

## WP 4 Energy Supply



Baltic Sea Region  
Programme 2007-2013

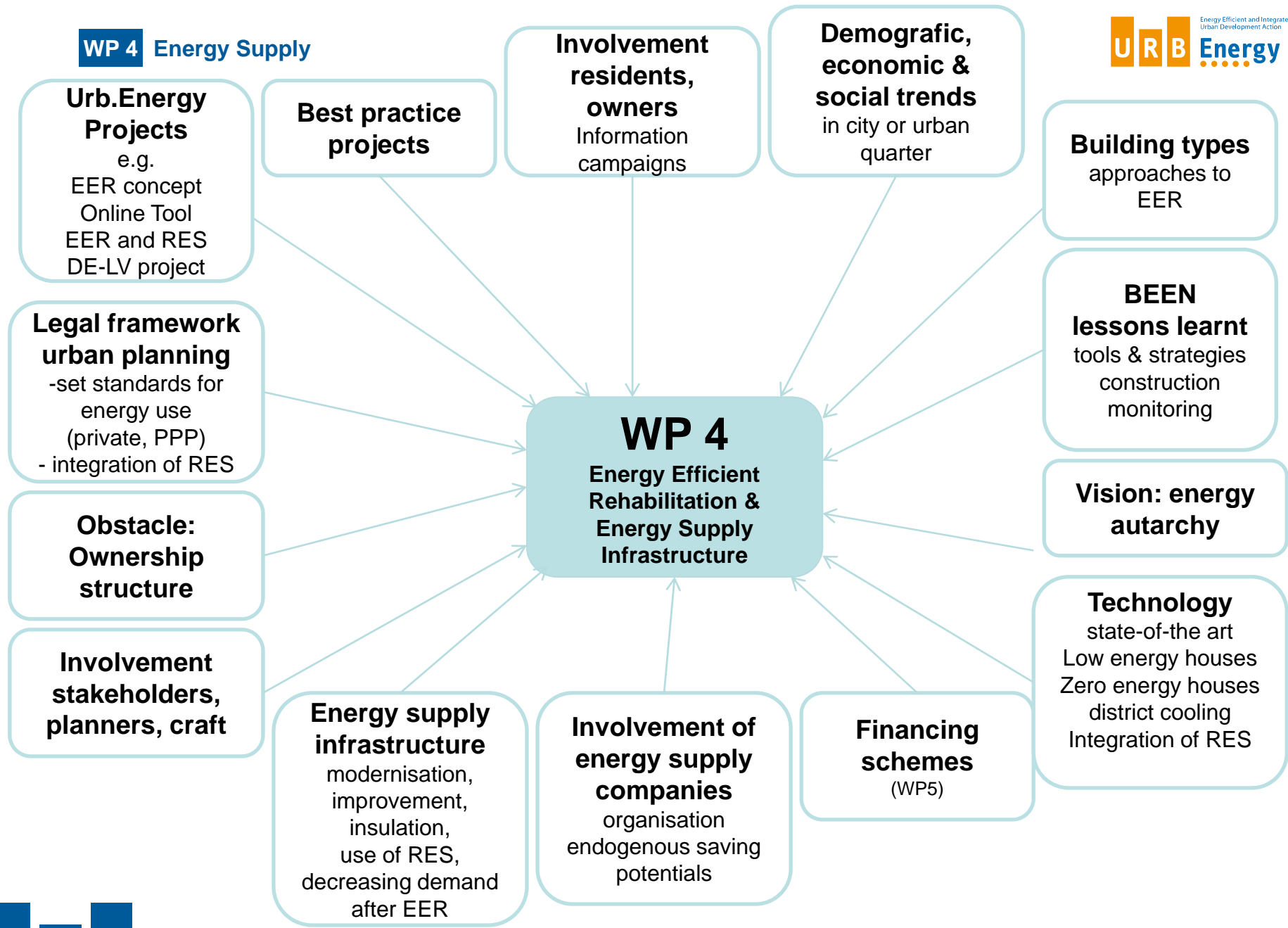
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## WP4 work plan

