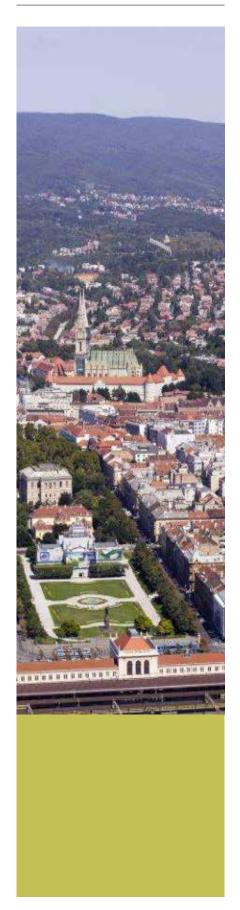


Zagreb



ENERGY PLANNING GUIDELINES - PROPOSAL

Energy transition and energy planning is very complex issue that tackles many different fields of interest and different regulations. Even though the main actor to define the regulative framework surrounding the energy transition is the state administration there is a possibility to influence urban planning procedure and emphasize energy planning issues.

As a result of this project, we will suggest to the City Assembly to adopt Guidelines for integrative energy planning and to initiate Pilot projects for refurbishment and retrofitting of existing neighbourhood built before 1987.

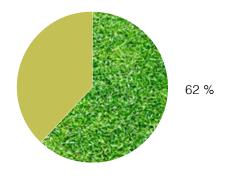
The main goals for integrative energy planning guidelines are reducing the use of fossil fuels, reducing CO² emissions, reducing energy consumptions, increasing energy efficiency, an increased use of RES, refurbishment of the existing urban fabric (neighbourhoods built before 1987). Those goals need to be divided into at least two levels, strategic – long term and operational - short term (bridge the gap between energy strategic documents and action plans and urban planning documents). The guidelines should also define the following needs:

- (overall) long term energy strategy
- establishing short term goals transition, priorities
- establishing set of indicators (sustainability connect with climate and environmental goals)
- data collecting
- establishing energy planning and monitoring body or department
- legislation harmonisation on city and state level (energy, environment, urban planning, mobility, providers, distributors...)
- drafting urban and energy study for urban planning documents

URBAN AND ENERGY STUDY - PROPOSAL

Outputs of an Urban and energy study of refurbishment and retrofitting of existing neighbourhood built before 1987 should be based on the fol lowing analyses:

- analysis of pre-existing condition in the area: inhabitants, public space, building stock, GHG emissions, mobility, urban green space etc.
- identification and mapping of specific type of users in the area number of inhabitants, number of households, building typology (age, materials, systems)
- identify specific type of users in the area and benchmark energy demand and energy saving potential, analyse savings and set targeted benchmarks, set minimum binding and additional saving targets, provide info on RES use potential for specific uses, prepare mapping of energy demand intensity and energy saving potential intensity to define most appropriate areas to target activities.
- possibilities of developing the climate neutral part of the city and use of RES



possibilities of innovative technology and solutions (grid-district heating and cooling or single solutions, dynamics etc.)

- different scenarios models of energy supply and demand with project data of GHG emissions
- different mobility scenarios project data of GHG emissions
- inhabitants (motivation for energy efficiency behaviour)
- financial and dynamic framework conditions (feasibility)
- monitoring indicators etc.

An urban and energy study can also anticipate urban planning document for new development.

Share of green area: 62 % ∰ Density/km²: 1.232 Total city area: 641 km²

