist municipalities in implementing and monitoring their SEAPs

Handbook: The main objectives

The development of capacity building for C&S and for LGs through

- ✓ technical and specialised **learning sessions**
- ✓ **Presentation of actions that can implemented in SEAPs**
- ✓ **Characteristic successful examples in each partner' s country**

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Task 2.1. Preparing training materials and tools and compendium of tools-handbook

a. During the 1st training session (Genova) the toolbox was analyzed and the most useful tools will be chosen by partners.
b. A database of 30 tools will be compiled.



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Task 2.1. Preparing training materials and tools and compendium of tools-handbook

In the database, the following **categorization** of actions were proposed:

1. ENERGY RETROFITTING OF PUBLIC BUILDINGS
2. SUPPORT OF ENERGY RETROFITING OF HOUSEHOLDS AND THE PRIVATE SECTOR
3. ENERGY EFFICIENT PUBLIC LIGHTING
4. ENERGY MANAGEMENT SYSTEMS
5. AUDITS, METERING, ENERGY MONITORING

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Task 2.1. Preparing training materials and tools and compendium of tools-handbook

6. INFORMATION GAMPAINGS
7. SOLAR ENERGY IN BUILDINGS AND MUNICIPALITIES
8. GREEN ELECTRICITY
9. SUSTAINABLE MOBILITY
10. MUNICIPAL FLEET RETROFITTING
11. BIOFUELS
12. DISTRICT HEATING
13. **INTEGRATED ACTIONS**

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Compendium of tools- Handbook

The project **MAYORS in ACTION** allows C&S municipalities to go further, **enabling them to implement actions by employing existing tools and experiences** in different environments.

The handbook is a compendium of tools that are being used by municipalities for implementing their Sustainable Energy Action Plans (SEAPs).

It includes a description of **15 distinct categories of tools** selected by the project consortium as the most representative and useful according to the criteria of technical and financial feasibility and potential positive effects.

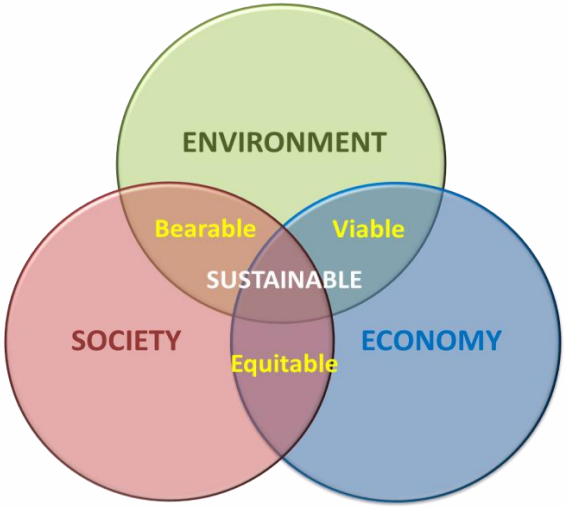

Image Intro - : Scheme of Sustainable Development

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Compendium of tools- Handbook

- INFORMATION CAMPAIGNS
- SUPPORT TO CITIZENS FOR THE ENERGY RETROFITTING OF PRIVATE HOUSEHOLDS
- AUDITS, METERING, ENERGY MONITORING
- RENEWABLE ENERGY IN BUILDINGS AND MUNICIPALITIES
- ENERGY EFFICIENT PUBLIC LIGHTING
- ENERGY RETROFITTING OF PUBLIC BUILDINGS
- SUSTAINABLE TRANSPORT

- MUNICIPAL FLEET ENERGY IMPROVEMENT
- GREEN ELECTRICITY
- ENERGY MANAGEMENT SYSTEMS
- SUSTAINABLE USE OF HEATING THROUGH THE DISTRICT HEATING NETWORKS
- SOLAR PURCHASING GROUPS

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Task 2.1. Preparing training materials and tools and compendium of tools-handbook

For each one of the 15 actions, the following issues were analyzed:

1. Objectives
2. Methodology: Steps of implementation and Tools
3. Actors of the process –Roles
4. Financial resources
5. Highlights – characteristic examples

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Compendium of tools- Handbook

➢INFORMATION CAMPAIGNS

	Main Actor/Promoter
Info point	Province
Info campaign	Local Governments
Energy saving in offices buildings	Region
Info campaign and competition	Local Governments
Energy manager competition	Local Governments
Continuous Information	Municipality and NGOs
Zagreb energy week	Municipality and Stakeholders
Information campaign through NGOs programs and Activities	Municipality and NGOs

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Energy Retrofitting of private households

- In most cases, in Europe, a **percentage between 30% and 40%** of the total CO2 emissions in urban areas is due to the private residential sector.

- The **fuel poverty** (defined as when a household would need to spend more than 10% of its income to maintain an adequate heating regime) is a crucial factor suffered by large part of the population which needs support for the energy retrofitting of their households.

