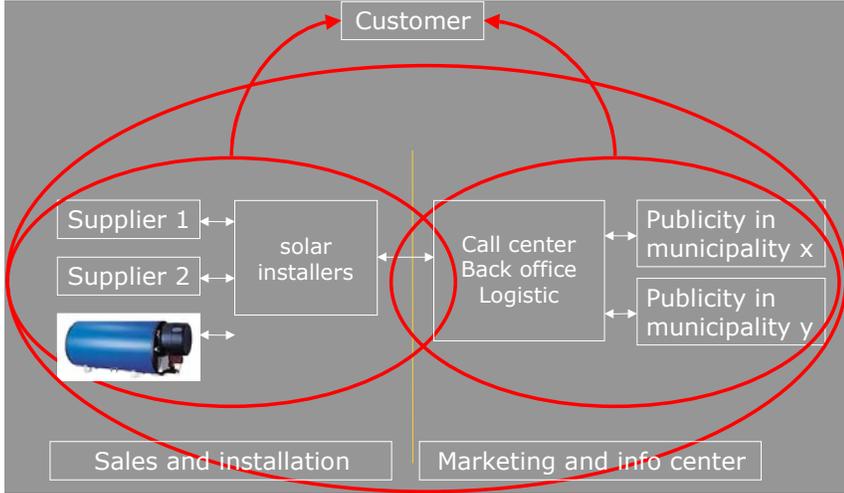


# Projects



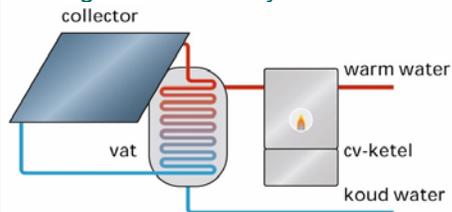
## 1 General information

<b>Project Title</b>	BeldeZon "Call the sun" Solar water Heater Campaigns
<b>Target country / region / city</b>	Municipalities/home owners in the Netherlands, members/ clients of ASN bank, WWF and other organisations
<b>Initiator</b> , and the role that the initiator has in the action / campaign	<ul style="list-style-type: none"> <li>• Municipalities</li> <li>• Regions</li> <li>• ASN Bank</li> <li>• WWF</li> <li>• local energy agencies</li> </ul>
<b>Other important parties</b> and their roles	<ul style="list-style-type: none"> <li>• Sol*ID, an organisation of 30 (solar dedicated) installation companies</li> <li>• Ecostream, a marketing and information centre, including call centre services</li> <li>• Ecofys as consultant for acquisition, customising/local tuning of campaigns, quality control and evaluation.</li> </ul>
<b>Organisation of the campaign / action</b> (Organisation chart)	 <p>A central position has the customer (the home owner) and his questions. A solar what? Why? Where can I get good information? How does it look? How do I get a good offer? A dedicated marketing and information centre (Ecostream) adequately responds to these questions by (local) information campaigns, call centre services, by organising (local) information fairs and organising the sales logistics. The interest created by the information centre should be followed up adequately by good sales and installation services. This is organised in co-operation with Sol*ID or by selection of locally qualified installers. Within SOL*ID system tenders have been conducted in order to establish a qualified product portfolio. This whole one-stop-shop concept is marketed as BeldeZon (Call the Sun).</p>
<b>Goals</b>	<ul style="list-style-type: none"> <li>• The Call the Sun campaigns have been developed as follow-up of the Solar</li> </ul>

