

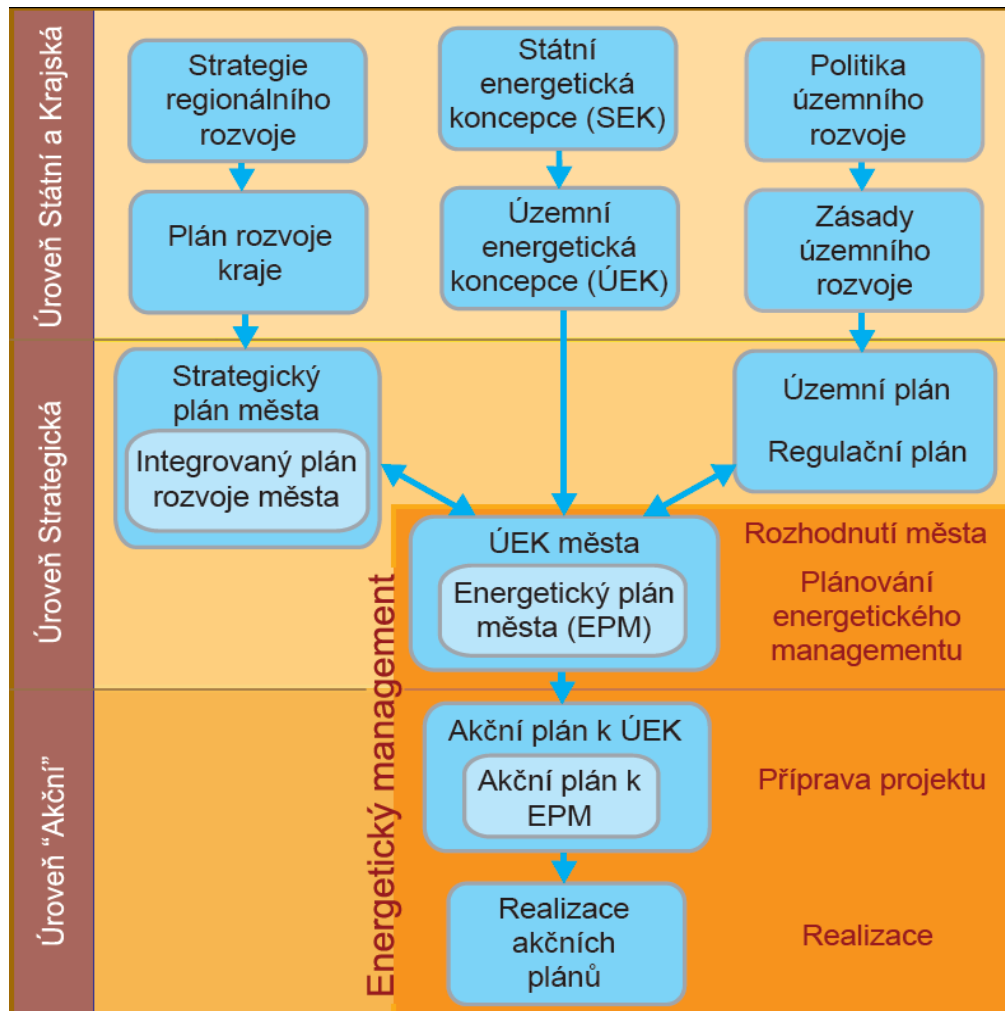


MUNICIPAL ENERGY MANAGEMENT

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PORSENNA o.p.s.