Therefore the objective of this action is to support private citizens to save energy and to refurbish their own houses

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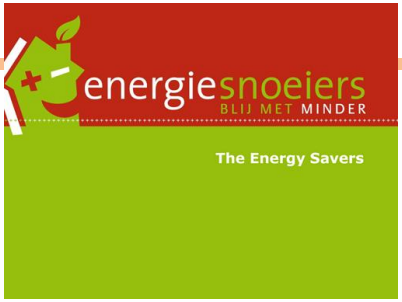
ENERGY RETROFITTING OF PRIVATE HOUSEHOLDS

THE ENERGY SAVERS

Free screening of the 'energy situation' of a house, during which the resident receives energy saving tips and some energy saving materials are installed.
Only for residents with lower income.

- Together with the resident he checks the energy bill
- For each room the resident receives helpful tips
- Where useful the scanner puts energy saving materials
- He informs and discusses the use of insulation - cost-benefit-grants
- Delivers an energy report to the resident



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ENERGY RETROFITTING OF PRIVATE HOUSEHOLDS

THE ENERGY SAVERS

- Distribution network operators (DNO)

Gives addresses of households – gives funding/grants

- Local authorities

Gives addresses of households – gives funding/grants

- Energy savers

Performs energyscans – implements energy saving interventions

- Households

implements energy saving interventions

ENERGY RETROFITTING OF PRIVATE HOUSEHOLDS

"**Energy Saving at Home**" Programme

The Ministry of the Environment, Energy and Climate Change (**YPEKA**) has developed a set of **financial incentives**, - co-financing from the European Union, for the implementation of

energy efficiency upgrading interventions in residential buildings

via the "**Energy Saving at home**" Programme.

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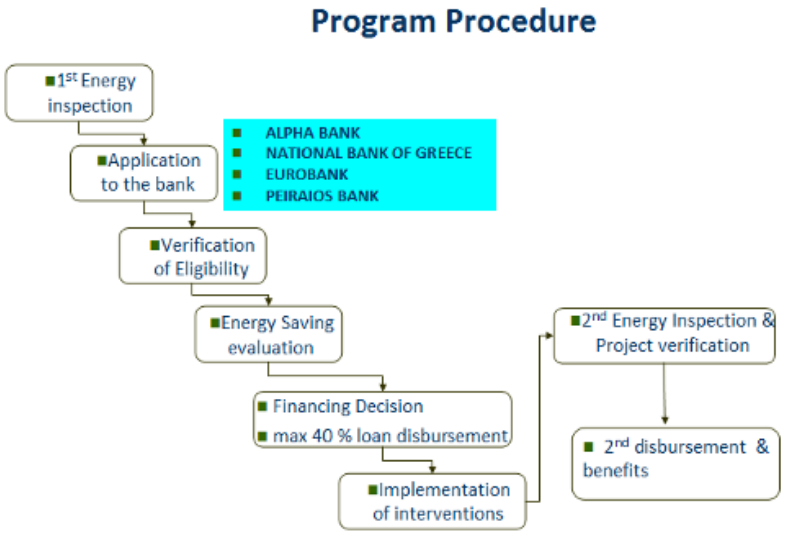
Methodology

→Every citizen must verify whether he/she meets the income-related criteria / check his/her credit ability, in cooperation with a bank

→Once the interested party verifies that he/she meets the conditions for participation in the Programme, he/she must contact an Energy Inspector in order to perform the 1st energy inspection on his/her property/building and then have the Energy Performance Contracting (EPC)

→The expenditures incurred after the EPC is issued are considered eligible, on condition that the application submitted under the Programme has been approved.



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Financial resources

The programme is co-financing from the European Union

The benefits in relation with the income of citizens

Categ.	A (Low Income)	B (Medium Income)	C (High Income)
Benefits	70% grant 30% no interest loan	35% grant 65% no interest loan	15% grant 85% no interest loan

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Compendium of tools-handbook

➢AUDITS, METERING, ENERGY MONITORING

	Main Actor/Promoter
Smart energy measurement/cloud information	LG
Thermography	LG + INTERLEUVEN
Smart buildings	Region
Remote control and remote management in municip s or facilities	Province/Municipality

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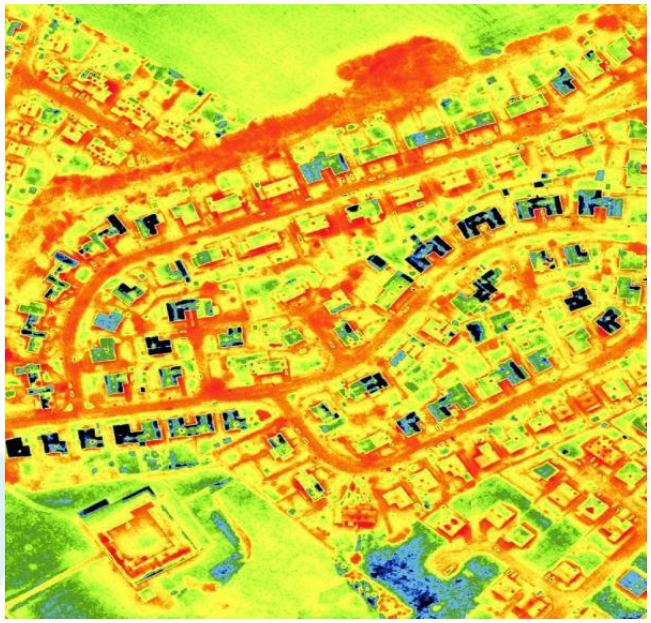
A thermographic aerial picture