	<p>Water Heater Campaigns with the goal to develop the market for domestic solar water heaters. Within the campaigns municipalities, utilities and other organisations are assisted to promote solar water heaters in the private existing housing market. Most of these organisations have environmental goals, but also have a lack of instruments, ideas and experience to achieve these goals.</p> <ul style="list-style-type: none"> <li>• Within the campaigns an effective effort has been made to tackle the main market barriers. Within this approach solar technology is offered in balanced packages combining:</li> <li>• the economy of scale (large scale hardware and installation tendering),</li> <li>• quality control (embedded in tendering procedures, inspections, solar result guarantee),</li> <li>• high quality solar energy systems and back-up heating systems,</li> <li>• selective marketing and publicity focussed on the target group,</li> <li>• financial, logistic, installation and after sales services.</li> </ul>
<p><b>Tendering</b></p>	<p>In the preparation phase suppliers are invited to participate in the tendering procedures. They can expect more sales with less effort on marketing and publicity. Special forms are developed to compare the various offers of the suppliers. The selection of suppliers to participate in the campaign by the project team is based on the following criteria: quality, price and way of implementation of the system. Only systems with proven quality can be selected. The quality assesment is based on national/EU standards as well as on practical project references during some years. This quality assessment prevents the large scale introduction of bad quality systems which would be detrimental for the market development of solar water heaters in this stage.</p> <p>If the client's wishes to involve local installers they are invited to participate after the selection of suppliers has been made. Special forms are developed to check the knowledge and experience of the installers with regard to Solar Water Heaters. Beside this, certain agreements are made with the installers about how to deal with clients and how to make an offer. After submitting the forms the project team makes a selection of participating installers. Quality due to training and experience is an important criterion in this selection procedure.</p> <p>In some projects installers who do not fulfil the selection criteria get the opportunity to meet them. In this way a Solar Water Heater Campaign is a good method to introduce solar water heaters to local installers; during the preparation phase they learn how to sell and install solar water heaters and after the information campaign, if the installers fulfil the quality criteria of training, they receive addresses of families who are interested in buying a solar water heater (in combination with a high efficiency heater). They can visit these families and give an offer for a solar water heater (in combination with a high efficiency heater). During the installation phase the installers are assisted by the supplier, who also inspects part of the systems.</p> <p>In this way the Solar Water Heater Campaigns effectively triggers of long-term market development. This takes place by the follow-up projects and knowledge transfer to organisations and installers participating in the various campaigns.</p>
<p><b>Project Timeline</b></p>	<p>Campaigns are always held in the months March till June and September till November. Because in these periods you have the natural moments of the start of sunny weather and the replacement the condensing heaters. The campaign itself lasts appr. 3 months.</p>
<p><b>Type of solar heating</b></p>	<p>Most solar water heating systems used in the Netherlands consist of app. a 3 m<sup>2</sup></p>

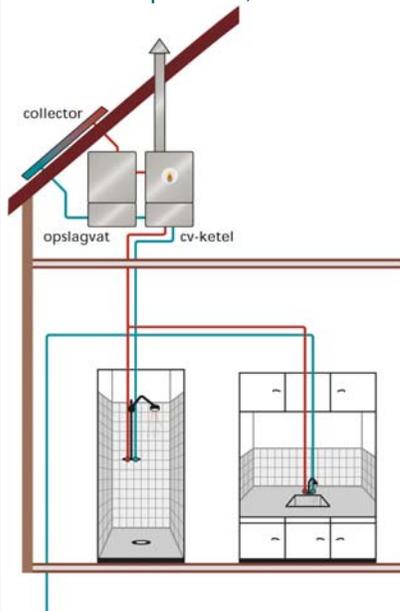
**products promoted**  
*(SWH / space heating,  
 single-family / collective  
 etc.)*

flat plate solar collector with a pre-heating boiler of 100 liter (see picture 1). In the Netherlands most solar water heaters sold are of this type because backup heating is done directly in a combined condensing space and hot water heater.



Picture 1. Scheme of Dutch SWH and condensing boiler

The systems are relative small compared to the systems used in many other EC countries. The size is optimised aiming at achieving the best price/performance ratio for the Netherlands with an average hot water consumption per family of 100 liters. Furthermore Dutch houses are relatively small and especially nowadays in new built houses often a closet of app 1 m<sup>2</sup> floor space is reserved for the heating and ventilation installation. So in this closet a high efficiency condensing heater, a solar boiler and a ventilation unit have to be installed. The Dutch manufacturers put a lot of effort in the design of compact solar water heaters, integrating the various components, that can be hung to a wall (see picture 2).



