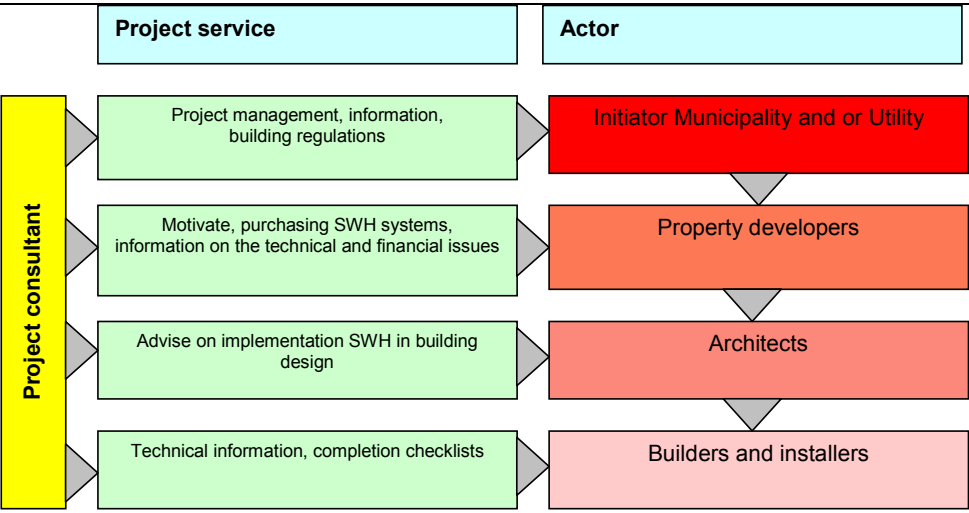


Projects



1 General information

Project Title	Essent/Rendo Solar Water Heater New Housing project
Target country / region / city	The service regions of the utilities Essent and Rendo: the provinces of Groningen and Drenthe and the region IJssel-Vecht
Initiator , and the role that the initiator has in the action / campaign	The utilities Essent and Rendo Role: project leader, facilitator, information provider
Other important parties and their roles	<ul style="list-style-type: none"> • Municipalities, contacts with and network of property developers. • Consultant (Ecofys) for expert knowledge on procurement, integration in building designs, evaluation of suppliers and installers offers.
Organisation of the campaign / action (Organisation chart)	
Goals	Increasing the market, high quality systems, lower price, and knowledge transfer. Realising 1200 solar water heaters by stimulating property developers in the new housing sector in the service areas of the utilities.
Tendering	A tender procedure for 1200 systems and condensing boilers has been executed based on tender forms for manufacturer and product qualification. The selection of suppliers and products for the project by the project team is based on the following criteria: quality, price, product specs, delivery conditions (a.o. guarantee), delivery capacity. Only systems with proven quality can be selected. The quality assessment 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.
Project Timeline	The project was initiated in 1999 and ended in 2002. An inventory among

	<p>municipalities in the service areas showed a large potential: 112 new housing projects with in total 5292 dwellings.</p> <p>In general the start is preferable at the start in the planning phase of new building developments. Duration of the project until completion of dwellings, however the most important phase is the designing phase when the decision is made for the application of the SWH and the SWH is integrated in the design. In this project part of the systems will be realised after the project end date.</p>
<p>Type of solar heating products promoted (SWH / space heating, single-family / collective etc.)</p>	<p>After a comprehensive tender procedure products of 6 manufacturers were selected. The reason for the extended product range were: 1) a large product range enabling more freedom of choice for architects and developers 2) a large delivery capacity. The product range comprised: standard drain-down SWH (pre-heaters as well as SWH's with integrated hot water back-up heating), thermo-sifon systems, an integrated collector storage system (ICS), combined solar systems for hot water and space heating and high-rise building systems.</p>
<p>General description of the campaign / action</p>	<p>The 'Project Approach'</p> <p>Examining the possibilities to reduce cost and improve quality of installation, Ecofys has developed a 'project approach', which was originally defined as:</p> <p><i>"Installing large numbers (300 - 1,000*) of Solar Water Heaters as a standard facility in a new housing development"</i></p> <p>The 'project approach' is a demand-side action. The primary cost reduction is achieved by economy of scale in system procurement (one tender for a large number of systems) and installation (a few qualified installers, efficient lay-out of connections, streamlining of the process). The scale and regularity of orders (typically over a period of a year or longer) can also result in lower manufacturing costs. A large project also offers the opportunity for systematic quality control in the whole chain. Quality criteria in the tender procedure, design help for architects, design checks, training for installers, commissioning checks. Training is worthwhile for the installer, and the repeated installation causes a learning effect. This learning effect turns out to be an important side effect of the 'project approach'. It appears that, once acquainted with Solar Water Heaters, project developers, housing associations, architects and contractors incorporate Solar Water Heaters in future building activities more easily.</p>
<p>Project Strategy (f.i. strategy chart)</p>	<ul style="list-style-type: none"> • Be early in the process (planning phase) • Economy of scale due to large scale tendering • Quality control throughout the whole chain
<p>Results of the project</p>	<p>In total 33 new housing projects (50 sub-projects) with a volume of 2223 dwellings and 1240 planned solar water heaters were registered. Current status (Oct 2002): 710 systems realised, 530 systems planned to be realised in 2003-2004.</p>
<p>Target Group(s) (check all that apply)</p>	<p>O Private house-owners (existing dwellings)</p> <p>X developers / builders of new dwellings</p> <p>X Housing associations</p> <p>X Installers</p> <p>X Architects</p>

