



BEA-APP project

Concept on spatial planning via introduction of planning criteria and value added for regional RE sector on the example of Kaunas City Municipality

Lithuanian Energy Institute

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Concept on spatial planning

Goal of the Concept

For solution of emerging problems one needs to improve existing planning system for energy objects, extend definition of planning criteria, evaluate new innovative project funding possibilities (funding schemes), impact to regional economics and apply new dialogue methods between project developers and publicity.

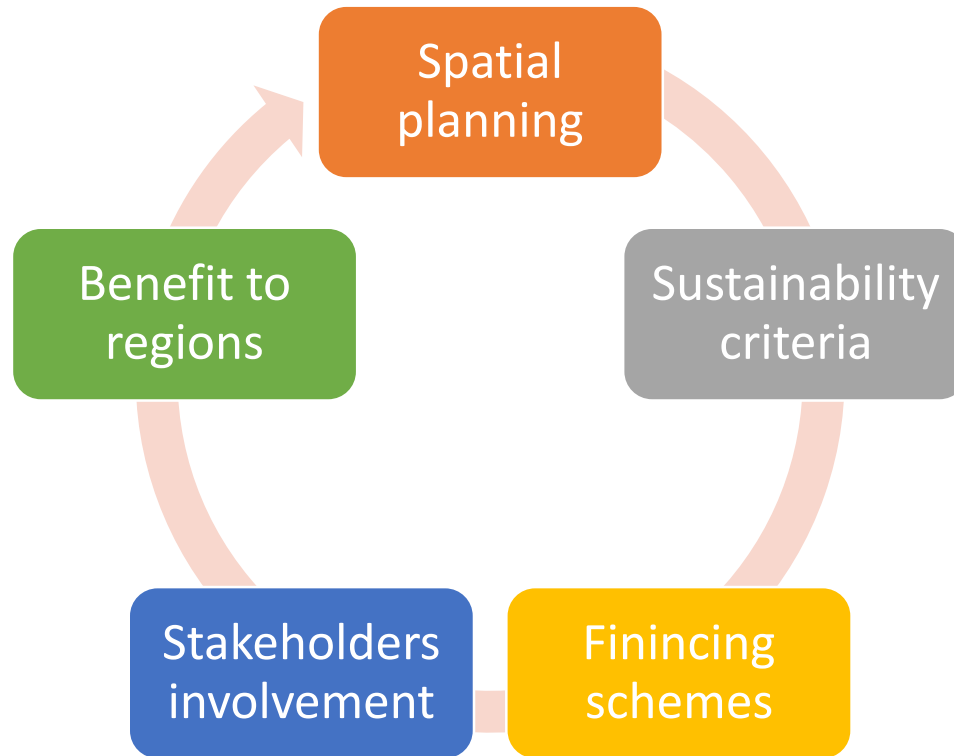
The aim

Preparing the Concept on development spatial planning of renewable energy in Kaunas City Municipality by the year 2027 on the basis of the results obtained during implementation of Interreg BSR Programme Project „Baltic Energy Areas – A Planning Perspective (BEA-APP)“

The concept will provide the main ideas for development existing planning methods, the use new, innovative projects financing schemes, expected added value and general planning criteria, appropriate for the specific area, potential technologies, climate conditions, maximal demand, etc.

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Key elements of planning process for RES development



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The role of spatial planners for Kaunas

- ✓ The main goal of municipal planners is formation of general vision in the planned region.
- ✓ Selection of proper geographic locations for implementation of RE objects, such as wind parks, bioenergy plants or solar PV plants, etc., is of key importance.
- ✓ Providing recommendations on the set of criteria for spatial planning, enabling selection of the most appropriate areas and technologies for further development of energy generation using RES.
- ✓ Suggestions on existing and innovative financing schemes for such projects, based in available experience of participating project partners.
- ✓ Suggestions for various stakeholders to be involved in spatial planning processes (conflicts resolution).

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Development of RE for Kaunas 2018-2027 (I)

Solar PV (for individual projects) with two-side power metering and support for producing consumers 100 kW/a (10 consumers) – total 1 MW;

Solar PV (on municipal buildings) with two-side power metering and support for producing consumers 20 kW/a (2 buildings) – total 200 kW;

Non District Heating heat (individual boiler-houses) - annual growth of new biomass boilers, installed by physical or juridical persons with total capacity 1 MW/a - total 10 MW;

Non District Heating heat (solar collectors) - annual growth of solar collector in new or renovated buildings, installed by physical or juridical persons with total capacity 1.5 MW/a - total 15 MW;

Non District Heating heat (heat pumps) - annual growth of heat pumps in new or renovated buildings, installed by physical or juridical persons with total capacity 0.5 MW/a - total 5 MW;

District Heating (biomass boiler-houses) - municipal waste burning CHP plant with capacity appr. 70 MW_{th}. It will use about 200,000 tons of municipal waste and generate appr. 500,000 MWh of heat;

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Development of RE for Kaunas 2018-2027 (II)

District heating (solar collectors) - annual growth of solar collectors on renovated multi-apartment houses – 200 kW/a (4 buildings) - total 2 MW;

District heating (heat pumps in municipal buildings) - annual growth of heat pumps on renovated multi-apartment houses – 20 kW/a (1 building) - total 200 kW;

District heating (solar collectors) in municipal buildings - annual growth of solar collectors on renovated municipal buildings – 40 kW/a (1 building) - total 400 kW;

Electricity in transport (individual transport means) - Annual registration of electromobiles – 20/a – total 200;

Electricity in transport (charging stations for electro-mobiles) - Annual installation of 4 charging stations – total 40;

Electricity in public transport (new trolley-busses) - planned number of new vehicles acquired, which is defined by municipal budget;

Fuel in public transport sector (green/efficient busses) - planned number of new vehicles acquired, which is defined by municipal budget.



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