

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

**TASK 24  
Solar Procurement**

**TASK STATUS REPORT**

**October 2000**

**Swedish Council for Building Research  
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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 sustainable, enlarged 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 initiated on 1 April 1998 and will be completed on 31 March 2003.

#### **Participation**

Five countries - Canada, Denmark, The Netherlands, Sweden and Switzerland - take part in Task 24. Belgium and Finland have expressed a large interest in joining the Task. Contacts are going on with other countries: Austria, France, Germany, United Kingdom and United States.

#### **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 with small national projects and a low degree of joint international collaboration, and the second with larger projects and a higher degree of collaboration.

*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" - which is now called "Business Tools" and which is presented on the web-site.
- To define a process for prototype testing and evaluation, using existing methods.

## 2. TIMETABLE AND MILESTONES

See Appendices 1 and 2.

## 3. NEW DEVELOPMENTS, ONGOING AND PLANNED WORK

The first round of the Task is ending in the beginning of 2001. It has consisted of identification of buyers and forming of national buyer groups and national tendering. A number of meetings have been held with the national buyer groups, which consist of i.a. representatives of municipalities, utilities, housing corporations, construction companies, real estate developers, NGOs and other organisations. The Task 24 participating countries have learned important lessons from each other, and this means good results from the efforts put into the Task.

### 3.1 National procurement activities

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

Overviews of the different national projects are included in Appendix 3:1-5 and summaries are made below.

#### *Canada*

Ontario is currently the best market for year-round solar domestic hot water systems because of the market size and a large percentage of customers use electricity for their water heating, which is relatively expensive in Ontario. The electricity market is scheduled to be deregulated in March 2001. A national programme dedicated to solar domestic hot water systems does not exist but funding for these and other solar energy projects is available on an individual basis through REDI For Other Markets.

The communities of Peterborough and Toronto participated in Phase I projects administered by Peterborough Green-Up (<http://www.greenup.on.ca/>) and the Energy Action Council of Toronto (EnerACT, <http://members.tripod.com/~EnerACT/>). In Phase I, 17 systems were installed in the two communities; 3 manufacturers were selected to supply these systems from a tender issued by Peterborough Green-Up in 1999. Each system will be monitored for a two-year period.

The scope for Phase II includes EnerACT and Peterborough Green-Up jointly tendering for the supply of 15 and 20 systems, respectively. The communities of Sudbury, Perth, and Ottawa are observing the progress of Phase II and may initiate their own projects next year. Key points in the tender are:

- Request for 2 system types from each manufacturer, low and high consumption.
- At least 40% of energy must be supplied by the systems in a typical year; and
- Strict criteria on ability to prevent heat transfer fluid degradation.

Phase II systems will be installed this autumn and next spring. It is expected that more communities will participate in Phase III and up to 50 systems will be installed in each community.

### ***Denmark***

The campaign “*Sol over Thy og Mors*” with the utilities Thy Højspaendingsvaerk and Morsoe Elforsyning (Thy and Morsoe Utilities) is now running. The actual campaign started in May 2000. Until now, 13 larger systems have been sold (i.e. systems of 12 m<sup>2</sup> each).

In the first half of 2000, contacts have been established with several companies and organisations as potential buyer-groups, for example:

*Dansk VVS – Solenergi Danmark* (Association of Plumbers). Very positive meetings have been held and work is currently going on to establish collaboration between Task 24 and the organisation. The goal is to install 30-40 systems per year per installer. The association has 35 installers involved and 6 suppliers.

*SEK*. Contacts have been established and meetings undertaken. SEK is a mutual description for energy and environment offices, of which there are 21 offices in Denmark today. The offices provide free, impartial information and guidance on energy conservation and utilisation of renewable energy sources.

Contacts have also been taken with KFS housebuilders, the WWF (World Wildlife Foundation), Danish Nature Conservation Foundation (DN) and a large franchise food company. The intention is also to establish contacts with “green” municipalities.

