

# **RES-e Regions: WP 4: Specific technology promotion**

## **Technology selection for Saarland, Germany: medium-sized PV**

### ***Background***

The economic viable implementation of plants based on renewable energy sources (RES) had been improved through the Energy Source Act (EEG) with fixed feed-in-tariffs for green electricity since 2000. This led to a certain boom for many RES technologies but not all of them could profit. Another problem arose from too high reduction rates for the feed-in-tariffs compared to the reduction of the technology costs. So in 2003 a decline in the number of erected plants could be stated especially after the end of additional soft loan programmes.

### ***Current situation***

After a renewed EEG with adapted feed-in-tariffs a further boom was created. In 2004 and 2005 beside the small PV plants of 1 to 5 kW in private establishments especially very big plants over 1 MW were planned and meanwhile installed. But the medium-sized PV plants with a range of 10 – 200 kW are underrepresented. Even though there are a lot of free roof capacities especially in the factories, at artisans halls and at farms there seems to be too much insecurity to invest on own facilities. In addition the new EEG offers better conditions for farmers to invest in parallel also in biogas plants on the basis of energy crops. So they could profit in two ways and should be approached on both promising topics.

### ***Barriers***

- Lack of neutral information for large roof owners for a promising and ecological investment alternative in the medium-sized PV range
- Insecurity of the viability of PV technologies for potential investors
- Lack of co-operation and common project finance opportunity for potential PV plants operators at a the medium-scale range
- Too less professional installers known

### ***Opportunities***

- Convincing multipliers e.g. artisans with own pilot projects for lots of private financiers
- Use of large building roofs for profitable and environmental friendly build electricity production on a decentralised basis
- Investment chances for unused private capital with an interest rate of up to 6 or 8 percent (compared to normal rates of less than 5%)
- Strengthening of decentralised grid structures especially in rural and low density demand grid areas

- Strengthening farmers not only with PV but in tandem production with biogas plants

### ***Target Groups***

Artisans like especially electricians, carpenters, slaters but also chimneysweeps and farmers often possess own facilities with big roofs. These branches should be approached to convince them first to install their own plant. Secondly they could use such pilot plants as advertisement for private house owners or public administrations. But they have to be trained in special marketing for this technology.

Beside them further lighthouse projects could be implemented on big roofs within local commercial sites well to be visited by private investors. Further target groups could be local politicians and decision makers for building PV plants on municipal roofs as well as local utilities and district heating operators.

### ***Actions needed***

The following activities should be realised to convince such multipliers to erect medium-sized PV plants on their own roofs.

- Contacting and convincing the above mentioned branch associations
- Disseminating neutral but promising information on economical and ecological advantages of PV on their own roofs through the normal branch newsletter
- Offering neutral advice on how to profitably build their own medium-sized PV plant on the factory roof
- Production of a publication on the main technical and economical frame data as well as presentation of best practise examples from the region
- Special information days with marketing sessions and demonstrating the viability of realised plants for further interested applicants of the same branch
- Special focus on farmers in rural areas