Actions on demand side (<i>check all that apply</i>)	<input type="radio"/> General information / publicity to consumers <input checked="" type="radio"/> Subsidy / incentive <input checked="" type="radio"/> Promotion of specific products <input checked="" type="radio"/> Sales of products (as part of the project) <input type="radio"/> Leasing of products (as part of the project) <input type="radio"/> Solar contracting (as part of the project) <input checked="" type="radio"/> Installation of products (as part of the project) <input type="radio"/>
Media, publicity and promotion actions used in the campaign (demand side)	<input checked="" type="radio"/> Press releases <input type="radio"/> Brochures <input type="radio"/> Internet marketing / Web site <input checked="" type="radio"/> Event marketing / Promotion events (fairs, markets, conferences, ...) In 5 ways knowledge has been transferred in the project: 1) Three regional kick-off meetings for the municipalities in the service areas 2) Three regional information meetings were held for all parties involved (property developers, municipalities, architects). 3) An information binder was compiled for the parties involved containing: the product offers (result of the tender), procedures for streamlining subsidy handling, design tips for architects, information on suitable back-up heaters and an irradiation disk (for optimal roof integration). 4) Within the project developers could submit projects (minimum project size 10 dwellings) for a free SWH consult. Based on dwelling designs an advice was given on collector integration, boiler placement, piping and back-up heating. 5) During the project various news letters haven been sent with updates on project status, subsidies etc.
Actions on supply side (<i>check all that apply</i>)	<input checked="" type="radio"/> Information to installers <input checked="" type="radio"/> Education of installers (basis for tender qualification) <input checked="" type="radio"/> Procurement / tendering of products <input type="radio"/> Procurement / tendering of installation services <input checked="" type="radio"/> Quality control on products <input checked="" type="radio"/> Quality control on installers <input type="radio"/> Checks on commissioning / delivery
Information sources about the campaign	<input checked="" type="radio"/> Realising 10,000 Solar Water Heaters by the 'Project Approach': lower cost, higher quality paper presented at Solar Energy & Utilities, Vejle, Denmark, May 1997 <input checked="" type="radio"/> Guideline for architects <input checked="" type="radio"/> Project evaluation report <input checked="" type="radio"/> www.zonnebouw.nl (document download site for parties involved)
Contact person and contact data, for more info:	Ronald Voskens, Frank Zegers Ecofys

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 campaign set-up, communication, execution, ...) of the campaign / action. Why did it work?

- Efficient project approach
- Small decisive project team
- Free high quality consultancy for developers

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 project. What caused major problems / weak points?

- The motivation of property developers is a time-consuming process (when SWH's are not mandatory) that should not be underestimated and well be incorporated in the project set-up.

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?

- Free consultancy for the developers
- High quality systems
- Good price / quality ratio
- Extra subsidies with central subsidy streamlining
- Systematic quality control

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?

- The choice for a SWH is not mandatory, so the property developer has to be convinced by other arguments. This is a rather time-consuming process.
- New housing projects are characterised by a long time-frame.

2.5 Which recommendations would you give other parties who want to imitate the project? (lessons learned)

- Start the project in early phases, preferable is the planning phase. In general the sooner the SWH is introduced, the sooner and easier it will be adopted.
- In large-scale projects only use systems that proven to be reliable in projects for several years.
- Try to make the use of a SWH mandatory

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

- National, regional authorities.