Framework

- Contributing to the achievement of the objectives of the Covenant of Mayors
- Considerations:
  - Environmental: less CO_2-emissions
  - Economical: saving on fuel, maintenance, road taks
  - Time saving: avoiding traffic jams
  - Conditional: positive for human health



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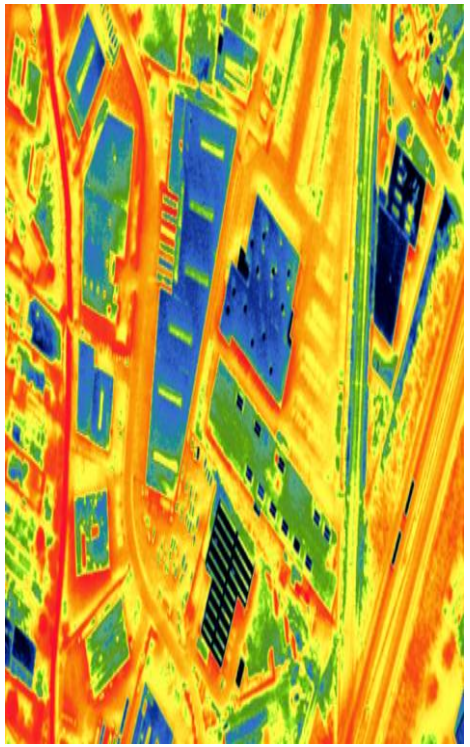
A thermographic aerial picture

- Working group prepares the procurement procedure (making a tender, evaluating the tender of the bicycle manufacturers, organising test drives, …);
- Selected bicycle manufacturer provides technical information during a public meeting;
- Residents order the desired number and type of bicycles;
- Local bicycle dealer assembles the bicycles and delivers them to the resident;
- Monitoring: survey for each resident



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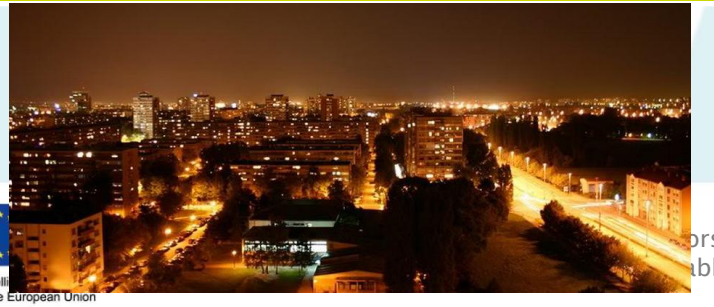
Compendium of tools-handbook

➢ENERGY EFFICIENT PUBLIC LIGHTING

	Main Actor/Promoter
Revamping of public lighting	Municipality
Introduction of smart management in public lighting - The example of Viladecans	Municipality
Public lighting in Greece	Central Union of Greek Municipalities, PETA S.A. (Local Authorities central development company), Coalition for Sustainable Development of Cities
Public lighting in Italy	Municipalities, citizens



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Compendium of tools-handbook

➢ENERGY EFFICIENT PUBLIC LIGHTING IN CROATIA

- Old lamps in the Dubrovnik av. and Magistrala 400W VTF (968 units) were replaced with new PHILIPS MODENA 250W NAV (622 units)
- On a street in the city center old Ovoid 250W VTF (51 units) lamps were replaced with the new SITECO DL 500 MAXI-K 250 NAV (47 units) and 150 NAV (33 units).

OBJECTIVES of the project:

- lower power installed for public lighting
- better lighting specification of lamps
- lower costs of services of public lighting
- lower luminous pollution
- lower emissions of CO2 into the atmosphere

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Compendium of tools-handbook

➢ENERGY EFFICIENT PUBLIC LIGHTING IN CROATIA

RESULTS of the project:

- **energy savings 1,018,838kWh /year**
- **bills for energy are lower 79.500€ per year**
- **achieved saving 17.800€ per year for servicing public lighting on those streets.**

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Compendium of tools- Handbook

The **Covenant of Mayors (CoM)** is the mainstream European movement involving local and regional authorities in the fight against climate change.

Coordinators and Supporters of the CoM (C&S) play a key role in giving technical and financial support to municipalities and have been successful in enabling most of them to develop their SEAPs and overcome existing barriers.

Compendium of tools- Handbook

HANDBOOK

Available in the Mayors in Action Website
www.mayorsinaction.eu

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MAYORS IN ACTION

FOR A SUSTAINABLE FUTURE

THANK YOU FOR YOUR ATTENTION

Provincia di Genova

Diputació Barcelona

КАПЕ CRES

REGIONE DEL VENETO

Polska Sieć Energie Cités

SOGESCA

INTERLEUVEN

ONDERNEMEND EN ONDERSTEUNEND

I·C·L·E·I Local Governments for Sustainability

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Empowering Covenant of Mayors Coordinators and Supporters to assist municipalities in implementing and monitoring their Sustainable Energy Action Plan