Focussed RES-H policies – the Solar Thermal example

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European Sustainable Energy Policy Seminar
March 20, 2007, Brussels
Organised by INFORSE, EUFORES, EREF
www.inforse.org/europe/seminar07_BXL.htm
Let me introduce ESTIF

• European Solar Thermal Industry Federation
• Representing the solar heating and cooling sector at EU level
• 90 members, representing >95% of the market
• A founding member of EREC
• Based in the Renewable Energy House, Brussels

www.estif.org
Nice market growth in the past decades!

Source: ESTIF
But: Huge discrepancies in the EU – for two decades already
Critical mass of the market needed

Self-perpetuating cycle of imbalance

Country with growing market
- High demand
- Large market
- High awareness
- Motivated installers
- Economies of scale
- Falling costs

Country with stagnating market
- Low demand
- Small market
- Low awareness
- Conservative installers
- Higher costs
- Lack of critical mass
Solar Thermal Action Plan for Europe

Heating & Cooling from the Sun
Policy matters

• Support policies have played a major role in all key national markets

• When critical mass is reached, political support can be gradually reduced

• A coherent support strategy:
  • addresses not one but several barriers to growth
  • is oriented towards reaching a longer-term target
  • avoids stop & go
  • provides stable, positive framework conditions
A coherent support strategy consists of...
Targets for solar thermal: why and how

Why
• Signal to investors (from plumbers to banks)
• Benchmark for success of policies
• Help avoid short-term actions, stop-&-go
• To provide vision to mobilise political and human energies at national and local level

How
• The target should be ambitious and realistic!
• Ideally: Bottom-up approach based on detailed potential studies
• But: Detailed study should not postpone action now!
• First solution: simple approach based on per-capita capacities
## Solar thermal targets for EU-25 in 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity in operation absolute (GW&lt;sub&gt;th&lt;/sub&gt;)</th>
<th>Capacity in operation per capita (kW&lt;sub&gt;th&lt;/sub&gt; / 1,000)</th>
<th>Energy produced (toe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>2,2</td>
<td>5</td>
<td>137,897</td>
</tr>
<tr>
<td>2005</td>
<td>11,2</td>
<td>24</td>
<td>686,493</td>
</tr>
<tr>
<td>2020 minimal target</td>
<td>91</td>
<td>199</td>
<td>5,600,000</td>
</tr>
<tr>
<td>2020 ambitious target</td>
<td>320</td>
<td>700</td>
<td>19,650,000</td>
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<tr>
<td>Long term potential</td>
<td>1,200</td>
<td>2,600</td>
<td>73,100,000</td>
</tr>
</tbody>
</table>
Solar regulations for new buildings

• The long term begins today:
  Future new buildings to last until end of 21\textsuperscript{st} century

• Building codes should require the use of solar thermal in new buildings and those undergoing major refurbishment

• Growing experience in Europe:
  • Spain (municipal since 1999 & national in 2006)
  • Portugal: approved, but not yet in force
  • Germany, Italy, UK: trend at local level

• Experience in Israel since 1980
Advantages of solar regulations

- a very effective instrument (if well implemented)
- Solar is cheaper if installed at construction stage
- Solar obligation solves the tenant-owner dilemma
- Minimal impact on public budgets
- Encourage solar also in the non-obliged sector
- Avoids stop-&-go market dynamics, thus creating a good investment climate
Guidelines for best practice regulations

• Technical and design requirements should not be overly detailed, to avoid hampering technological development and causing excessive costs

• Any product requirement should be based on European Standards and certification, to avoid creating barriers to trade

• Quality assurance clauses should be introduced and randomly checked, to avoid unmotivated owners installing the cheapest low quality products
Financial Incentives Schemes (FIS)

Examples
• Direct grants for investments into new capacity (e.g. German Market Incentive Programme)
• Tax reductions (e.g. on income tax like in France, or on property tax, VAT)
• Low- or no-interest loans
• Tradeable certificates (e.g. Australian RECs system)

• Can be combined with obligation on new building
• Reduce impact of investment cost
Guidelines for best practice FIS

- Continuity over several years
- Availability of sufficient funds to avoid stop-&-go
- Easy and lean administrative procedures
- Product requirements should be fully compatible with EU standards and certification procedures
- Quality criteria in line with local situation
- The financial benefit offered should be related to the energy provided, but avoiding excessive costs for measurement
Focused policies for new applications

Solar cooling and process heat have a huge potential, but are not mature technologies yet

- Specific awareness raising for potential users
- Widespread demonstration projects
- Dedicated financial incentives
- Basic and applied research
- Funds for developing planning guidelines and tools
- Solar cooling to be considered for energy certificates of buildings
Flanking measures

Again: Most effective support strategies consist of coherent set of measures addressing several barriers to growth.

Financial incentives and solar obligations benefit from flanking measures:
- awareness raising
- training of professionals
- funding for R&D
- public demonstration projects
- development of standards and certification
For more information:

www.estif.org