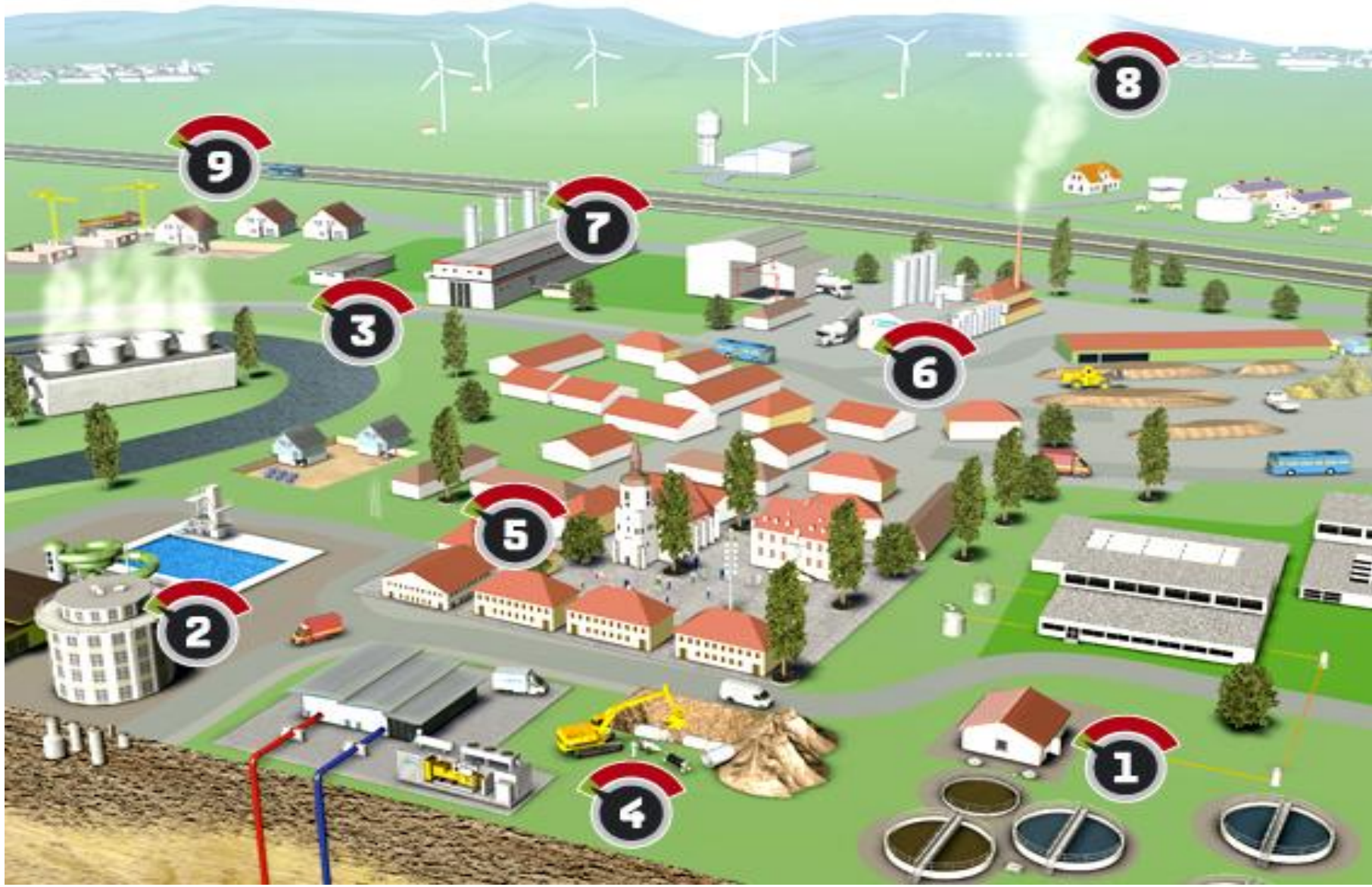
PRAHA, 6.9.2010

Energy management



- National policy
- Regional policy
- Municipal policy
- Concrete measures and projects

Frame of the communal energy





Indicators of local energy



Questionnaires

- **Aim:** find out state of the art and municipal needs in communal energy
- **279 municipalities and regions**
 - 53 questionnaires returned back

Results of the survey

- Does not defined aims, strategies, action plans, measures, outlooks in energy consumption.
- Not defined capacities for energy management
- Not existing data about potential of energy savings (37 %) and renewable energy sources (25 %).
- 75 % municipalities does not have set indicators in communal energy.

