

Part-financed by the European Union (European Regional Development Fund and European Neighbourhood and Partnership Instrument)



Integrated Approaches for Energy Efficient Upgrading of Residential Areas

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## Project funded by the European Union (Baltic Sea Region Programme 2007-2013)

#### 15 partner organisations in 6 countries of the BSR

Germany
Poland
Lithuania
Latvia
Estonia
Belarus





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Objective: Concepts and Strategies for the Integrated Energy Efficient Renewal of Residential











- Modernization of the energy supply systems
- Improvement of residential environment and public spaces
- Participation of residents
- Intelligent financing concepts





## **Project Background - General**

- Need to improve the structural and thermal efficiency of the multi-family housing stock
- Rising energy prices
- High potential in the building sector for energy efficiency and use of renewable energy sources
- Need to embed housing renovation actions into integrated concepts for the revaluation of urban quarters
- →Necessity for energy efficient upgrading of existing residential areas







## Project Background – EU Energy Policy

- Amendment of ERDF Regulation (2007/ 2009): opening of Structural Funds for housing
- Up to 4% of the national ERDF allocation can go to energy efficiency and renewable energy in housing
- Programmes funding cooperation on energy issues: Intelligent Energy Europe, Interreg IV etc.
- Recast of the Directive on energy performance of buildings (2010) – high energy efficiency requirements
- EU Strategy for the Baltic Sea Region
- →Increased EU support and requirements
  on energy consumption in buildings







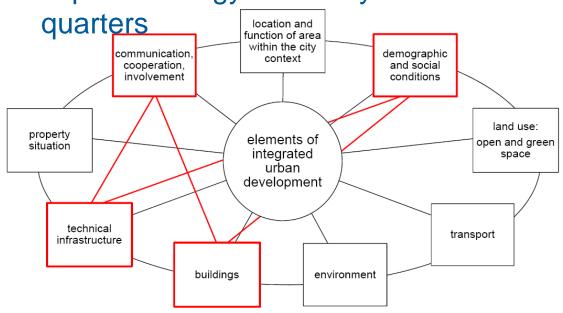
## Urb.Energy applied an integrated approach







- It addresses the overall development of selected residential areas and various interlinked elements of integrated urban development
- It aims to use integrated concepts to improve energy efficiency in urban

















Seven selected urban areas ("target areas") + the experience from the federal state of Brandenburg







## **Project outputs - local**

#### Target Areas (EE, LT, LV and PL):

- Transferable concepts and strategies for the energy efficient and integrated upgrading of residential neighbourhoods in the BSR:
  - Concepts for EER of buildings and modernisation of the supply infrastructure
  - Integrated urban development concepts (IUDCs)
  - Analyses of appropriate financing schemes
  - Preparatory (technical) documentations for future investments

#### **Berlin:**

 Case study: Integrated Urban Development in two Berlin neighbourhoods – Retrospective evaluation with focus on energy efficiency

#### **Brandenburg:**

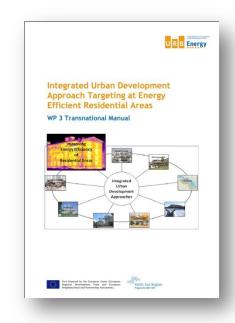
Energy efficiency in integrated urban development in Brandenburg – assessment and perspectives





## Project outputs – transnational (BSR)

- Summarised results and transnational approaches are distributed and transferred via:
  - Manual on integrated urban development approaches targeting at energy efficient residential areas
  - Manual on holistic strategies for EER of the housing stock and renewal of the related energy supply system
  - Guidelines for innovative use of EU (structural) funds for measures in the housing sector and deprived urban area
  - Policy Paper promoting the issues of IUDC, EER and financing instruments on different political levels
  - WP-Flyers summarising main results







## **Findings and Recommendations**

- Improved energy performance in the urban and building context cannot concentrate on single buildings or individual actions = various measures and actions need to be combined
- The inclusion of municipal energy related action plans into the general urban planning framework for cities and communities needs to be promoted
- Integrated Urban Development Concepts (IUDCs) are suitable instruments to activate energy efficiency potentials in urban areas
- IUDCs need approval, active support and commitment of the local council, administrations and energy suppliers





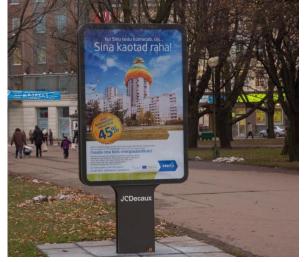




## **Findings and Recommendations**

- Information and participation of relevant actors are very important!
- Key actors are residents! They need to be informed on the benefits of integrated and energy efficient refurbishment measures.
- Awareness raising activities, information campaigns and technical support (e.g. by a local agency) are crucial instruments to achieve acceptance of energy efficiency measures in the joint building.







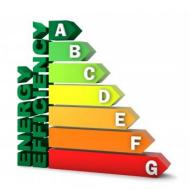


## Findings and Recommendations

- It is important to provide ERDF funding to:
  - Energy efficiency improvements and use of renewables in existing housing
  - Development of integrated, sustainable strategies for urban areas = IUDCs for energy related modernisation of urban neighbourhoods
- On the national level, a combined approach of loan programmes and additional grants for longterm financial support of EER measures currently the most successful method (Estonia, Lithuania)
- Municipal revolving funds combining European, national and local funding possibilities would be a good and sustainable financing instrument – so far not in existence











# Thank you very much for your attention!

## www.urbenergy.eu

#### **Project Co-ordinator**



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