Case 8:

Swimming pools/Rupchen

To lease solar heating systems to swimming pools that pay a fixed monthly price for 10 years seems like a good idea. In this case Intergas own the systems and rent them to the swimming pool. If the fixed price is below the expected variable cost, it should be possible to follow this model in other projects.

Advantage:

- Swimming pools usually have good saving potential
- Guaranteed heat yield and fixed monthly price makes it easy to oversee
- Long term customers

Lessons learned:

- Sometimes other kinds of energy savings seem more obvious for swimming pools.

CASE STUDY 8

Solar Procurement Projects:
Solar Energy Campaign Swimming Pools

Title: 'Solar Energy Campaign for Swimming Pools'.
Location: Service Area of Energy Utility Intergas, the Netherlands.
Pilot project: Open Air Pool, Rupchen.

Short description of the project:

The Solar Energy Campaign for swimming pools is a project to stimulate the introduction of solar energy systems for swimming pools in the service area of Intergas, a utility in the province Noord-Brabant. The project approach consisted of: 1) investigation of the potentials and constraints of solar energy applications and 2) study of optional offers to stimulate the realization of large scale solar energy systems at swimming pools.
The project was directed at municipalities and private exploiters of swimming pools.

A particular aspect of the project existed in the creation of a common basis for solar energy application and identification of investment possibilities. This determined the options for concrete product and services offers.

<table>
<thead>
<tr>
<th>Participants:</th>
<th>Role:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intergas</td>
<td>Initiator/Executor</td>
</tr>
<tr>
<td>Ecofys</td>
<td>Research and Consultancy</td>
</tr>
<tr>
<td>Municipalities, pool owners and exploiters</td>
<td>Discussion Partners</td>
</tr>
<tr>
<td>Municipality Rucphen</td>
<td>Lease contractor pilot project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time schedule:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01/1997 to 04/1997</td>
<td>Study on potentials and constraints; product and services offer</td>
</tr>
<tr>
<td>01/1997 to 04/1997</td>
<td>Selection and mailing swimming pools (including survey and information brochure)</td>
</tr>
<tr>
<td>04/1997</td>
<td>Training for Intergas employees</td>
</tr>
<tr>
<td>04/1997 to 09/1997</td>
<td>Site visits to 17 swimming pools</td>
</tr>
<tr>
<td>10/1997 to 03/1998</td>
<td>Development Lease Contracts</td>
</tr>
<tr>
<td>01/1998 to 07/1998</td>
<td>Realization pilot project Rupchen</td>
</tr>
</tbody>
</table>

*Technical product information:*
Supply of: Solar energy system consisted of non-covered solar collectors for direct pool water heating of open-air pools.

**Project goals**

**General objectives:**

- To stimulate the large-scale application of solar energy systems for swimming pools in the Intergas service area.

**Specific objectives:**

- To locate pools with optimal conditions for application of solar energy;
- To develop and offer services for the stimulation and realization of solar energy application, including operational lease.

**Design characteristics**

*Inspection/monitoring tests:* to be executed

*Most prevailing problems:* not yet known

**Financial characteristics**

*Price setting:* The solar energy application potential was calculated on the basis of surface area, temperature and pool coverage. During the overall study, Intergas expressed its preference to invest in the solar system and provide heat to the pool exploiter by means of a lease contract.

For the pilot project Intergas calculated the minimum yield to cover the investment in the solar system. The exploiter pays a fixed monthly price (for 10 years) for a guaranteed heat yield.

**Sales promotion**

*Brief description of marketing and promotional aspects:*

The promotional campaign was directed at public and semipublic pools in the service area. After selection of 46 pools a mailing was distributed consisting of an introduction letter, a survey and an information brochure about solar energy for swimming pools. A database with potential clients was built on the results on the survey.
Ownership and responsibilities

Owner solar heating unit: Intergas is the owner of the solar energy system and supplies solar heating to the exploiter of the swimming pool by means of a lease contract.

Included in the lease contract: fixed lease price with a minimum yield guarantee.

Financiers of the units: Intergas

Supply and installation guarantee: Intergas gives a guarantee for system maintenance and for the supply of a minimum heat yield.

Results

The study of the potentials and constraints and the (financial) product and services options, together with the positive results of the mailing resulted in an action plan. During 1998 a pilot project was realized at the open-air pool in Rupchen. This project will be monitored, evaluated and epitomized if necessary. In 1999 a lease-contract offer will be available for the supply of solar energy heat at swimming pools within the whole service area of Intergas.

Project experiences and conclusions

To be determined after pilot project results become available.