RES-e Regions / WP3
First activity: Analysis of RES-e in municipalities

Introduction: The German frame conditions

Since the novel of the German feed-in-law "EEG" in August 2004 the conditions for nearly all "green" electricity technologies are relatively good. So the economic conditions are in favour of RES-e. But there is growing public opinion against concrete projects especially concerning wind energy. As a speciality in Saarland some months ago a citizen initiative against a 4 Megawatt PV area was successful in pushing the village council not to give the permission to build it on acre land. That's the frame within the inquiry took place.

It is important to know some figures on municipalities in Saarland. In this region there exist only 52 municipalities. The smaller ones have between 10 and 20 thousands inhabitants. Beside them there are 5 further cities with between 20 and 50 thousands inhabitants and the capital Saarbrücken with 180.000 people.

For the interviews those villages and cities are chosen which declared their participation in the competition between the municipalities. Meanwhile 11 of them are participating in this competition which means a rate of more than 20%. They comprise the whole range of types of municipalities: smaller and bigger ones including Saarbrücken and more industrialised as well as agricultural communities. All the interviews are made during face-to-face conversation. Normally the interviewed persons are the energy or environmental experts of these municipalities or a member of the construction department.

OPINION

General opinion of local authorities

In general the interviewed persons are in favour of RES-e and wanted the share of it to be increased. And of course PV applications are strongly welcomed by all interviewed people. But some of them make restrictions against wind energy. In one municipality there are problems with a biogas plants (odour). So the interviewed person can only accept this technology if the obligations of the building authority are completely fulfilled.

Opinion according to the production technology

In general most of the interviewed persons are in favour of nearly all types of renewable energies.

An expected reservation against wind energy could not be detected. In some cases they are not so in favour of wind energy. But it was not an emotional affair as the question of wind parks in their surroundings was not given because of too bad windy conditions for an economical installation.

One interviewed member of the administration was against biogas if the odour problematic wasn't sufficiently solved but in general could accept also biogas plants.

It was also remarkable that there was no restrictions against bigger wood-chip fired plants as in 2004 one 20 MW (el) plant was hindered by public opposition in the northern Saarland. It could be that most of these people didn't see the relevance of wood energy in such dimensions but there was no opposition for wood CHP within the interviewed group.

All people were well in favour of PV plants on roofs and didn't see any restrictions for other applications on acre land.

Referring to small hydropower some of the more ecological oriented persons were a bit sceptical on disadvantages for nature. But when explaining that the obligations from the constructions permissions are always so that the fish flow was supported this scepticism ended and they voted positive also for hydropower.

Public opinion, as felt by the local authorities

It was not so easy for many of the interviewed persons to answer to this question as it was not easy to them to speak about all of their citizens. First reason is that in many municipalities there were no problems with any of the RES-e technologies. Second it that there was no big discussion about that. A few of these people from the administration think that most people didn't have any opinion about RES-e technologies. And therefore they don't expect any opposition. But mostly are ready to deduct a general opinion about the technologies as follows:

1. PV was expected as very positive welcomed everywhere.
2. Wind power was seen as a bit critical by a part of the people. In one municipality the mayor was much in favour of a wind park for economical but has to fight against the majority of his own political party.
3. Small hydropower was estimated as very acceptable with one exception by fishermen.
4. Biogas was only denied in the one municipality with the bad running biogas plant. All other estimated this technology as positive by the population.
5. This positive attitude was also estimated for not too big (less than 5 MWel power) wood-chip fired CHP plants.

EXPERIENCES AND PROJECTS

Experiences with RES-e plants

Nearly half of the municipalities had experiences with PV plants on their roofs. This high amount is first due to a special regional support programme to build 1 kW PV plants on school roofs. A speciality is given in three municipalities as they are ready to offer their roofs to third investors for free (city of Saarbrücken) or on the basis of a small rent. So they are participating on the experience with PV plants without spending and pre-financing own money. In one municipality the advice offer of AZES was used for a concrete planning

support for further PV plants. So the on-site visit resulted in a realistic potential of further 150 kW from PV plants on a serious of 7 different roofs (most of them schools and therefore optimal for a positive public dissemination of this success). In this case the municipality profits from an Interreg programme for target II areas with a support of up to 40% of the whole investment costs.

In addition to their own experiences with concrete plants, 3 of the municipalities had former own support programmes for their citizens to build solar electricity production plants on their roofs. In one municipality such a programme is continuously running.

There is no further public participation for RES-e-installations

Energy strategy and targets as regards energy production

No interviewed municipality has it own energy strategy and only two of them possess an actual systematic energy consumption control of their buildings. But some of them have investigated alternatives in those cases the former boiler conception hast to be renewed. Also isolation measures and exchange of energetically bad windows were taken during renovation cases. But this is also due to the national energy saving order to construct buildings in an energetically most efficient way.

Along with the absence of concrete energy strategies there exists neither any political ambitious target for RES-e-share.

Consumption of green electricity

There was no municipality buying green electricity to fulfil the needs of their own electricity consumption.

BARRIERS AND SUPPORT

Barriers

Funding problems are in all cases detected as the biggest barrier. This is due to the fact that the investment budget of nearly all municipalities is strongly limited by the inner revision of the regional government. As this rule is approached already since many years in most cases there exist a long queue of all kind of projects to be served by investment plans. And PV plants are only one of minor priority in comparison to the legal obligations of an administration. In some cases we could give a push to think about an exception role of PV as this investment will be paid back during the 20 years whereas all other investment is never re-financed.

Support

General information support about the competition was seen as a good chance to shift also the private interest to the economical advantages of the EEG and the reliability of new PV plants on citizen's roofs.

In 4 municipalities the offer to realise information evenings for private and public persons was estimated as a good support.

In 2 municipalities the interviewed persons will personally contact potential biogas or hydropower plant owners to inform them about our advice offer.

In nearly half of the municipalities a small brochure on all RES-e- technologies will be welcomed, answering the most important and frequently asked questions as well as striking out the advantages of the EEG and therefore economical viability

CONCLUSIONS

The interview and the competition launched seem to be an appropriate way to increase consciousness of the technical and economical viability of PV plants and therefore will hopefully lead to more public and citizens activities towards more solar electricity.

Beside PV as queen of RES-e- technologies for municipalities and citizens some concrete approaches for landlords, farmers and owners of water licenses can also push new biogas or small hydropower projects if the economical conditions will be positive.