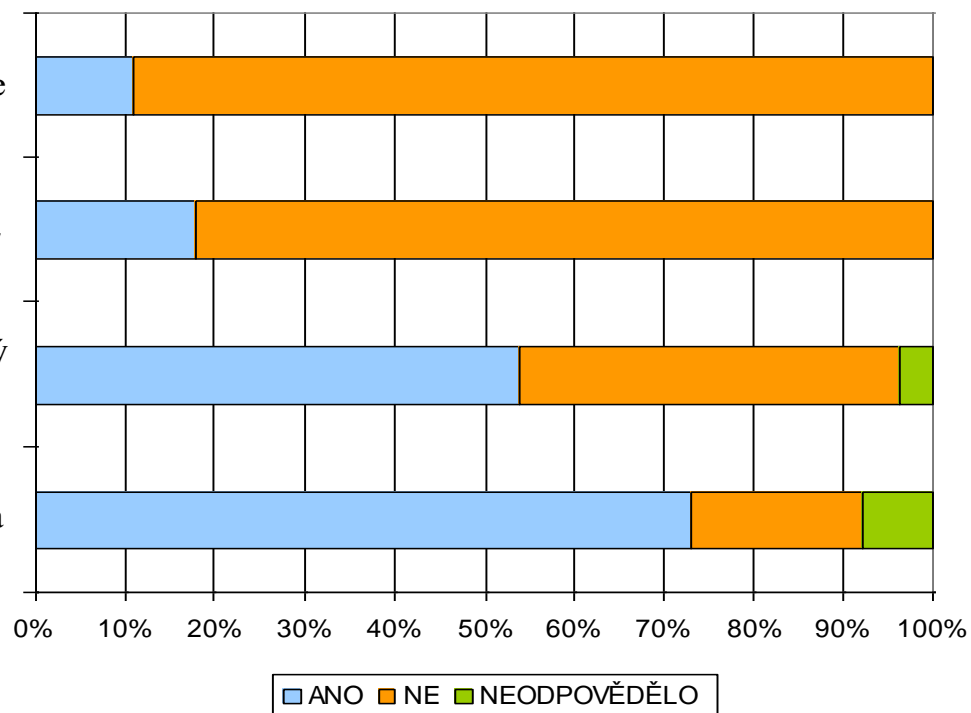
Results of the survey

- Low awareness about renewable energy and energy savings of the municipal representatives.
- 14 % of municipalities took part in awareness campaigns focused on renewable energy and energy savings.
- Municipalities prefer energy savings to renewable energy projects.

State of strategy planning

Energy outlook to 2020

- Výhled do roku 2020 ve spotřebě energie
- Energy savings and renewables action plans
- Akční plány pro oblast úspor energie a využívání OZE
- Strategic energy documents , energy plans
- Zpracovaná energetická koncepce , či jiný strategický dokument v oblasti energetiky
- Energy as priority of future municipal development
- Energetika jako prioritní dalšího rozvoje města