Picture 2. Scheme of Dutch water heating system

**General description of  
 the campaign / action**

In 1995 Ecofys developed the concept for the Solar Water Heater Campaign for privately owned existing dwellings. In these SWH campaigns, a limited number of homeowners in a certain municipality or region get the opportunity to purchase a completely installed Solar Water Heater at a fixed, low price. The campaign aims at home-owners about to renovate their heating installation, and the offer includes an option to purchase a combination of a SWH and a high-efficiency condensing boiler (for space and water heating).

A key aspect in a Solar Water Heater Campaign is the efficient publicity. First a district with many private homes of 10-20 years old is selected. In these districts most of the conventional heating systems have reached the replacement age which leads to good opportunities for the sale of a new heating system including solar. A general information campaign is started, followed by a mailing to the selected district. One week after the mailing, an information market is organised. From the start of the general campaign until two weeks after the market, people can register for a visit of an expert who checks if their situation is suitable for the

	<p>installation of a Solar Water Heater and presents an offer. If the offer is accepted, the system will be installed.</p> <p>The Solar Water Heater Campaigns have resulted in 1999 in the establishment of the national solar sales and information centre BeldeZon (Call the Sun) and Sol*ID, an organisation in which 30 installation companies and a marketing logistic company participate. Sol*ID is capable of handling campaigns throughout the whole Netherlands. Since 1999 the Solar Water Heater Campaign formula has also been adapted for new customer groups like employees of companies, clients of banks and the NGO's like the WWF.</p> <p>Within BeldeZon Solar Water Heater campaigns have also been broadened with an offer for an Energy Performance Advice (EPA), enabling a 25% extra subsidy bonus for solar water heaters, and also to other measures like PV-panels.</p>																																				
<p><b>Project Strategy</b> (f.i. strategy chart)</p>	<p>Key factors of the campaign are:</p> <ul style="list-style-type: none"> <li>• existing dwellings</li> <li>• replacement of heating system</li> <li>• good price quality ratio</li> <li>• efficient publicity in short period</li> </ul>																																				
<p><b>Results of the project</b></p>	<p>Since 1995 Ecofys initiated, developed and co-ordinated 44 Solar Water Heater Campaigns in which in total app 20.000 solar water heaters will be installed. About 100 municipalities, 6 utilities and hundreds of installers participated in the campaigns so far. Due to these SWH campaigns sales in the existing houses market segment have grown from a few hundred to near 5000 systems per year and are responsible for 80% of all sales in the private housing sector at this moment (see figure 1).</p> <div data-bbox="483 974 993 1323" data-label="Figure"> <table border="1"> <caption>Data for Figure 1: Yearly number of SWH installed</caption> <thead> <tr> <th>Year</th> <th>Individual</th> <th>Project SWH</th> </tr> </thead> <tbody> <tr><td>89</td><td>100</td><td>100</td></tr> <tr><td>90</td><td>150</td><td>150</td></tr> <tr><td>91</td><td>200</td><td>200</td></tr> <tr><td>92</td><td>250</td><td>300</td></tr> <tr><td>93</td><td>300</td><td>400</td></tr> <tr><td>94</td><td>350</td><td>500</td></tr> <tr><td>95</td><td>400</td><td>600</td></tr> <tr><td>96</td><td>450</td><td>700</td></tr> <tr><td>97</td><td>500</td><td>1000</td></tr> <tr><td>98</td><td>550</td><td>2800</td></tr> <tr><td>99</td><td>600</td><td>2900</td></tr> </tbody> </table> </div> <p>Figure 1. Yearly number of SWH installed in the renovation market individually and within SWH campaigns.</p> <p>Beldezon sales:</p> <ul style="list-style-type: none"> <li>• 2001: mainly through 2 campaigns: 200 SWH and 2150 PV modules.</li> <li>• 2002: 5 municipality campaigns finished: Apeldoorn, Tilburg, Gouda, Emmen Houten. Total: 450 SWH, 100 PV panels. Ongoing campaigns: Ridderkerk (40 PV panels so far), Gooi-Vecht region (9 municipalities), Amstelveen region (7 municipalities), Rotterdam, Amsterdam, Den Haag.</li> </ul>	Year	Individual	Project SWH	89	100	100	90	150	150	91	200	200	92	250	300	93	300	400	94	350	500	95	400	600	96	450	700	97	500	1000	98	550	2800	99	600	2900
Year	Individual	Project SWH																																			
89	100	100																																			
90	150	150																																			
91	200	200																																			
92	250	300																																			
93	300	400																																			
94	350	500																																			
95	400	600																																			
96	450	700																																			
97	500	1000																																			
98	550	2800																																			
99	600	2900																																			
<p><b>Target Group(s)</b> (check all that apply)</p>	<ul style="list-style-type: none"> <li>√ Private house-owners (existing dwellings)</li> <li>○ Developers / builders of new dwellings</li> <li>○ Housing associations</li> <li>√ Installers</li> </ul>																																				

