Project

Acceptance of renewable energy

Achieving the energy transition with a policy of small steps
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If the Energy Strategy 2050 is to be a success, it is not only technical challenges that need to be mastered. It is above all a political question. However, the Swiss population cannot be persuaded to accept revolutionary changes. Instead, small evolutionary steps are required.

Mr and Mrs Swiss are best moved in small steps towards renewable energy. Source: Shutterstock
There are already many technical papers on the implementation of the Energy Strategy 2050. Many are concerned with energy savings in buildings, power plants and private households. But how can the Swiss population be persuaded to support the expansion of renewable energies? A research team led by Isabelle Stadelmann-Steffen from the University of Berne investigated this question.

Her project focused on four renewable energy sources: small-scale hydropower, solar energy, wind power and geothermal energy.

**Framework conditions decisive for small-scale power plants**

In order to achieve the objectives of the Energy Strategy 2050, the expansion of small-scale hydropower is planned, among other things. Small-scale hydropower plants are plants with an output of up to 10 megawatts. More than 1,000 such small-scale hydropower plants are operated in Switzerland. However, the total output of small-scale hydropower plants in Switzerland has risen only relatively slowly since 1990.

According to researchers at the University of Berne, the cantons also make very different use of the potential of their hydropower. This is partly due to the political conditions. In cantons that define exactly where small-scale hydropower plants may be built and where they may not, fewer plants are built. Conversely, where local small-scale power plants are offered good feed-in conditions, small-scale hydropower plants are more likely to flourish.

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At a glance

- The willingness to switch to renewable energies decreases significantly if more has to be paid for this.
- While green taxes would be particularly advantageous from a scientific point of view, they are unpopular among the population and also politically.
- The cantons are called upon to take measures and to coordinate among themselves.

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Additional burden of 15 francs per month is too much

The fact that a lot ultimately depends on costs is also shown by studies of private households. According to the Berne study, the Swiss are generally in favour of the use of renewable energy. However, as soon as households incur costs for this, the support decreases. The enthusiasm for renewable energy policy decreases almost linearly to the additional costs: with every extra franc that households have to pay, the acceptance of political measures decreases.

Little belief that an environmental tax works

The study also examined the extent to which the interviewees were in favour of various measures to promote renewable energies and reduce energy requirements. Environmental taxes in particular proved to be particularly unpopular, although science considers them to be very effective. One explanation for this finding is that a significant proportion of citizens either do not understand the way such taxes work or do not believe in their effectiveness. This is demonstrated, for example, by the answers to the statement "an environmental tax does not reduce energy consumption". About half agreed with this statement, but just as many rejected it.

Secret recipe: “policy of small steps”

In a federal state like Switzerland, incentives for renewable energy vary from canton to canton. For this reason, the study examined schemes in the Cantons of Berne, Valais, Lucerne, Uri and Thurgau. As different as these cantons are, they all tend to go it alone and, according to the study, do not coordinate enough among themselves. The cantons need a wide range of instruments to promote renewables. However, the population clearly prefers tax breaks and subsidies. It is precisely for these instruments, though, that the cantons lack the necessary resources. And the elimination of the compensatory feed-in remuneration KEV at national level in 2022 will exacerbate this situation.
Evolution instead of revolution

Isabelle Stadelmann-Steffen and her team propose a "policy of small steps". This is because a constant further development of the status quo would be better received by the general public than major changes. As an example, the researchers mention a moderate tax that can then be increased over time instead of introducing a high, more effective tax that is not accepted.

They propose that political decision-makers exchange views with their counterparts from other cantons. And at the local level, decentralised and small electricity producers should be supported, for example with good feed-in conditions for small-scale hydropower plants.
Produkte aus diesem Projekt

- Isabelle Stadelmann on the acceptance of renewable energy
  Date of publication: 15.05.19

- Environmental decision-making: the influence of policy information
  Date of publication: 19.06.19

- Bringing the policy making perspective in: A political science approach to social acceptance
  Date of publication: 19.06.19

- The acceptance of instruments in instrument mix situations: Citizens’ perspective on Swiss energy transition
  Date of publication: 19.06.19

- Factors Driving the Promotion of Hydroelectricity: A Qualitative Comparative Analysis
  Date of publication: 19.06.19

- How beliefs of the political elite and citizens on climate change influence support for Swiss energy transition policy
  Date of publication: 19.06.19

- Bad news is bad news: Information effects and citizens’ socio-political acceptance of new technologies of electricity transmission
  Date of publication: 19.06.19

- The unpopularity of incentive-based instruments: what improves the cost–benefit ratio?
  Date of publication: 19.06.19

- Going beyond technocratic and democratic principles: stakeholder acceptance of instruments in Swiss energy policy
  Date of publication: 19.06.19

- Akzeptanz erneuerbarer Energie
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- Das Ja zum Energiegesetz – Breite Zustimmung zur Energiestrategie oder hart erarbeiteter Erfolg?
  Date of publication: 19.06.19

- “Viele Menschen wollen einfach den Ist-Zustand bewahren” - Isabelle Stadelmann bei “Wissenschaft persönlich”
  Date of publication: 10.10.19

- Hybride Freileitungen und die Akzeptanz neuer Energietechnologien
  Date of publication: 22.10.19

  Date of publication: 14.02.20

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