



**The International Energy Agency  
Solar Heating and Cooling Programme**

**TASK 24  
Solar Procurement**

**TASK STATUS REPORT**

**October 2002**

**Formas, The Swedish Research Council for Environment,  
Agricultural Sciences and Spatial Planning**

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## **TASK 24 SOLAR PROCUREMENT - TASK STATUS REPORT**

### **1. TASK DESCRIPTION**

#### **Objectives**

The main objective of Task 24 *is to create a larger and sustainable market for active solar water heating systems (mainly domestic systems).*

This will be achieved through major cost and price reductions for all cost elements, including marketing and installation, as well as performance improvements and joint national and international purchasing.

#### **Duration**

Task 24 was started 1 April 1998 and will be completed 31 March 2003. It is suggested that the Task be extended with 6 months, to 30 September 2003. However, there is no decision yet, pending approval from Sweden of funding for the Operating Agent.

#### **Participation**

Countries now participating in Task 24 are: Canada, Belgium (joined recently, formal Letter of Participation still to be submitted), Denmark, The Netherlands, Sweden and Switzerland. Since Task 24 is approaching its end, no more time or efforts will be spent on trying to include more countries in the work.

#### **Subtasks**

Task 24 is divided into two Subtasks, each co-ordinated by a lead country:

*Subtask A: Procurement and Marketing (Lead Country: The Netherlands).*

The objectives of Subtask A are:

- To raise general interest in active solar thermal solutions, and
- To form buyer groups to purchase state-of-the-art and innovative systems.

The procurement activities consist of two rounds. The First Round with small national projects and a low degree of joint international collaboration has now ended. The Second Round with larger projects and a higher degree of collaboration has started.

*Subtask B: Creation of Tools (Lead Country: Denmark)*

The objectives of Subtask B are:

- To collect, analyse and summarise experience
- To create tools to facilitate the creation of buyer groups and the realisation of projects and procurements. The tools will be included in a manual, "Book of Tools".
- To define a process for prototype testing and evaluation, using existing methods.

## 2. TIMETABLE AND MILESTONES

See Milestones table, [Appendix 1:1-3](#).

## 3. NEW DEVELOPMENTS, ONGOING AND PLANNED WORK

### 3.1 Procurement, competition and marketing activities

The Netherlands is Task Leader of Subtask A, in which procurement and marketing activities are included.

The First Round of Task 24 is now ending. Intensive work has been spent in all the participating countries during the last six months. Overviews of different national projects are included in [Appendix 2:1-6](#) and summaries are given below.

#### *Belgium*

Lots of activities have been ongoing in Belgium. Tendering for the “*Brussels Solar Water Heater Promotion Campaign*” - grouped for 2 medium size installations (100 m<sup>2</sup> each) – started in May and was closed in September. Tenders submitted are now being evaluated and supplier selection is ongoing.

The “*Soltherm Wallonie*” 10-year-programme, started in 2001, is made up of different sub-programmes, both for residential customers and for tertiary sector subgroups (hospitals, hotels, sports centres, etc). The sub-programmes include quality of supplier services, products and installation, professional training for installers and architects, general information and promotion. In the “*Soltherm – Belsolar Quality System*” project, 192 voluntary contracts for installation service quality were signed in 2001 and 12 suppliers have participated in 2001-2002. 8 solar audits have been realised and 12 are well on their way. In the summer of 2002, there was an integration of the initiatives into 1 unified system for the Belgian market, the “*Belsolar Quality System*”. Buyer groups are being prepared and the call for tender is planned for 2003. Much work is spent on having i.a. Quality Charter, collaboration with installers and technical criteria according to EN-Standards. Further information is available at [www.soltherm.be](http://www.soltherm.be).

Preparations are ongoing for another project, “*VLAZON*”, with the Belgian Solar Industry Association and the Flemish Regional Government. A strategic plan for market development for the Flemish region will be drawn up and the position of buyer groups will be defined. Buyer groups will only be part of the implementation phase after finalisation of the strategic plan. A list of suppliers is available at [Belsolar@3E.be](mailto:Belsolar@3E.be).

#### *Canada*

In the two phases of the “*Peterborough Green-Up and EnerACT (Energy Action Council of Toronto)*” projects 43 systems have been installed so far and 3 more have been purchased. The projects have not been a total success and the installation schedules have not been met. Deregulation may have prevented utility participation in the marketing. Systems retailing for almost \$5,000 sold well with subsidies approaching 50% (Phase I) proved difficult to sell with subsidy of approx. 25% (Phase II). The utility partners have now changed their

operations to reduce service focus and more focus on “marketing”. Independent inspection and monitoring with integrating heat meters has begun on 20 of the systems. Detailed monitoring of beta systems will be implemented by January 2003.