<b>Actions on demand side</b> (check all that apply)	<input checked="" type="checkbox"/> General information / publicity to consumers <input type="checkbox"/> Subsidy / incentive <input checked="" type="checkbox"/> Promotion of specific products <input checked="" type="checkbox"/> Sales of products (as part of the campaign) <input type="checkbox"/> Leasing of products (as part of the campaign) <input type="checkbox"/> Solar contracting (as part of the campaign) <input checked="" type="checkbox"/> Installation of products (as part of the campaign) <input checked="" type="checkbox"/> Reduction of price <input checked="" type="checkbox"/> Present on information fairs <input type="checkbox"/> ..... <input type="checkbox"/> .....
<b>Media, publicity and promotion actions used in the campaign</b> (demand side)	<input checked="" type="checkbox"/> Press releases <input checked="" type="checkbox"/> Brochures <input checked="" type="checkbox"/> Internet marketing / Web site <input checked="" type="checkbox"/> Event marketing / Promotion events (fairs, markets, conferences, ...) <input checked="" type="checkbox"/> Advertisements, articles
<b>Actions on supply side</b> (check all that apply)	<input checked="" type="checkbox"/> Information to installers <input checked="" type="checkbox"/> Education of installers <input checked="" type="checkbox"/> Procurement / tendering of products <input checked="" type="checkbox"/> Procurement / tendering of installation services <input checked="" type="checkbox"/> Quality control on products <input checked="" type="checkbox"/> Quality control on installers <input checked="" type="checkbox"/> Checks on commissioning / delivery
<b>Information sources about the campaign</b>	<input checked="" type="checkbox"/> <a href="http://www.beldezon.nl">www.beldezon.nl</a> <input type="checkbox"/> .....
<b>Contact person and contact data, for more info:</b>	Ecofys, Giel Linthorst Tel: +31-30-2808322 Fax: +31-30-2808301 E-mail: <a href="mailto:g.linthorst@ecofys.nl">g.linthorst@ecofys.nl</a>

## 2 Analysis of strong / weak points, success / failure factors

### 2.1 INTERNAL success factors/strong points

Please give an analysis of the **internal** success factors (strong points concerning the project set-up, communication, execution, etc.) of the campaign/action. Why did it work?

Key success factors of the campaign are:

- existing dwellings
- replacement of heating system
- fixed, nice price
- efficient publicity in short period

### 2.2 INTERNAL failure factors / weak points

Please give an analysis of the **internal** failure factors (weak points / bottlenecks concerning the project set-up, communication, execution, decision makers who should have been involved,...) of the campaign / action. What caused major problems / weak points?

Internal failure factors are:

- The publicity in mostly all campaign is done by the municipality itself.

### **2.3 EXTERNAL success factors / strong points**

Please give an analysis of the **external** conditions (critical factors in the environment in which the project was executed). Why did it work?

External success factors are:

- The high subsidy for SWH.

### **2.4 EXTERNAL failure factors / weak points**

Please give an analysis of the **external** conditions (critical factors / bottlenecks in the environment in which the project was executed). What caused major problems? What action could be taken to influence these factors? What would you change in a similar campaign / action?

External failure factors are:

- The installers
- National campaign subsidies have been abolished since 2000, they have to be sold commercially, which retards the market growth.

### **2.5 Which recommendations would you give other parties who want to imitate these projects? (lessons learned)**

### **2.6 What other parties could act as initiator for a project like this?**