YES, NO, NOT ANSWERED

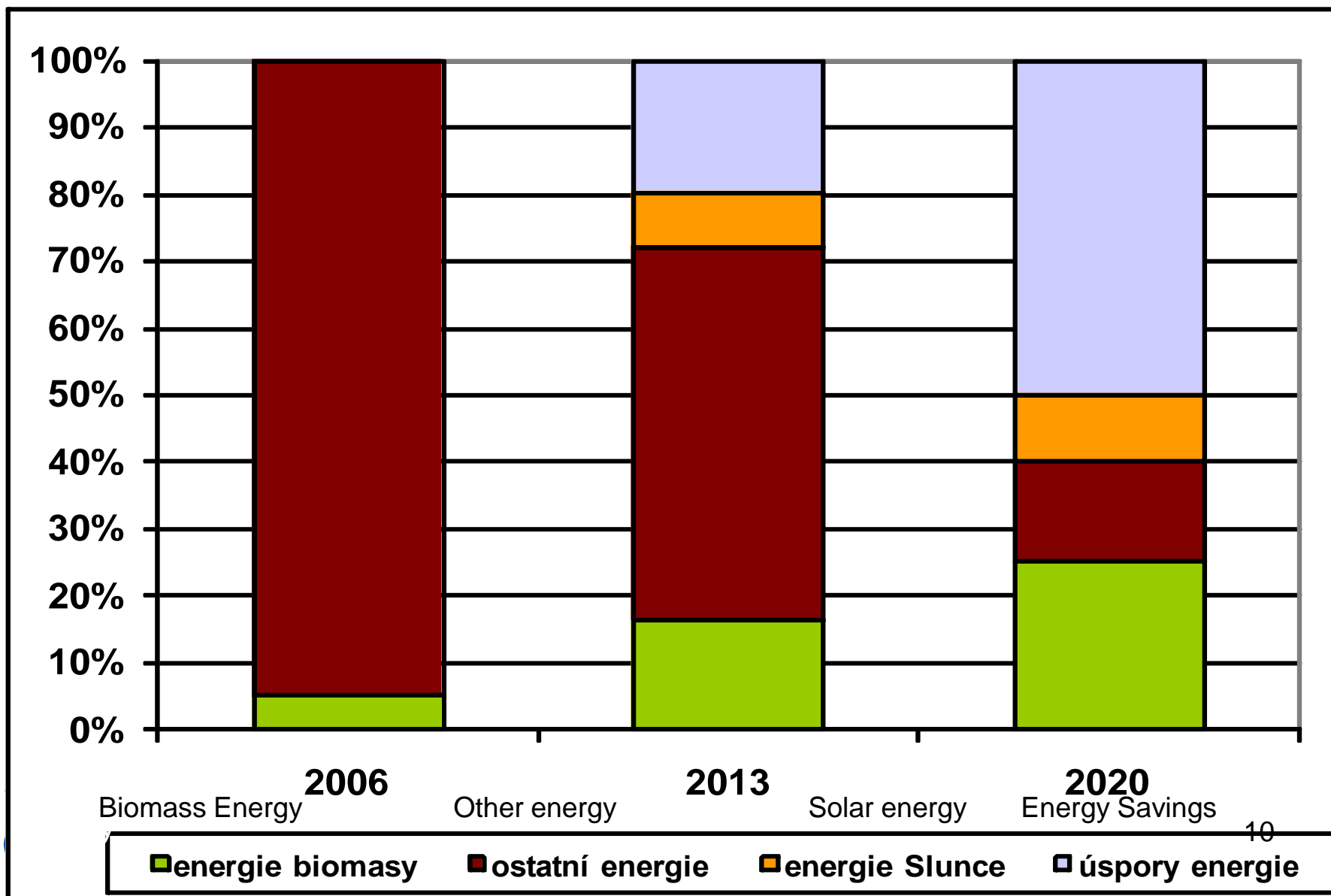


Local Energy Indicators

1. Low energy and passive buildings
2. Subsidies on the municipal level
3. Energy management
4. Heat consumption
5. Electricity consumption – municipal buildings
6. Electricity consumption – public lighting
7. Energy cost
8. Energy savings
9. Renewable energy sources
10. Awareness campaigns
11. Energy performance certificates
12. Energy prices
13. Regulated housing rent
14. CO₂ emissions