A business plan has been developed for the project “*TEAM Advanced Low Flow Solar Water Heater*”, with Toronto Hydro and Kingston Hearthmakers as buyer groups, and Enerworks managing contract manufacturers. The plan is to install 10,000 systems in 3 years. Initial testing has been completed at the National Test Facility. 16 Beta test units have been installed to date and 40 systems have been contracted for installation by April 2003. Commercial production is planned, including a manufacturing tender by August 2003

A *market research* has been carried out in Canada and a report has been published. The intention is to publish it in an electronic version at the Task 24 website. A number of important issues have been identified for the raising of interest on the market in solar systems. One important issue is raising the awareness and removing uncertainties among households.

### ***Denmark***

When a new Danish Government came into office in the autumn of 2001 there was a substantial reduction of the national renewable energy activities, including solar activities. At first decisions were taken not to allocate funds for the Danish work in Task 24 for 2002. This was however changed as a result among other things of the letter written by the Chairman of the Executive Committee and the Task 24 Operating Agent, and three of the Task experts from Denmark will now be able to continue in Task 24 until the middle of 2003.

The Danish *procurement buyer group project on the Internet*, [www.soltilbud.dk](http://www.soltilbud.dk), run from August 2001 and had to be discontinued 31 December 2001 due to no new funding for the project. Although there were few buyers (people were not ready yet to buy from the Internet) but about 6,000 “hits”, the website project can be regarded to have been a success as a price-list, and it improved competition.

The “*Sunshine over Thy and Morsø*” project, started in 1999 with two electric utility companies in Northwest Jutland will probably continue. A fusion between the utilities is coming up soon, and they will probably continue to offer solar heating systems to their 45,000 customers. No direct mail campaign is planned, but there will be advertisements on their homepage.

The first steps in a new project has recently been taken. The project involves *joint purchasing of solar collectors for district heating plants*. A first meeting was held at the beginning of October with other consultants in order to formalise the project. A report and invitation letter has been sent out to 28 district heating plants to investigate the interest potential. The objective of the project is to co-ordinate the effort to install more solar heating to the local district heating plants. The idea is that the team of consultants will carry out some actions for the plants, including investigation, preparation of detailed project and tender material, tendering, evaluation and assisting in installation, supervision and delivery. Concentration is made at first on smaller plants, since the larger ones can manage the actions by themselves.

## ***The Netherlands***

The “*Space for Solar*” project for medium size systems with housing associations is a framework turn-key delivery contract. Scans have been conducted for 3,400 m<sup>2</sup>. Conversion to individual contracts are ongoing, but it is a laborious process. Currently 9 systems with a total area of 614 m<sup>2</sup> have been realised.

In the “*Solar Energy in the Essent Supply Region*” project for domestic systems for new houses, 3 suppliers have been selected. They are companies that also sell heating equipment. 33 new housing projects with a total of 2,223 dwellings were registered. In 1,240 of them solar systems will be installed. 710 systems have been installed so far and 530 systems are planned to be realised 2003-2004.

The planned Altener proposal for international tender in the Second Round of Task 24 for the “*Solhas*” survey project for domestic systems for existing dwellings was not submitted. A follow-up is planned in the “*Soltherm*” project instead. The “*Soltherm Europe Initiative*” is a Europe-wide initiative with 11 countries involved. The supplier organisations ASTIG and DFS are partners in the project. The performance specifications are based on EC quality standards. An EU Altener contract was signed in January 2002. National implementation planning is currently ongoing. The goal is to have 100 million m<sup>2</sup> installed by 2010. Further information is available at [www.soltherm.org](http://www.soltherm.org).

In the “*Call the Sun*” project with the ASN Bank, WWF and SOL\*id, the systems are mainly sold through 2 campaigns (“*Beldezon*”): In 2001, 200 SWHs and 2,150 panels were installed and so far this year 5 municipality campaigns have been finished with 450 SWHs and 100 PVs. Campaigns are ongoing in several Dutch regions and cities, including Rotterdam, Amsterdam and The Hague.

The “*WWF Solar Dwellings*” project is a market introduction project. The buyer group consists of 19 property developers. Up to October 2002, 600 houses have been contracted. The feasibility study was based on the WWF solar dwelling quality certificate requirements. Performance specifications were set up for solar thermal, PV and heat pumps, and the call for tender was launched in March 2002. The tenders submitted were evaluated in May-June 2002. A second negotiation round is starting in October and products are planned to be on the market in November 2002.

