Case Studies

Case 5:

Large scale sales to private individuals / Leiden

The objective here is to let private individual property owners get the advantage of overall project negotiation for the solar heating plant and installation. The idea is to stimulate and realise large scale sales to private property owners. Call for tender for 100 systems with a given tender having a mix of identical and individual systems in Leiden. The project in Leiden must be considered a success as approximately 10% of the contacted people answered a questionnaire and there were 115 solar systems sold (approximately 5% of the contacted people). The municipality will try to replicate the success on a yearly basis. The successful project has also been replicated with relative success in the Province of Utrecht where 400 systems were sold (17,000 received direct mail).

Advantage:

- Positive neighbour impact
- Good possibility for tender
- Price reduction for end users (30%)

Lessons learned:

- Difficult to ensure the tendering company a guaranteed bulk sale of, for instance, 100 or 200 systems at the same time.
- Needs good co-ordination.

CASE STUDY 5

Solar Procurement Projects:
Solar Water Heater Campaign, Leiden

Title: 'Solar Water Heater Campaign Leiden'
Location: Leiden, the Netherlands
Time period: Starting date: /08/1995 End date: /04/1996
Short description of the project:

The ‘Solar Water Heater Campaign’ is a specific project approach to promote and stimulate the sales of Solar Water Heaters (SWH) at a larger scale to private property owners with existing houses. A particular aspect of this approach is the overall project negotiation in system and installation pricing as performed by the project group, while individuals can use the offer. Other important characteristics of this project approach include:

- Provision of a completely installed SWH, possibly in combination with an auxiliary heater;
- Intensive sales action period (8 weeks) and publicity campaign informing the public on SWH and providing a special offer.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Role</th>
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</thead>
<tbody>
<tr>
<td>Organisation</td>
<td>Form of action taken:</td>
</tr>
<tr>
<td>Municipality Leiden</td>
<td>Initiator/Executor</td>
</tr>
<tr>
<td>Ecofys</td>
<td>Advisor/Consultant</td>
</tr>
<tr>
<td>Energy Company (EWR)</td>
<td>Initiator</td>
</tr>
<tr>
<td>Agpo/ZEN</td>
<td>Supplier of SWH and auxiliary heaters</td>
</tr>
<tr>
<td>Installation Companies</td>
<td>Installer(s)</td>
</tr>
</tbody>
</table>

Time schedule:

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>01/08/1995 to 20/09/1995</td>
<td>Preparation work: selection of systems and installer(s),</td>
</tr>
<tr>
<td>20/09/1995 to 27/10/1995</td>
<td>Preparation of the publicity campaign</td>
</tr>
<tr>
<td>27/10/1995 to 28/02/1996</td>
<td>Action period (publicity campaign, optional registration to the Solar Water Heater Campaign)</td>
</tr>
<tr>
<td>28/02/1996 to 31/03/1996</td>
<td>Installation of the systems and arrangement of the subsidies Evaluation of the overall project</td>
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Technical product information:
Supply of: drain-back systems with a flat plate collector (2.8 m²) and 100-litre storage. Offered forms: different types of collectors and vessels based on consumer preference and demand; possibility to purchase an Solar Water Heater in combination with a new auxiliary heater.

Project goals

General objectives:

- To stimulate and realize large scale sales of SWH's to provide property owners with existing houses;

Specific objectives:

- To promote SWH's to private property owners using selected sources of information and communication. To install multiple SWH's within a small area during a short term period to reach a better and broader attractiveness of Solar Water Heaters.

Targets:

- The realization of 100 Solar Water Heater systems installed within the municipality Leiden.

Design characteristics

Inspection/monitoring tests: Each system has been inspected by EWR according to the standard inspection procedure as developed by Ecofys.

Most prevailing problems: installation errors such as incorrect regulation of the system, causing the pump to operate at the wrong time or not at all, incorrect filling of the collector circuit and insufficient fall of the pipes to and from the collector (drain-back). Manufacturers continuously improve their systems, now trying to make the systems ‘installation-proof’.

Financial characteristics

Price setting: Expected savings for the individual buyers amounting to 30% compared to the prevailing standard price of NLG 5,000 to 6,500 (including VAT) for a completely installed Solar Water Heater. Savings increased with the purchase of a SWH in combination with a new auxiliary heater.
Bidding procedure: A call-for-tenders for 100 systems was issued to suppliers of complete SWHs. After assessment and final negotiations and agreement, Agpo/ZEN was chosen by the project group to deliver the systems. In the next phase, local installation companies were invited to offer prices for standard installation. Finally, the private property owners could send a registration form to the selected installer. After that the installer prepared an offer for each specific case and installed the system on acceptance.

Sales promotion

Brief description of marketing and promotional aspects:

For all sales promotion and information purposes a logo and a slogan were developed to increase recognition of the campaign. The promotion campaign existed of advertisements and articles in the local newspapers; a telephone number for asking information; a direct mailing to persons who own south-oriented houses of about 10-15 years old, and an information stand in a shopping centre where interested people could ask for more detailed information (a demonstration model of a Solar Water Heater was done on the spot). The promotional materials consisted of: general information about Solar Water Heater, information about the procedures in this project, consumer prices (including installation for standard situations) and an application form.

Ownership and responsibilities

Owner solar heating unit: the individual property owner owns the solar unit.
Included in the sales contract: The user and the installer are involved in the sales contract.
Financiers of the units: The systems are financed by the users in one payment or periodically via the energy bill.
Supply and installation guarantee: The guarantee comprises a 6-year warranty period for the system and a 2-year warranty period for the installation works. The supplier and the installer delivered this guarantee.

Results

Brief description of sales results and overall project achievements:
In total 115 SDWH systems were installed. As a resultant of this positive impact, the municipality of Leiden and EWR have agreed to replicate the project on a yearly basis. About 2500 information brochures were distributed by direct mail or on individual request. 263 persons participated in the SWH campaign.
Overview of number of sales promo/info. materials | Total Number
--- | ---
direct mailings | 2100
requests for information | 400
registration forms | 263
systems sold | 115
% Solar Water Heater with new auxiliary heater | 50%

Project experiences and conclusions

The project approach is already replicated and implemented with success in other municipalities. Thanks to the success of these projects, the project approach was extended to larger project regions and provided to energy companies and their service area. (See case "Solar Water Heater Campaign, Province of Utrecht").

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