

EL-EFF REGION

WP 3: Stakeholder survey

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1 Background

As a basis for the development of a regional action plan, stakeholder interviews were carried out in Upper Austria. Representatives of relevant regional stakeholder groups were selected and interviewed to collect ideas on possible fields of action and their views about measures which would be useful to improve efficiency in electricity use. Their opinion on the future development of electricity consumption is shown in the following.

2 Selected stakeholders

The interviewed persons were selected representing a mix of stakeholder groups , relevant for Upper Austria.

	Organisation	Interview partner	Stakeholder Group/Function
1	Energie-Institut	Mr. Lummerstorfer	energy adviser
2.	Energiewerkstatt	Mrs. Salletmaier	energy adviser
3.	Energy services Strasser	Mr. Strasser	energy adviser
4.	ETECH	Mr. Schmid	Planner
5.	Linz AG	Mr. Stix	Energy supply company
6.	Municipality of Munderfing	Mr. Lehner	Chief officer of the municipality Munderfing
7.	Municipality of Katsdorf	Mr. Moser	Mayor of Katsdorf
8.	O.Ö. Energiesparverband	Mr. Dell	Managing Director Energy Commissioner of Upper Austria
9.	O.Ö. Energiesparverband	Mrs. Egger	Deputy manager International cooperation Oekoenergie-Cluster/companies
10.	O.Ö. Energiesparverband	Mr. Fürstenberger	energy adviser
11.	O.Ö. Energiesparverband	Mrs. Öhlinger	Head of sector internat. tasks
12.	Poppe*Prehal Architekten	Mr. Prehal	Architect
13.	Regional government of Upper Austria	Mr. Hübler	Land OÖ
14.	Sachverständigenbüro	Mr. Brandstätter	energy adviser
15.	Schiffler Licht – Innovative Beleuchtung	Mr. Schiffler	energy adviser
16.	Solarprofi	Mr. Mayrhofer	energy adviser
17.	Upgrade Consulting Engineers	Mr. Pehn	energy adviser
18.	Upper Austrian Chamber of Labour	Mr. Kronlachner	Consumer adviser in the field of electricity
19.	Upper Austrian Federal Economic Chamber	Mr. Kalab	Energy industry and energy management
20.	Upper Austrian Federal Economic Chamber	Mr. Kugler	Representative of electrical and electronic industry

3 Methodology

In total, 20 interviews were carried out by telephone and face-to-face. After a short introduction the persons were asked the following questions:

1. On your opinion – how will electricity consumption develop in Upper Austria until 2030?
2. Electricity consumption will increase at most in which fields? (Suggestions: private households, industry or public sector but also appliances, e.g. climatisation – suggestions were made only as an impulse and only if necessary)
3. Where do you see the largest potentials to save electricity (private households, trade and industry or public sector)?
4. Are there any possibilities to save electricity within your field of activity (either within your office/company/organisation or in contact with your clients)?
5. Do you have any ideas/suggestions for
 - a) legal measures?
 - b) measures concerning information and awareness raising?
 - c) financial incentives?
 - d) anything else?

4 Analysis of the interviews

4.1 Electricity consumption until 2030

The majority of the interviewed persons think that electricity consumption will increase in Upper Austria until 2030. 10 out of 20 stakeholders believe that it will increase strongly with amounts between 30 to 50%. The maximum which was named was a growth rate of 100% (“energy consumption will duplicate”). Two interviewed persons think that energy consumption will increase during the next years and after the introduction of appropriate measures it will decrease, whereof one supposes that in 2030 it will be at the same level as today. One stakeholder said that electricity consumption will decrease by minus 0.5% per year which would be minus 12% compared to the electricity consumption of 2008.

4.2 Fields of increasing electricity consumption

Question 2 was about different fields of increasing electricity consumption. 7 out of 20 stakeholders think that electricity consumption will increase at most **in private households**. One reason for this development is seen in higher levels of equipment of households with electrical appliances. Although appliances become more electricity efficient, the absolute number of electrical appliances in households and consequently the electricity demand increases. Additional appliances listed in the interviews are entertainment electronics, multimedia PCs and other home office equipment, air conditioning, laundry dryer and mechanical ventilation. 3 of the interviewed stakeholders consider that i.a. heat pumps have

an important role in the increasing electricity consumption. Two interview partners consider changing demographic characteristics like the growing number of one person households or the ageing society as a reason for growing electricity consumption in private households.

4 interview partners consider **service and industry** as the sector with the biggest growth rate. Reasons for this development are economic growth and an increase in production, more machines and high-tech production methods which is often more electricity consuming. One stakeholder said that GDP and energy consumption were decoupled (GDP: +3.3% and energy consumption +0.6%) for the first time in 2006, however, the reason for this was probably the rather warm winter period. Another stakeholder said that electricity consumption per produced unit decreases because of already implemented efficiency measures and that the production process cannot be optimized anymore. The aim is to hold the same level of electricity use at an increasing output. One interview partner explained that the development in this sector is very complex as there are many counter-trends, e.g. production machines become more efficient but there are more machines in total, the number of companies grows but the bigger companies could out-source their production site.