## ***Sweden***

Two projects were launched in Sweden in 2000 – a procurement for medium sized systems (10,000 m<sup>2</sup>) and a competition for small systems (5,000 – 10,000 m<sup>2</sup>) – and were announced both nationally and internationally in the EU “Official Journal”. Information about the projects is available at <http://solupphandling.bfr.se>. All the documents in the Requests For Proposals (RFP) were available in English and easy to download from this web-site.

The procurement for *solar collectors for use in large systems* could not be fulfilled since sufficient volumes for signing contracts with successful suppliers were not achieved. Favourable lower costs had been guaranteed only on condition that there would be a specified amount of guaranteed deliveries.

In the competition for *small systems*, 14 entries were received (3 international ones). Uponor AB, a Swedish company within the Finnish industry group Uponor, was selected winner. The introduction of the small systems were somewhat delayed due to material problems in the first 5 test installations. After further development of the equipment material, retesting was made, including field testing in Australia and laboratory testing in Sweden of components and systems. The testing was finalised with good results, and at the beginning of April this year decisions were taken by the jury to approve the system for start of deliveries. During the period May – September 2002, 150 systems have now been delivered. The remaining 850 systems will be delivered up to April 2003. No complaints have been heard after field testing during the extreme hot Scandinavian summer this year. There have only been positive comments about easy mounting of the system and the good instruction manual.

A *final report about the small systems project* is now being completed. It is written in Swedish, but will be translated into English and made available to all Task 24 participants. Important “lessons learned” include the importance of international announcement of a project, easy availability of specifications and competition documents (drawn up in an international language) such as on the Internet, etc.

### ***Switzerland***

The “*100 Solar Roofs in Lucerne*” project was started in May 2002 with the City of Lucerne as project responsible and coached by the Swiss Task 24 representatives. Business partners are the Energy and Water Works. Replacement of heating (fuel switch oil – gas and standard hot water installations) will be made during the autumn of 2002 and the project will end in the summer of 2003.

The “*Action Flumrock/Rüesch Solar*” project has been prepared, but has been delayed due to changes in the company. The “*SSES Virtual Buyer Group (on the Internet)*” project has been prepared, but partners to run the project have not yet been identified.

A new project “*Solar Showers*” started in Basel in August and will end in October 2002. It is an information project from the Basel District Government with free consultancy for 200 participants. Interested solar buyers will get a voucher for a consultation with one of the trained installers with special knowledge. Installers have been informed and instructed to become executive partners as “*Solarprofis*”. It has been a remarkable success with installers as partners and consultants. More than 60 professionals have received information and training.

In the “*Solar Roofs for Zürich*” project with Swissolar and the Canton authorities as partners very long discussions have been going on since April 2002. The intention is to have a fuel switch combined with solar (gas utilities). A presentation of Task 24 will be made at the end of November with information about tools, manuals etc.

The *Solar Manual*, which has already been tested, was distributed in October. A 2-page leaflet “*Solar – ja klar!*” has also been produced. It describes with pictures how a solar system can be installed in just one day – beginning at 7 a.m. and ending at 6.30 p.m.

### **3.2 Creation of Tools**

Denmark is Task Leader of Subtask B, which includes the creation of tools to facilitate the realisations of projects.

#### ***Task 24 homepage with the “Book of Tools/Business Tools”***

The Task 24 homepage, [www.ieatask24.org](http://www.ieatask24.org), was opened at the beginning of 2001. It includes the Task 24 Manual “Book of Tools/Business Tools”. These Tools have been created to assist buyer groups in the tendering process, marketing, financing, installation and quality control.

At the Experts Meeting in Copenhagen in March 2002, in the situation with lower Danish financial resources, Canada offered to contribute more to the work on the Task 24 web-site . The work could include uploading more material and maintaining and upgrading the web-site.

During the last six months the homepage has been updated by the Danish Subtask B Leader with Minutes from Experts Meetings, Task Status Reports, some conference presentations, etc. At the Experts Meeting in Namur in October, the website was thoroughly discussed and actions agreed upon. Tender documents and case from the participating countries will be uploaded, information about the Soltherm/Keymark database will be added, the marketing study from Canada will be uploaded, a newsletter will be published, etc.

However, the current financing situation of the website hosting must first be clarified including the offer from Canada, so that the important updating can be made. After the completion of Task 24, the website will be transferred to the IEA SHC server in New Zealand.

### **3.3 Contacts with suppliers**

The Subtask A Leader from The Netherlands, who has formally been nominated as contact person with ASTIG, has had follow-up contacts with this organisation. According to him, the ASTIG members are not particularly fond of Task 24. However, they approve of the actions taken by Task 24, since these actions increase the demand of solar systems and raise the awareness of quality systems. It is expected to be more of an integration between ASTIG and the other supplier organisation, ESIF, when they merge in December 2002 into the European Solar Thermal Industry Federation.