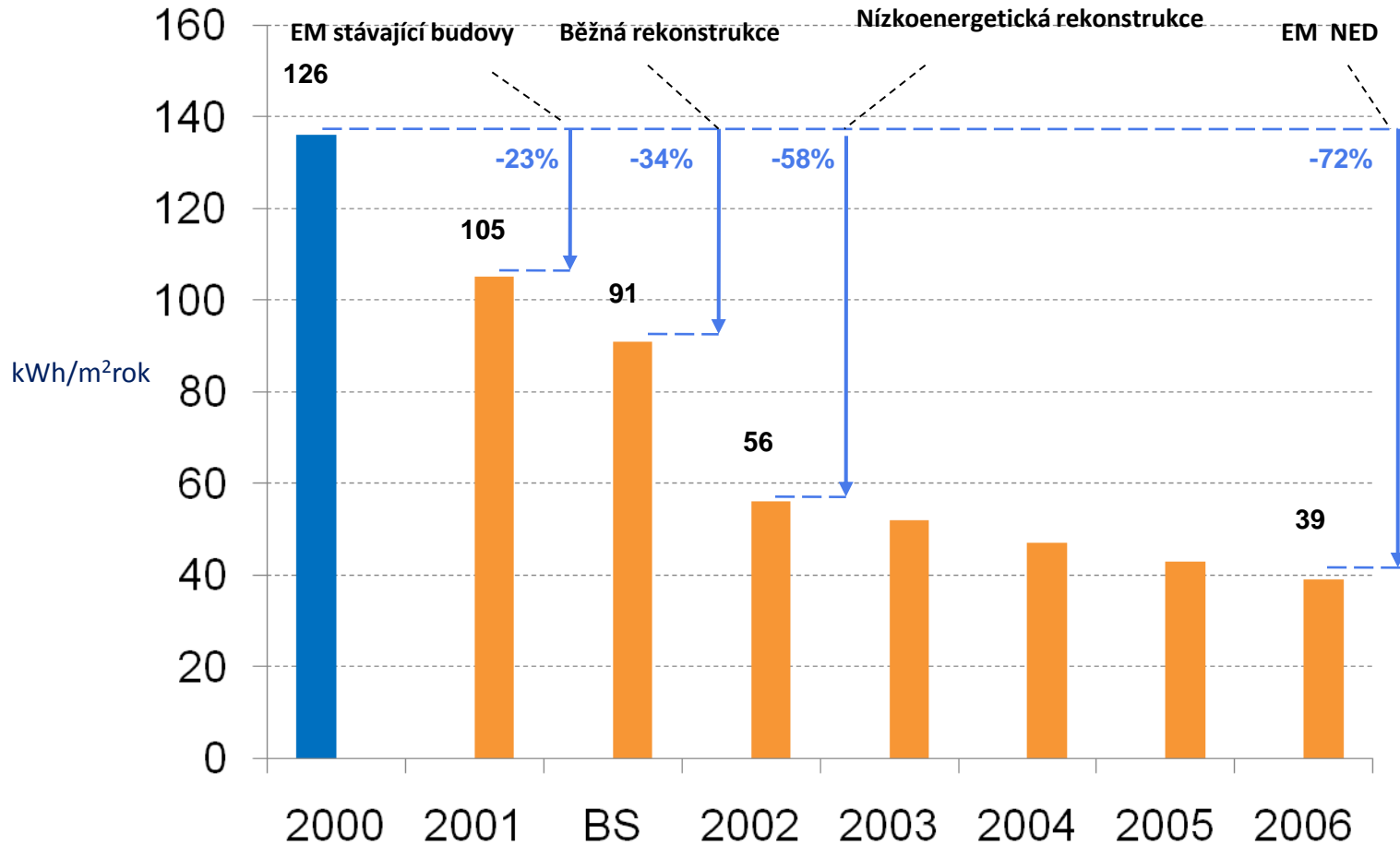


Energy self-sufficient strategy 2006 – 2020



Energy management (EM)

EM in without refurbishment; Common refurbishment; Low Energy refurbishment ; EM after low energy refurbishment



Goals of the Energy management

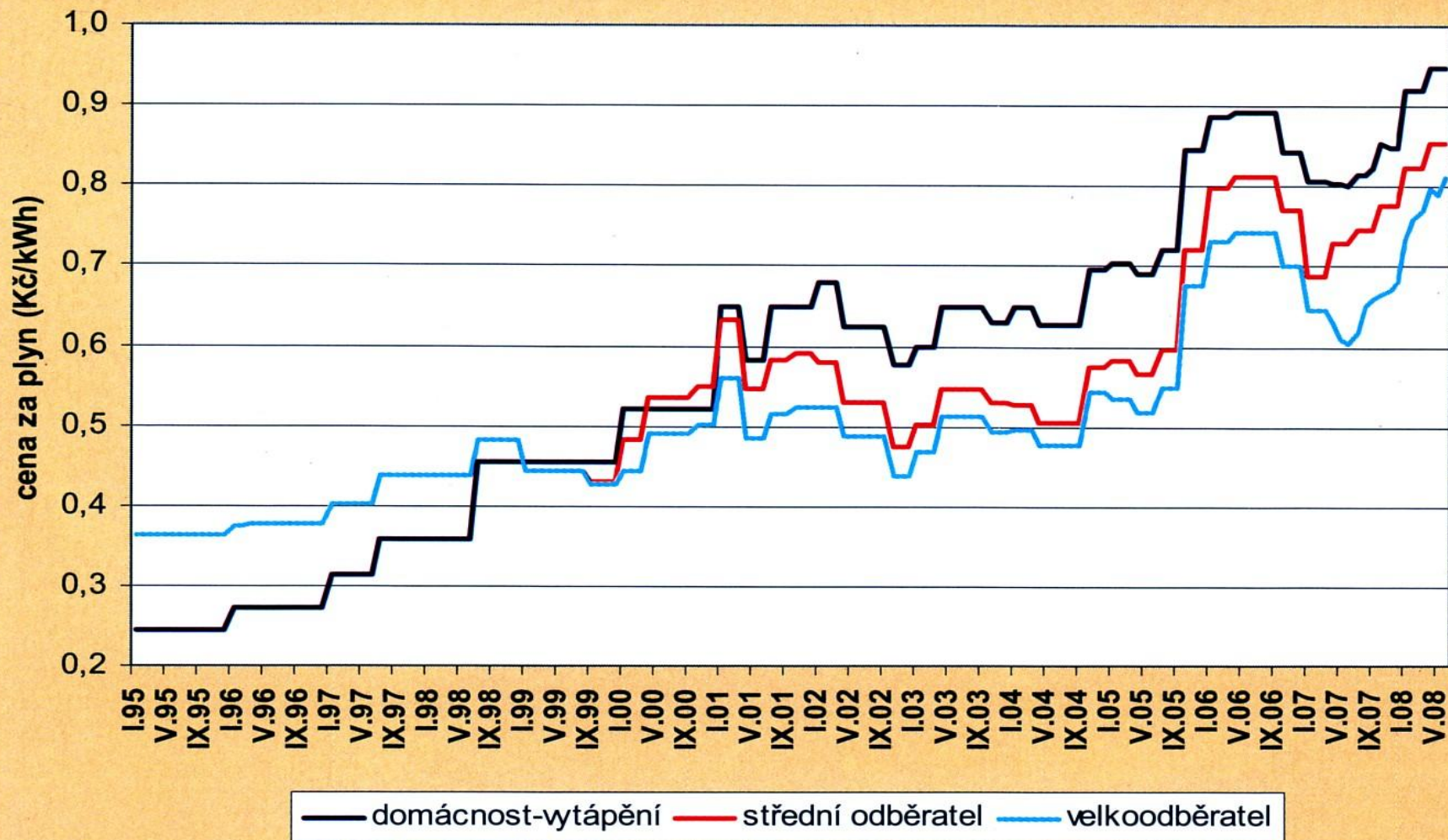
- Realization of the municipal energy policy
- Sustainable decrease of energy consumption of the municipal property
- Searching, preparation and realization of the concrete measures and projects decreasing municipal operational cost
- Motivate to energy efficient behaviour



