





PEA: Public Energy Alternatives



Promotion of renewable energy sources as driving force for the development of rural regions: Experiences from the INTERREG IVB project Baltic Sea Region Program 2007 – 2013 25. May 2011 Brussels







PEA General Information

Runtime: 01/2010 – 12/2012

Budget: ~3,7 Mio. € / ERDF ~ 3 Mio. €

Partnership:

• 21 partners from 6 different countries:

Germany (4, LP City of Wittenberge), Estonia (5), Lithuania (5), Latvia (2), Poland (3), Finland (2)

 11 public bodies, 7 universities and 3 mainstream partners









1. Strengthening regional development through:

- Reduction of costs for electricity, heat and transport via renewable and regenerative energy
- Reduction of use of fossile fuels
- Technicial innovation and raise of energy effiency

2. Awareness rising for the topic and knowledge transfer through:

- New developed training modules
- Sustainable energy concepts for implementation on local basis
- Dissemination of the approach in public







Transnational project level:

•"Triple Helix Approach" consisting of local public bodies, mainstream partners and scientific institutions

Regional project level:

•6 regions with local working groups and 1 regional lead partner







Challenges for rural regions

- Decreasing economy / decrease of jobs
- Depopulation/migration to metropolitan areas / "brain-drain"
- Aging population
- Unused natural resources
- Stay or become an interesting place to live, travel & invest
- Preservation of sites of historic interest
- General quality of living and working / handling of pollution
- Rising prices for energy and heat
- Acceptance of the population for innovative approaches (NIMB "Not in my backyard")
- Meet European energy goals (Agenda 2020)







- Economic growth via a wider use of renewable, alternative and local energy sources → less dependend on import of fuels combined with a revival of local agriculture
- Implementation of new technologies and solutions → creation of high qualification jobs in the area
- Environment and risk prevention e.g. cleaning up polluted areas, boosting energy efficiency → cleaner cities and green industry → further improve the image of regions and helpful in drawing tourists and investors
- location of companies specialized in the production of alternative energy → enhancing the quality of life of citizens and economic competitiveness







Ylivieska Subregion (FI)

- •The share of oil boilers for heating is 21 % of the housings, some primary schools are still using oil boilers
- •Concept: "Front base gasifier" which is integrated in the oil boiler:
 - Wood chips / pellets are gasified and the wood gas is burned in the oil boiler
 - \rightarrow Very low local emissions compared to oil heating
 - → Cheaper and local fuel for schools and households Wood chips are available everywhere in the countryside
 - → Local district heating plant is interested and opens possibilities to start a new service concept







Dzierzgon municipality (PL)

- •~1,400 people get hot water from their own solar heating units. Solar thermal system covers 60% needs for hot water in the households
- •294 houses with a total surface of 1,420 m²
- •preparation for hybrid street lights: 111 lamps will use solar and wind energy to light rural areas
- \rightarrow Attractiveness of the region is increased it is now seen as a clean, ecological place for recreation
- \rightarrow Savings reinvested in sustainable solutions







Ignalina District (LT)

•Missing of hot water during the whole day, users have to install electric preheaters

•The roof of the local boiler-house was equipped with solar collectors for the heating of water. Hot water will be consumed through the centralized hot water supply system with 13 objects (private and public) with 180 people depending on the central heating system

 \rightarrow 13 % of the needed energy will be produced, 72 MWh/year with a saving of 160 kg CO₂/year p. person







Visaginas region (LT)

After the close down of the NPP gas fired boilers were used for heating \rightarrow rise of energy costs by 4 times

Renovation of central heating system (solar heating) and insulation of public and multifamily buildings to manage a cost-effective way of heat supply

 \rightarrow Saving of 30-40 % of the warm water preparation costs per year

- →Getting away from the shadow of Nuclear Energy
- \rightarrow Reinvestment of the savings in the region







Thank you very much for your attention!

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