### **3.4 Information activities**

The Task 24 members earlier proposed an ‘*IEA SHC Award of Excellence*’. It would be a prestigious recognition for good performance in competitions and procurements and could be used for the Second Round of Procurements, as well as for other projects within the Solar Heating & Cooling Agreement. An Award Committee was formed with some Executive Committee representatives as members. It is now beginning its process of selecting an artist to design the SHC Award.

Information about Task 24 has continued and presentations have been given at different conferences and workshops. The Operating Agent gave a presentation at the Special IEA SHC Workshop on 4 June 2002 in Lisbon, Portugal, in connection with the Executive

Committee Meeting. The intention is to prepare papers and presentations of Task 24 for the upcoming ISES Conference in Gothenburg, Sweden, in June 2003.

### **3.5 Task meetings**

Since last Executive Committee Meeting, one Task 24 *Experts Meeting* has been held 15 - 16 October 2002 in Namur, Belgium.

The following *Experts Meeting* will take place 20 – 21 March 2003 in Canada.

## **4. WORK PLANNED FOR THE NEXT SIX MONTHS**

The intensive efforts to prepare for the Second Round of Procurements will continue during the next six months. It will include a larger degree of international co-ordination of specifications and principles for evaluation. The Experts have identified concrete areas for further joint work. It includes international procurement for national groups as well as for international groups. With The Netherlands as co-ordinator, some countries will continue the collaborative work based on housing associations on a European scale. In the project, eleven European countries take part. Other countries, like Switzerland, will work on the creation of buyer groups, using Internet mechanisms. Some Task participants also take inspiration for their future tenders from the Swedish initiative with advertisements in the EU “Official Journal”, tender documents in an international language and easily downloadable from a public web-site. The Task 24 participating countries are in favour of using an “IEA SHC Award of Excellence” for international competitions in collaboration with the Executive Committee. The work with model processes and contract documents will continue for further international exchange and suggestions also from suppliers. The web-based “Business Tools” will be further updated for an international context with experiences from projects fulfilled. Findings from the Special Evaluation of the First Round and the Standard Midterm Evaluation have influenced the more detailed Work Plan.

## **5. ISSUES FOR THE EXECUTIVE COMMITTEE**

### **Issue 1: Prolongation of Task 24 - Confirmation regarding participation**

Countries participating in Task 24 should confirm their participation in a prolongation of Task 24.

### **Issue 2: Prolongation of Task 24 – Confirmation regarding Operating Agent**

In accordance with decisions at the June 2002 Executive Committee Meeting, Sweden’s Executive Committee Member has to confirm Swedish Operating Agent funding for a prolongation before it can be approved.

### **Appendices:**

1. Milestones tables, 1-3.
2. Overviews of national projects, 1-6.



**Appendix 1:2 – Milestones Table - Task 24 “Solar Procurement” Task Status Report – October 2002**

Subtask B: Creation of Tools		1999												2000												2001												2002												2003											
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
▽ ▲	<b>B1:</b> Book of Tools content 1st draft Chapt. 1-3 / outline Chapt. 4				1																																																								
	<b>B2:</b> Book of Tools - 1st edition in draft												2																																																
	<b>B3:</b> Book of Tools - Updated 2nd edition in draft																																																												
	<b>B4:</b> Evaluation of 1st Round																																																												
	<b>B5:</b> Book of Tools - 3rd edition in draft																																																												
	<b>B6:</b> Evaluation of 2nd Round																																																												

**Appendix 1:3 - Milestones Table – Comments - Task 24 “Solar Procurement” Task Status Report – October 2002**

Activity	Resp. Country	Milestones achieved Last 6 months	Milestones not achieved				Milestones next 6 months
			Milestone	Comment	Recommendation	Impact	
<i>Subtask A:</i> Procurement & Marketing	NL	A4 Deliveries in the 1 <sup>st</sup> Round started in all countries.	A5 Distribution of invitations for tender 2 <sup>nd</sup> Round.	May 2002 – June 2003. Start delayed, will give new countries possibility to join.	Intensified preparatory work for more international procurement.	May require more activities also during 2003.	A6 Delivery start 2 <sup>nd</sup> Round
<i>Subtask B:</i> Creation of Tools	DK		B5 “Book of Tools” (“Web Tools”)	Updated edition delayed – lack of funding	Canada has offered additional funding	Delay in updating of Task 24 homepage and “Web Tools”	B5 “Book of Tools” (Web Tools) updated edition depending on funding for Subtask B Lead Country.