Benefits of the Energy management

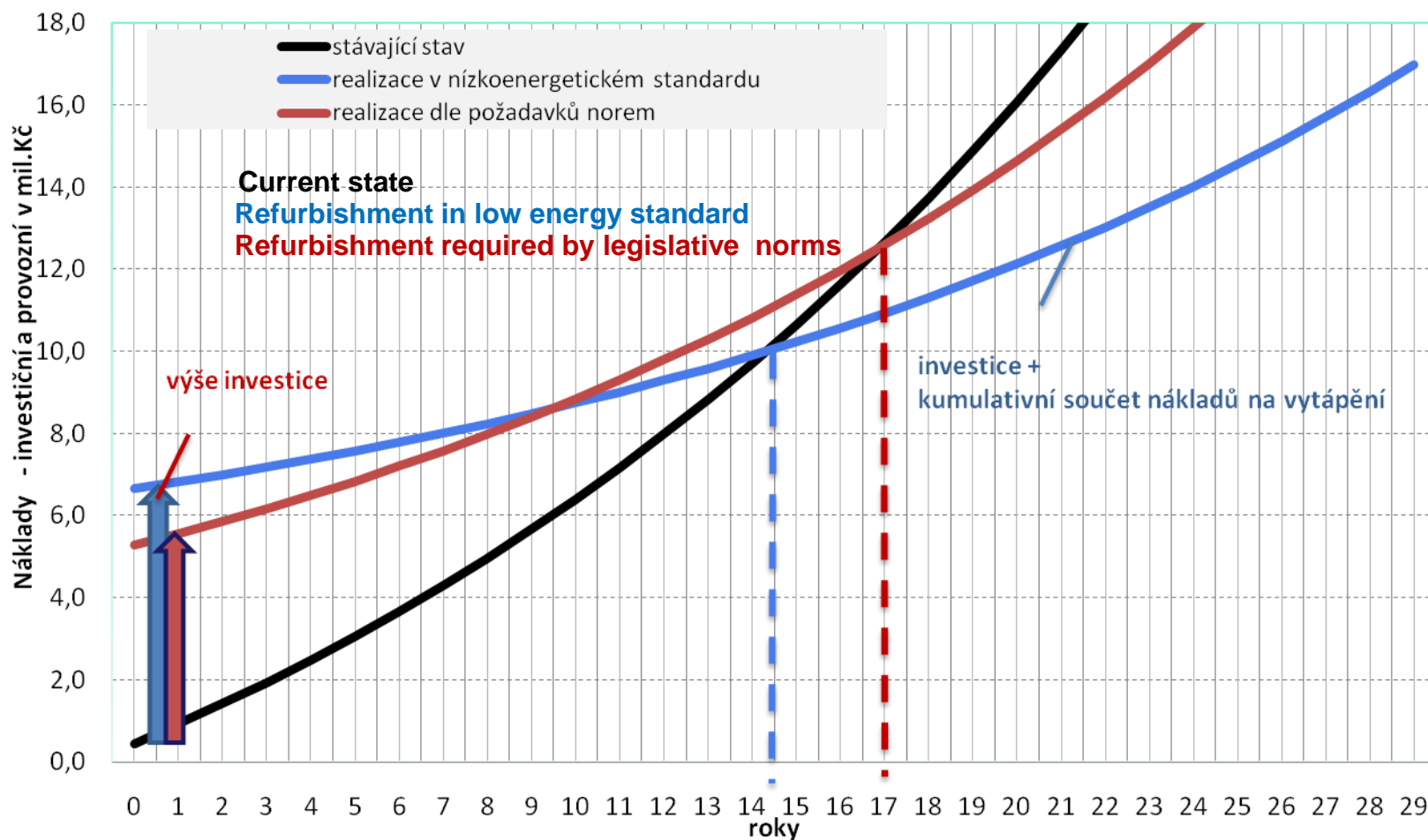
- Non-investment cost stabilization
- Increase of energy safety and self-sufficiency
- Support of local economy and local enterprises
- Decrease of negative environmental impacts

