ADAPTATION OF URBAN PLANNING: WATER AND ENERGY

OBJECTIVE

Adaptation measures for climate proofing of urban planning and design.

DESCRIPTION

In the building sector, new standards and codes can be introduced for sustainable design and construction of new homes. Stricter water-quality standards, increasing demand for water, the need to adapt to climate change coupled with the need to reduce greenhouse gas emissions, are some of the many energy-use related pressures affecting water management. Ways to increase energy efficiency in urban water management include the installation of more efficient equipment (e.g. water efficient fixtures), the adoption of water conservation measures and the upgrade of existing infrastructures.

EXPECTED RESULTS

New sustainability performance of a new house.

RESULT INDICATORS

Water and energy new lines.

INVOLVED ACTORS

Administration, engineers, builders.

EXPECTED TIMELINE FOR ACTION

- Medium term (5-10 years)
- Long term (> 10 years)

BEST PRACTICES

- Rouen – France
- Malmö – Sweden
- Ober-Grafendorf – Austria
- Rotterdam – Netherlands
- Madrid – Spain
- Autonomous Province of Trento – Italy
- Friuli Venezia Giulia Autonomous Region – Italy
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- Primorsko-Goranska County – Croatia
- Marche Region – Italy
- Apulia Region – Italy

CRITICALITIES

1. Costs associated with new technologies and fittings;
2. inaccurate water pricing;
3. barriers associated with how water utilities operate;
4. competing priorities at drinking water and wastewater facilities;
5. lack of public awareness about the energy demand of the urban water lifecycle.

SCOPE OF THE ACTION

- Adaptation
- Mitigation

TYPE OF PROPOSED ACTIONS

- Soft

SECTOR OF ACTION

- Energy
- Urban settlement
- Water resource management

CLIMATE IMPACTS

- Drought
- Other

IMPLEMENTATION SCALE

- Municipality
- Region / Country

SOURCE

https://climate-adapt.eea.europa.eu/metadata/adaptation-options/adaptation-of-urban-planning-water-and-energy