## Task 24 Solar Procurement – Overview of National Projects – October 2002

Country: <b>BELGIUM</b> Contact person: <b>Luc De Gheselle</b> <i>Updated October 2002</i>	Name of project: <b>Brussels Solar Water heater Promotion Campaign</b>	Name of project: <b>SOLTHERM</b>	Name of project: <b>VLAZON</b>
1. Preliminary status	Tenders published	Ongoing	Ongoing
2. Feasibility study	Tenders grouped for 2 medium size installations (100 m <sup>2</sup> each) Tenders closed. Supplier selection ongoing.	Ongoing both for residential customers as for tertiary sector. 8 solar audits realised. 12 in preparation, well on the way; 3 demo projects (out of 10 scheduled in total) already have tender document published or supplier selection ongoing.	Strategic plan for market development for Flemish Region. Position of buyer groups to be defined.
3. Performance specifications	One of the above 2 projects has a tender document with Guaranteed Solar Results contracting.	First independent dimensioning realised for each project, prior to selection of technical consultant.	Not finalised yet; will be based on quality system derived from EN standards.
4. Buyer groups: Name:  Type of buyers:	None realised	Under preparation  Residential customers	Will only be part of the implementation phase after finalisation of the strategic plan.
5. Official information	Brussels Institute for Environmental Management and City Government of Brussels	Walloon Regional Government – Minister of Energy and Transport	Belgian Solar Industry Association and Flemish regional Government – Ministry of Economic Affairs
6. Supplier contacts	None	12 participating suppliers in 2001 <a href="http://www.soltherm.be">www.soltherm.be</a>	<a href="mailto:Belsolar@3E.be">Belsolar@3E.be</a> for list of suppliers.
7. Call for tender	Publication planned for May 2002	Planned for 2003	None defined yet.
8. Deadline for submitting tenders	September 2002	Not fixed yet	None defined yet.
9. Evaluation of tenders	Ongoing	Autumn 2003	None defined yet.
10. Products on market	45 brands represented on Belgian market in total. Under 10 brands together have 75% of Belgian market.	Idem	Idem.
11. Comments and remarks; problems, if any			

12. Other information	Demo project with 3 collective systems each for 55 social houses on 1 location are being retrofit; now in construction phase.	Soltherm Strategy plan for 2003 under definition.	
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## Task 24 Solar Procurement – Overview of National Projects – October 2002

Country: CANADA Contact Persons: Mike Noble / Doug McClenahan <i>Updated October 2002</i>	Name of Project: Peterborough Green-Up and EnerACT (Energy Action Council of Toronto)	Name of Project: TEAM Advanced Low Flow Solar Water Heater
1. Preliminary status	<b>Phase I:</b> Peterborough Green-up installed 8 systems. EnerACT installed 9 systems. <b>Phase II:</b> Peterborough Green-up installed 10 systems (plus 3 more purchased) EnerACT installed 17 systems. Additional 16 systems installed through Toronto Hydro Energy Services and Kingston Hearthmakers	Plan to install 10,000 systems in 3 years. Initial testing completed at National Test Facility. 16 Beta test units installed to date. 40 systems contracted installation by April 2003. Commercial production to go to manufacturing tender by August 2003.
2. Feasibility study	No	Business plan developed
3. Performance specifications	<b>Phase I:</b> Systems must supply >35% of annual energy load. Scores based on cost, energy performance, and quality <b>Phase II:</b> Systems must supply >40% of annual energy load. Scores based on cost/energy, warranty, and quality. Heat transfer fluid degradation concern addressed by pass/fail.	N/A
4. Buyer groups:  Type of Buyer:	- Peterborough Green-Up and EnerAct - Utilities – Toronto Hydro Energy Services - Builders – R2000 Builders – organized through EnerQuality Corporation	- additional 16 installations with Toronto Hydro and Kingston Hearthmakers. Further 40 installations are contracted with same groups, as well as new home builders
5. Official information	- Phase I Subsidy: 50% (this is an exception) - Phase II Subsidy: 25% - First 5 beta systems were delivered at no cost, balance sold at OEM pricing. - Next 40 systems sold at \$1600 CAD with no subsidy.	
6. Supplier Contacts	N/A	Enerworks – managing contract manufacturers
7. Call for tender	Phase II: September 21, 2000 Commercial manufacturing: August 2003	
8. Deadline for submitting tenders	Phase II: October 6, 2000	
9. Evaluation of tenders	Phase II: October 9-29, 2000	
10. Products on Market	Phase I: Thermodynamics, Solcan & Daystar Energy Systems Phase II: Thermodynamics & Solcan	See status above