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## Target areas of Urb.Energy project

- **Piaseczno, Poland (PP8)**
- **Siauliai, Lithuania (PP11)**
- **Jugla (neighbourhood of Riga City), Latvia (PP12)**
- **Jelgava, Latvia (PP13)**
- **Rakvere, Estonia (PP15)**

## WP4 activities for Target areas

- **Elaboration of concepts for EER of buildings and modernization of the supply infrastructure:**
  - **with different main foci of PPs:**
    - **Focus 1: renewable energy resources (PP5),**
    - **Focus 2: documentation for the EER of two selected buildings in the target area (PP8),**
    - **Focus 3: preparation of refurbishment projects of 4 residential buildings (PP15).**
  - **projects with investments in buildings and supply infrastructure:**
    - **PP5 prepares project focusing on renewable energy application,**
    - **PP12 indoor climate and consumption parameters in buildings are monitored via an internet portal for online monitoring.**
- **Involvement of stakeholders and residents via information campaigns and workshops**

## Outputs of PP3, PP4, PP5, PP18

- **Berlin (PP3):**
  - Case study on EER of residential buildings and related energy supply infrastructure in Berlin districts.
- **MIR (PP4):**
  - Analyses on realized integrated urban development concepts in Brandenburg (Focus: buildings and infrastructure),
  - Strategy for energy efficiency in urban development in Brandenburg (including focus: buildings and infrastructure).
- **ETI (PP5):**
  - Surveys and evaluations of most suitable renewable energy resources and technologies for selected areas in Brandenburg.
- **Grodno (PP18)**
  - Analysis on energy efficiency for selected buildings within urban development concept in Grodno,
  - Implementation of modernization activities in the housing stock in Grodno region.

## WP4 events

- **WP4 workshop during Kick-Off (1<sup>st</sup> project period)**
- **WP4 seminar Jelgava (2<sup>nd</sup> project period)**
- **WP4 workshop in Warsaw (3<sup>rd</sup> project period)**
- **WP4 workshop in Grodno (4<sup>th</sup> project period)**

## Urban development concept for Jugla

- **Concept for EER in buildings:**
  - statistical research of multi-apartment buildings in Jugla (number of buildings, apartments, living area in each series and other buildings, statistics of EER measures already carried out);
  - heating, hot and cold water, gas and electricity consumption data analyses;
  - specific recommendations on quality assurance of energy audits, renovation projects and construction works;
  - political recommendation for Local Government.
- **Concept for heating supply infrastructure improved of Jugla**
  - statistical data base establishment on decentralized consumers in Jugla, analyses of the data;
  - analyses and evaluation of the efficiency of heating supply system in centralized and decentralized sectors;
  - modelling energy supply system after EER and integration of RES taking into account the possible new consumers in Jugla and the experience of other PP countries;
  - political recommendations.

## Involvement of residents, owners

- **Awareness of apartment owners in PP countries:**
  - Has it improved since BEEN project? What is the situation today?
- **The situation in Grodno regarding inhabitant views on EER of their buildings**
- **Latvia, Riga, Jelgava:**
  - still very low activity (despite the possible 50% cofinancing for EER projects);
  - online monitoring of renovated and not renovated buildings consumption and INDOOR CLIMATE parameters.



# Energy supply infrastructure

- **Modelling principles of energy supply systems in PP countries**
- **District cooling systems in PP countries:**
  - in a new planned business area in Riga a possibility for a district cooling system is now considered.
- **Support for RES on national and municipal level in PP countries**

# Technology

- **Ventilation in multi-apartment buildings after EER in PP countries:**
  - ventilation with recuperation;
  - air quality (humidity, CO2 level).
- **Modern insulation materials used for EER in PP countries:**
  - Neopor “BASF”, cellulose for building insulation, etc.
- **State of the art on low energy houses**
- ***PP view on energy autarchy (not possible for Riga today)***