Schemes, networks and tariffs

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• Learning networks
• Tariffs for saving electricity in households
Swiss tender-based energy saving scheme
ProKilowatt

- SFOE support ‘projects’ or ‘programmes’ for saving electricity
- ‘Projects’ or ‘programmes’ can be proposed by companies (e.g., engineering firms or ESCOs), private persons, public sector or consortia
- Tender-based: Success chances increase with higher energy savings and lower cost (of the ‘projects’ or ‘programme’)
- Subsidies only for measures with PBT of at least 5 and 9 years respectively
- Voluntary submission, voluntary participation

http://www.bfe.admin.ch/prokilowatt/
Swiss tender-based energy saving scheme
ProKilowatt PROJECTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Subsidy (million Swiss Fr.)</th>
<th>Number of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2.6 Mio.</td>
<td>18</td>
</tr>
<tr>
<td>2011</td>
<td>4.4 Mio.</td>
<td>31</td>
</tr>
<tr>
<td>2012</td>
<td>8.3 Mio.</td>
<td>67</td>
</tr>
<tr>
<td>2013</td>
<td>6.9 Mio.</td>
<td>35</td>
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</tbody>
</table>

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Swiss tender-based energy saving scheme
ProKilowatt PROGRAMMES

Subsidy (million Swiss Fr.)

- ORC
- IT
- Process heat
- Space heat (el.)
- Bldg. m’mnt systems
- Other
- Hot water
- Appliances
- Motors & drives
- Cooling
- Lighting

Numbers:
- 2010: 6.4 Mio.
  - ORC: 20%
  - IT: 9%
  - Process heat: 34%
  - Space heat (el.): 19%
  - Bldg. m’mnt systems: 11%
  - Other: 17%
  - ORC: 29%
  - IT: 19%
  - Process heat: 19%
  - Space heat (el.): 11%
  - Bldg. m’mnt systems: 6%
  - Other: 17%
- 2012: 6.6 Mio.
  - ORC: 15%
  - IT: 29%
  - Process heat: 30%
  - Space heat (el.): 15%
  - Bldg. m’mnt systems: 6%
  - Other: 15%
- 2013: 12.2 Mio.
  - ORC: 33%
  - IT: 13%
  - Process heat: 8%
  - Space heat (el.): 9%
  - Bldg. m’mnt systems: 18%
  - Other: 17%

- 8
- 13
- 23

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Swiss tender-based energy saving scheme
ProKilowatt

For comparison:
• Swiss hydropower prod. costs: 5-7 Swiss centimes/kWh
• Swiss household electricity prices: 20-25 Swiss centimes/kWh
• Swiss industry/commerce electricity prices: ~15 Swiss centimes/kWh

For energy supplier (e.g. as EEO):
• Interesting, if no/too little/retiring capacity
• possibly not interesting, if assets in production & grids and no supply bottlenecks
Learning energy efficiency networks (1/2)

- Typically composed of companies located in a given region, active in different sectors
- in CH, DE, AT, …
- Currently 50 networks operational in Germany, 500 planned until 2020
- Voluntary (but possibly as reaction to political pressure)
- Energy audit per company or per site
- Regular meetings with moderator and energy technology expert
- Agreement on joint energy-efficiency target

Source image: LeeN (Lernende energieeffizienz-Netzwerke)
Learning energy efficiency networks (2/2)

Measures implemented within the German “30 Pilot-Netzwerke” *)

<table>
<thead>
<tr>
<th>Companies</th>
<th>#</th>
<th>210</th>
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<tbody>
<tr>
<td>Technical measures</td>
<td>#</td>
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<tr>
<td>Total final energy use</td>
<td>GWh</td>
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<tr>
<td>Saved final energy use</td>
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<td>870</td>
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<tr>
<td>Electricity</td>
<td>GWh</td>
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<td>Natural gas</td>
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<td>Fuel oil</td>
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<td>District heating</td>
<td>GWh</td>
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<tr>
<td>Other</td>
<td>GWh</td>
<td>85</td>
</tr>
</tbody>
</table>

Average reporting period: 2.7 years

Average annual energy efficiency improvement: 2.2% p.a.

*) personal communication with D. Köwener, LeEN (Lernende EnergieEffizienz-Netzwerke), 2015
Tariffs for saving electricity in households

Progressive Tariff (PT)

Energy savings feed-in tariffs (ESFIT)
Comparison effectiveness ESFIT and PT
Preliminary results - Confidential

To be published