<p>11. Comments and remarks: problems, if any.</p>	<p>Installation schedules were not met. Deregulation may have prevented utility participation in marketing. Systems retailing for almost \$5000 sold well with subsidies approaching 50% (Phase I) proved difficult to sell with subsidy of approximately 25% (Phase II). Utility partners have changed their operations to reduce service focus, more focus on “marketing”</p>	
<p>12. Other Information</p>	<p>Independent inspection and monitoring with integrating heat meters, on 20 of the systems has begun. Detailed monitoring of beta systems will be implemented by January 2003.</p>	

## Task 24 Solar Procurement – Overview of National Projects – October 2002

<b>Country: DENMARK</b> <b>Contact persons:</b> <b>Torben Esbensen,</b> <b>Klaus Ellehauge,</b> <b>Lotte Gramkow</b> <i>Updated October 2002</i>	<b>Name of project:</b> <b>Joint purchasing of</b> <b>Solar collectors for</b> <b>district heating</b> <b>plants</b>	<b>Name of project:</b> <a href="http://www.soltilbud.dk">WWW.soltilbud.dk</a>	<b>Name of project:</b> <b>“Sol over Thy og</b> <b>Morsø” (Sunshine over</b> <b>Thy and Mors – regions</b> <b>in Northwest Jutland)</b>
1. Preliminary status	We have had the first meeting on October 2, 2002 with other consultants to try and formalise the project.	Has run from August 2001. Project period stopped 31. December 2001. No new funding	The tendering material for solar systems was sent out to Danish solar heating manufactures in March 2000. Campaign started in May and ended in November 2000.
2. Feasibility study	A total of 28 district heating plants have received a report on the suitability of connecting solar collectors to their district heating system. A number of these are positive and a joint purchasing will be tried.	No	No
3. Performance specifications	The systems will all have undergone the testing in terms of theoretical and practical matters.	Tender called for systems in 3 categories. Tested in accordance with the Danish Government requirements at the Solar Test Lab.	The systems have been tested in accordance with the Danish Government requirements at the Solar Test Laboratory.
4. Buyer groups:  Name: Type of buyers:	A number of the 28 district heating plants having already shown interest in solar heating. We will first concentrate on the smaller plants, since the larger can manage themselves. Smaller plants are normally under 5.000 m <sup>2</sup> , however they will all be asked, if such a joint purchasing project is of interest.	Organisation of buyers and installers by means of the Internet. <a href="http://www.soltilbud.dk">www.soltilbud.dk</a> Owners of one- or two family houses.	Customers of the electrical utilities: Thy Højspændingsværk and Morsø Elforsyning. Individual customers. Customers of the utilities.
4. Official information	Not yet known, but properly involve the association of district heating plants in Denmark.	<a href="http://www.soltilbud.dk">www.soltilbud.dk</a> . price list and buyer instructions on this Internet page.	Information “Sprængfyldt med energi”. Informs about solar energy, economy, financing plan and some price examples, etc.

6. Supplier contacts	Not yet know.	All Danish suppliers were invited to give their best offers.	The supplier has mainly been: Djurs Solvarme. Also the solar system Velsun was available for the customers.
7. Call for tender	Not yet	June 2001. Tender (call for offers).	March 20, 2000.
8. Deadline for submitting tenders	-	July 2001.	April 10, 2000.
9. Evaluation of tenders	-	Offers judged by a committee, and points given with respect to certain criteria, choice of best offer.	The bids were submitted to Kildemoes Solvarme and Thy-Mors Energy. Djurs Solvarme and Velsun were chosen as suppliers.
10. Products on market	-	Very good offers are received from 12 groups of manufacturers and installers, which have resulted in 20 % price reductions.	Djurs Solvarme has two tank units (180 litre and 260 litre) and two solar collector modules 3 m <sup>2</sup> and 4 m <sup>2</sup> .  For Velsun please see <a href="http://www.velsun.dk">www.velsun.dk</a> or <a href="http://www.velux.com/">http://www.velux.com/</a>
11. Comments and remarks; problems, if any	We will have to wait to see the responses and the interests from the district heating plants.  A total of 25.000 m <sup>2</sup> should be realistic.	5,800 hits on the WEB-site – but very few buyers.  It is estimated that buyers will not commit themselves via the Internet. It is also estimated that the Website has been a success as price list and has improved competition.	The campaign material was sent out to the customers of Thy-Mors Energy at the end of May 2000. Thy-Mors Energy has 28,000 customers of whom approximately 1,000 are electrical heated dwellings; a greater potential for sold systems for these types of customers.
12. Other information		<a href="http://www.soltilbud.dk">www.soltilbud.dk</a> , where all the offers can be sent and an instruction for buyers is given.	The campaign has until now sold 30 solar systems: 10 larger 12 m <sup>2</sup> systems, 16 systems of 8 m <sup>2</sup> and 4 systems of 6 m <sup>2</sup> . More than 70 customers have shown interest in the campaign and over 50 customers have been visited by the utilities. The campaign will most likely continue.