One stakeholder mentioned that electricity consumption will decrease in buildings of the service sector due to the effects of the “Buildings Directive” (EPBD).

5 stakeholders think that electricity consumption will grow in all sectors at the same level. One interview partner said that generally it will decrease in all sectors but there will be a specific increase due to appliances like air conditioning or heat pumps though.

4.3 The largest potentials to save electricity

8 out of 20 interviewed persons consider **private households** as the sector with the largest potential to save electricity. Suggestions to cut the demand were a more sensible utilisation of energy, less and more efficient appliances and lighting (in the long run there will be only CFL bulbs), awareness raising through information and advice (e.g. that there is a link between plasma screens and global warming, pro solar cooling).

Service and industry were named five times and lighting is seen as the largest potential. The public sector was named three times.

4.4 Possibilities to save electricity in your field of activity

The interviewed persons were asked about possibilities to save electricity in their field of activity. Lighting was named by 10 stakeholders (e.g. to use CFL bulbs, use light sensors, optimization of lighting). One stakeholder said that the saving potential concerning lighting in industry was not so big but that it had an important function as a role model. Further examples were avoidance of stand-by losses (use a multiple socket outlet), use a central printing station, electricity efficiency at the purchase of appliances as a priority, to out-source the server because a specialised company would use a more efficient technology, each desk should be equipped with an on/off switch, to avoid heating systems based on electricity. Two stakeholders were afraid that electricity consumption would increase more with a growing rate of electrically powered cars.

4.5 Do you have any ideas/suggestions for...

Question 5 asked for input concerning measures to control rising electricity consumption. This question was split in the 3 categories – legal measures, awareness raising/information and financial incentives.

a) legal measures?

When asked about ideas or suggestions for legal measures it turned out that the stakeholders' opinion is divided: One group considers legal regulation as no appropriate measure to control electricity consumption. This opinion is partly based on the attitude that it is better to achieve a change in user behaviour through positive incentives like programmes and information than with constraints. Partly the interviewed persons did not see any possibilities for legal measures.

The second group of stakeholders in contrast stated that laws must become stricter and that it needed a strong and courageous legislation. The following suggestions were given:

- declining taxation for electricity consumption or a penalty for high electricity consumption (a higher electricity consumption goes with a cheaper price – but it should be the opposite)
- new buildings (especially office buildings) must be checked regarding the energy demand for cooling (avoidance of air conditioning in summer)
- no subsidy for heat pumps
- energy efficiency of appliances like mechanical ventilation or pumps should be connected to the subsidy for the whole building
- maximum electricity consumption as a subsidy requirement for new buildings (sustainable housing programme): introduction of an energy performance indicator (kWh/m²/a/person);
- the installation of a PV as subsidy requirement in the sustainable housing programme;
- products with a high electricity demand must be prohibited and there should be limits for products;
- regulation for building supply stores: an expert must install air ventilation appliances
- to ban conventional light bulbs
- no heating systems based on electricity
- more labels for more products
- limitation of installed capacity in households
- obligation of electricity accounting in trade and industry and in the public sector
- contents of electricity bill defined by law

b) information and awareness raising?

All stakeholders agree that information is important and should be even intensified. Furthermore, the majority of the interviewed persons consider private households (as small consumers) as the main target group for information campaigns. Contents of such campaigns should be: lighting, stand-by, better information about heat pumps, more solar

collectors to avoid hot water supply based on electricity in summer, labelling of appliances. Further measures in this field are training campaigns and advice.

Another interview partner focused on the bottom-up approach: Personal contacts are obligatory for awareness raising. Kids in kindergarten and schools must be informed about the importance to save electricity and to educate their parents as a consequence. Personal contact to citizens is very important, too.

c) financial incentives?

Generally, financial incentives are seen as a good instrument for awareness raising. The following suggestions were given: subsidies for purchasing efficient appliances (e.g. a subsidy only for appliances of the level A++), for the exchange of electric heating, a subsidy for third party financing in the field of electricity efficiency, better feed-in tariff for electricity from a PV system, remuneration for low electricity consumption (penalty for high consumption respectively).

d) anything else?

- purchase directive in the public sector (municipalities),
- campaign in the commercial sector (illumination and air conditioning), very difficult target group because there are so many different contact persons
- tariffs linked to the load curve

5 Summary & conclusions

The survey produced interesting results regarding the views and the current knowledge level of different stakeholders. There are many similar views but also opposite ideas.

When asked about the future development of electricity consumption, the majority of the interviewed persons believe in an increasing demand in the coming years with a focus in the stakeholder group of energy advisers. 4 out of 20 persons said that demand will stabilise and/or decrease.

Private households are seen as the field with the biggest growth rates (energy advisers, public authorities, energy supplier and representative of economic chamber) and consequently the field with the biggest saving potentials (lighting, stand-by losses, energy efficiency, etc.).

When asked about the own field of activity, the answers show that most of the interviewed persons are already very aware of the topic and actively searching for saving potentials. Suggestions for legal, financial and awareness raising measures are far reaching and partly very detailed.

It can be summarized that the results of the survey provide a basis and valuable input for the development of regional action plans.