Energy prices price of gas kWh (CZK)

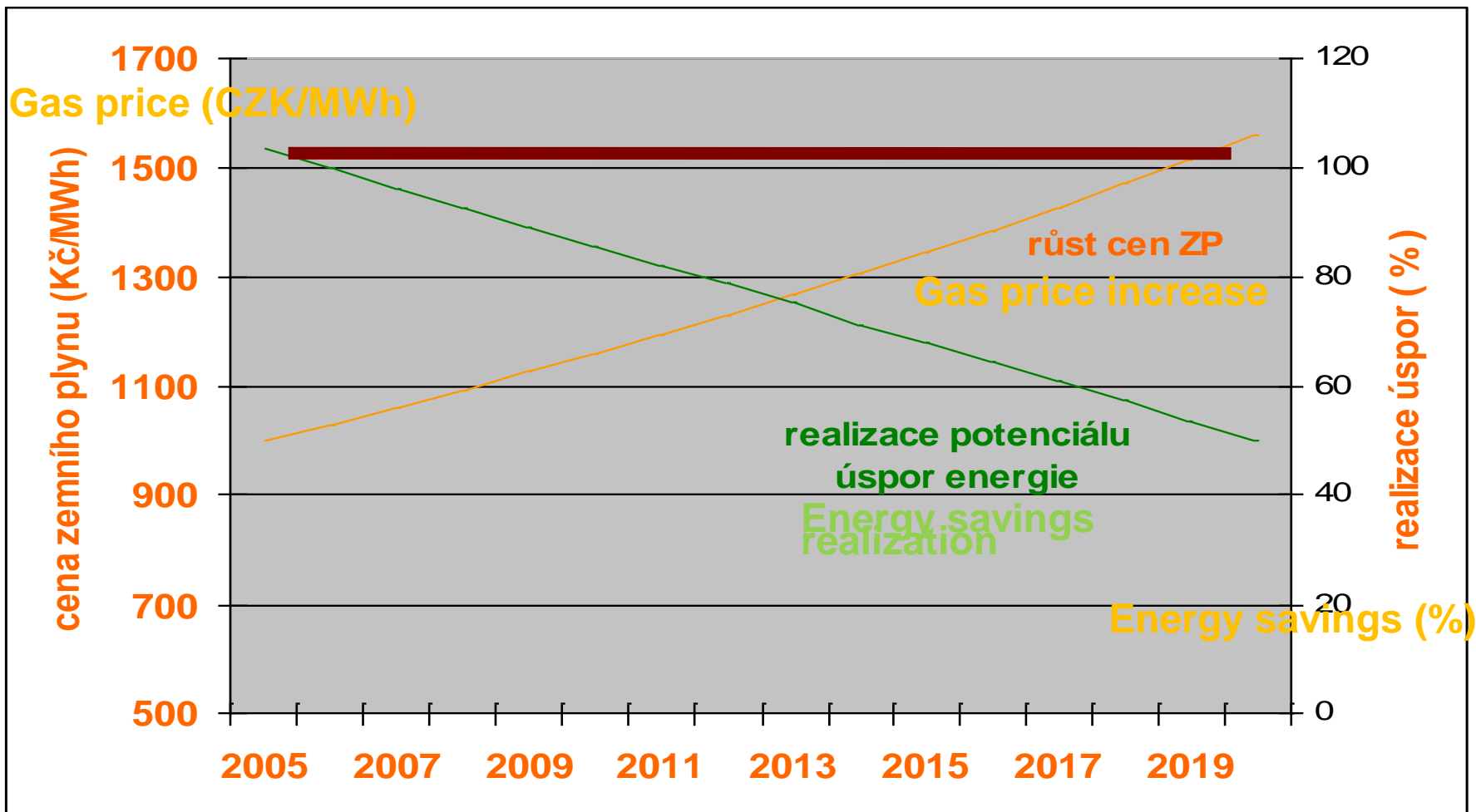


Payback of energy measures

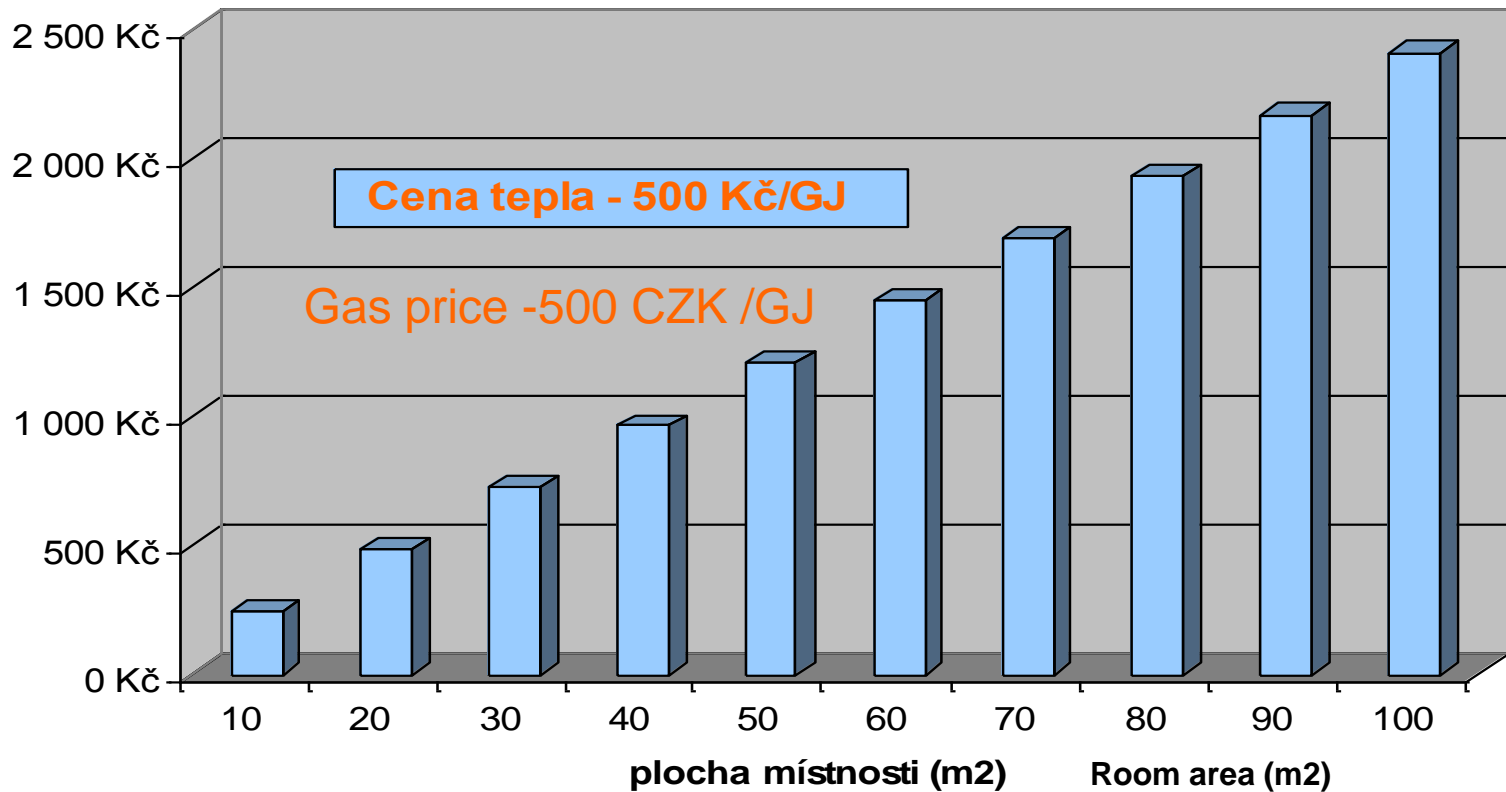
TOTAL COST



Example of energy savings realization



Example-optimal indoor temperature



■ Ušetřené prostředky při snížení teploty v místnosti o 1°C (Kč/rok)

 Saved money by temperature decrease of 1° C(Kč/rok)



What measures can be used?

- public obligation of energy management
 - importance, community reinforcing
- energy certificates to appliances
- information about unit prices
- thermometers to offices
- instructions and trainings to usage of buildings and appliances

What measures can be used?

- purchase of energy savings appliances
 - internal directive and criteria of municipal tenders
- long-term exhibition about energy savings renewable energy sources – good examples
- periodic information in municipal magazines
- public discussion, consultation office



What measures can be used?

- Partial conception:
 - development of central heating system
 - solar energy utilization
 - geothermal energy
 - conception of energy performance decrease
- Project accumulator
- Revolving fund for energy savings and renewables
- Change of attitude and priorities in planning



Where to find inspiraton?

- www.eurocities.eu
- www.eumayors.eu
- www.energie-cites.eu
- www.klimaaktiv.at
- www.iclei.org
- www.energymodel.eu
- www.solarniliga.cz
- www.dobrapraxe.cz



**I wish you a lot of sunny days
and forces**



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