## Task 24 Solar Procurement – Overview of National Projects – October 2002

Country: <i>THE NETHERLANDS</i> Contact person: P.G. Out <i>Updated October 2002</i>	Name of project:	Name of project:	Name of project:	Name of project:	Name of project:	Name of project:
	“Space for Solar”	“Solar energy in the ESSENT supply region”	“Solhas”	“The Soltherm Europe Initiative”	”Call the Sun”	”WWF Solar Dwellings”
1. Preliminary status	Running	Running	Running	Running	Running	Running
2. Feasibility study	January-June 2000	n.a.	For tender specifications: based on enquiries in 9 EC countries, Sep 01	Jan – Nov 2002	June-December 1999	Based on the WWF solar dwelling quality certificate
3. Performance specifications	Oct. 2000	In tender documents. For new suppliers without references a 10-year guarantee is demanded	Not specified yet, will be on many aspects, technical as well as non-technical	based on EC quality standards, Solar Key mark	In tender documents.	In tender documents. For Solar thermal, PV and heat pumps.
4. Buyer groups: Name:  Type of buyers:	Space for Solar  Housing associations	Essent for property developers & housing assoc. Property developers & housing associations	Housing associations  Housing assoc. in The Netherlands & 9 other European countries	Soltherm Europe  Various, to be defined in the feasibility phase	Call the sun -ASN Bank for clients, -WWF for members, -SOL*id for installers - Home owners in municipalities	WWF Solar Dwellings  Various property developers (19 in total); currently 600 houses contracted (Oct 2002).

5. Official information	Dec 2000-Mar 2001	n.a.	Altener proposal for International tender in 2 <sup>nd</sup> Round of the Task foreseen. Not submitted, follow-up planned in Soltherm project.	n.a. yet	National tender	March 2002
6. Supplier contacts	Sept 2000-Mar 2001	March-April 2000	n.a.	Since April 2001, ASTIG, DFS are project partners	November 1999 – May 2000	March 2002
7. Call for tender	Dec 2000	March 2000	See 5.	From 2002	30 Nov. 1999	March 2002
8. Deadline for submitting tenders	Feb 2001	March 2000	See 5.	Not known yet	10 Dec. 1999	April 2002
9. Evaluation of tenders	Feb – Mar 2001	April 2000	International tender 2002	Not known yet	December 1999 – February 2000	May-June 2002, second negotiation round Oct 2002
10. Products on market	July 2001	August 2000	2002	From 2002	Since February 2000	Nov 2002

11. Comments and remarks; problems, if any	Framework turn-key delivery contract with good price/-performance ratio. For 3400 m <sup>2</sup> quick scans have been conducted. Conversion to individual contracts ongoing but laborious process. Currently 9 systems with a total area of 614 m <sup>2</sup> realised.	3 suppliers selected ; companies that also sell heating equipment; Registered were 33 new housing projects with in total 2223 dwellings in which 1240 SWH will be realised. Current status: 710 systems realised, 530 systems planned to be realised in 2003-2004.		Europe wide initiative, 11 countries involved. Altener contract signed January 2002. National implementation planning currently ongoing.	Sales mainly through 2 campaigns <u>2001</u> : 200 SWH and 2150 PV modules. <u>2002</u> : 5 municipality campaigns finished: Apeldoorn, Tilburg, Gouda, Emmen Houten. Total: 450 SWH, 100 PV panels. Ongoing: Ridderkerk (40 PV panels so far), Gooi-Vecht region (9 municipalities), Amstelveen region (7 municipalities), Rotterdam, Amsterdam, Den Haag.	Market introduction project for WWF solar dwelling quality certificate
12. Other information	-	-	-	See www. Soltherm.org	-	

## Task 24 Solar Procurement – Overview of National Projects – October 2002

Country: <i>SWEDEN</i> <b>Contact person:</b> <b>Hans Isaksson</b>  <i>Updated October 2002</i>	<b>Name of project:</b> <b>“Competition – Systems for solar-heated domestic hot water supply in detached houses”</b>	<b>Name of project:</b> <b>“Procurement – Solar collectors for use in large solar heating systems”</b>
1. Preliminary status	Ongoing competition activities for 1,000-2,000 systems (approx. 5,000-10,000 m <sup>2</sup> collector area)	Called off procurement activities (10,000 m <sup>2</sup> )
2. Feasibility study	Yes	Yes
3. Performance specification	Yes, available on: <a href="http://solupphandling.bfr.se">http://solupphandling.bfr.se</a>	Yes, available on: <a href="http://solupphandling.bfr.se">http://solupphandling.bfr.se</a>
4. Buyer groups:  Name: Type of buyers:	Chairman Matti Nordenström, MAV, <a href="mailto:matti@einfo-s.org">matti@einfo-s.org</a>  House owners, detached houses.	Chairman Björn Johansson, AB Enköpings Värmeverk, <a href="mailto:bjorn.johansson@varmeverket.enkoping.se">bjorn.johansson@varmeverket.enkoping.se</a>  Facility owners
5. Official information	EU “Official Journal” 28 January and 3 March 2000	EU “Official Journal” 14 April 2000
6. Supplier contacts	Regular meetings and contacts with SEAS	Regular meetings and contacts with SEAS
7. Call for tender	Announcement sent 21 January 2000 to “Official Journal”	Announcement sent 5 April 2000 to “Official Journal”
8. Deadline for submitting tenders	31 March 2000	31 May 2000
9. Evaluation of tenders	Testing started 16 May, ended 31 July 2000. The winner, UPONOR, was announced 16 March 2001.	June-October 2000
10. Products on market	The system is planned to be on the market in the spring of 2002.	The procurement has been called off.

11. Comments and remarks; problems, if any	After examining the test installations in the summer of 2001, the start of delivery was postponed. Further improvements, P-marking, etc. will have to be approved before deliveries can start.	The total ordered-purchased area reached 2,000 m <sup>2</sup> . The tendering document stated a total area of 10,000 m <sup>2</sup> and a minimum of 4,000 m <sup>2</sup> .
12. Other information	<p>The date for approved P-marking, etc. was 31 March 2002. The additional testing of the improved system was finalised and the system approved by the jury for start of delivery 5 April 2002.</p> <p>During the period May – September 150 systems have been delivered. Remaining 850 systems will be delivered up to April 2003.</p> <p>No complaints have been heard after field testing during an extreme warm Scandinavian summer. Only positive comments about simple mounting and good instruction manual.</p>	A jury report has been published. The report mentions 2 international and 3 Swedish collectors to fulfil the specifications in the best way. Altogether there were 11 offers.

## Task 24 Solar Procurement – Overview of National Projects – October 2002

Country: <i>SWITZERLAND</i> Contact person: <b>Christian Völlmin</b> <i>Updated October 2002</i>	Name of project: “Lucerne”	Name of project: “Solar for Flumroc”	Name of project: “SSES virtual buyer group (on Internet)”	Name of project: "Solar Shower"
1. Preliminary status	Running	Preparation (Due to different changes within the company the project is delayed)	Preparation (Still looking for the Partner to run the action)	Running
2. Feasibility study	Yes	Yes	Yes	No
3. Performance specifications	Solar hot water according to the regulation for subsidies. Start of implementation planned for March 2002.	Product of the newly integrated Solar company must be used.	SSES members will get their own solar hot water installation	Solar shower show with equipped trailer. Installer information and instruction to become executive partners as "Solarprofis"
4. Buyer groups: Name:  Type of buyers:	City of Lucerne  Owners	Not yet available  Employees of Flumroc	Not yet decided (work name: “Virtual Buyer Group”) Private house owners	No special buyer group.
5. Official information	Yes, through the regular information channels of the City.	Internal information only.	Organised	Yes. Through the district government.
6. Supplier contacts	Yes	Yes. Own supplier	Yes	Yes
7. Call for tender	According to the Task 24 guidelines	No	Will be according to the Task 24 guidelines	No
8. Deadline for submitting tenders	June 2002	Individually per project	Not yet known	
9. Evaluation of tenders	Yes		-	
10. Products on market	Standard Hot Water Installations Fuel switch Oil – Gas	Yes. Hot water installations of the own company.	Yes	Yes. All standardized and certified hot water systems.

11. Comments and remarks; problems, if any	The project will be coached by the Swiss representatives of Task 24 and the local responsible of the energy department.		The SSES currently changes status to a consumer oriented organisation. This causes delays for the buyer group.	Remarkable success with installers as partners and consultants. More than 60 professionals got information and training.
12. Other information	The buyer group will be formed with the new established tools and manuals presented at the last Task meeting.	The buyer group will be established among the employees of the Flumroc company (Insulation).	We will form a local project team with PR specialist, computer internet expert from SSES, suppliers, contractors and the local IEA Task 24 representatives <a href="http://www.solarpooler.ch">www.solarpooler.ch</a> (soon)	The interested solar buyers will get a voucher for a consultation with one of the trained installers with special knowledge. Solarprofis