### ***The Netherlands***

#### Domestic systems in existing dwellings

Solar Water Heater Campaigns are going on with the buyer groups: Sol\*ID, the ASN Bank and the WWF (World Wildlife Foundation).

The *Sol\*ID solar company* is owned by 40 installers. The company also has an open character, so other installers can join; however they have to prove that they can offer a certain quality level. Sol\*ID is the only Dutch installation company that offers solar sales and installation services on a national scale. They are now working on feature packages and solar viewers, which provide the possibility of seeing that the system is actually working.

The *ASN Bank campaign* includes different financing possibilities and approx. 100 systems are sold/installed at the moment. During the next Kyoto follow-up summit, the *WWF* plans more publicity.

#### Domestic systems in new housing development and large renovation

Contacts have been taken with property developers and housing associations in the north of the Essent supply region and buyer groups have been started.

*Essent for property developers & housing associations.* Projects for about 1,200 systems have been registered, manufacturers chosen and the first systems have been installed.

Together with the Dutch umbrella organisation of all housing associations named 'Aedes' and its European counterpart 'Cecodhas', a *European survey named 'Solhas'* has started with the goal to develop a market strategy for solar water heaters for the market sector of housing associations. The survey will form the basis of the demands of a European scale buyer group of housing associations to be established at the end of 2000/beginning of 2001. This buyer group will tender during the second, more international part of Task 24.

During the survey, *national projects*, especially in The Netherlands, will take place in co-operation with Aedes. The Dutch focus was first primarily aimed at domestic systems, but during the summer of 2000, Aedes decided to incorporate medium size systems also in the project.

### Medium size systems

The "*Space for Solar*" initiative is running with a buyer group of 59 participating organisations, mostly housing associations and rest homes. To give this buyer group a legal basis, a foundation has been created in which all participants are represented. The initiative has a portfolio of more than 100 projects, with a total of approx. 20,000 m<sup>2</sup>.

Since medium size systems are more tailor made, various solar services will be offered. The foundation has an open character, new parties are invited to join the "Space for Solar" initiative. The "Space for Solar" initiative offers potential buyers of medium size systems the possibility to join the initiative. Participation in the initiative means real international tendering.

### ***Sweden***

Two buyer groups have been established in Sweden. The "Systems for solar-heated domestic hot water supply in detached houses" (the *small SDWH systems*) has a representative of the County of Värmland as chairman, and a representative of the Enköping Energy Utility is chairman of the "Solar collectors for use in large solar heating systems" (the *larger systems*). Procurement and competition activities are ongoing.

### Competition – 1,000-2,000 Small SDHW Systems (5,000-10,000 m<sup>2</sup>)

A large number of competition entries were received. Both national and international manufacturers contributed. A number of prototypes were tested in May-July at the official testing laboratory in Sweden. The results are now being evaluated and studied in detail. The intention is to complete a framework contract to be signed before the end of October.

So far, the internet-based notifications from interested buyers are counted to be approx. 1,000, and notifications continue to drop in. No time limit has been set, and it will be possible to submit notifications at least during the rest of the year 2000, if possible also during the first half of 2001. Deliveries of 1,000-2,000 systems are planned to start in November 2000.

## Procurement – 10,000 m<sup>2</sup> of Solar Collectors for Larger Systems

Entries for the procurement were received in May 2000. Both national and international manufacturers contributed. After requests for complementary information about erection and mounting costs had been addressed to the participants, the entries are now being evaluated and studied in detail. Hopefully, a final decision will be made in November and the start of delivery at the turn of the year. The participants in the buyer group, 30 organisations, are being offered consultations to check the notified solar project, according to needed collector area, etc. This is also a concern to secure the purchased solar area in the procurement. So far, the purchased area is rated to be between 5,000-8,000 m<sup>2</sup>.

More information, both in Swedish and English, can be found on <http://solupphandling.bfr.se>

### ***Switzerland***

Switzerland has been occupied with preparations for and carrying out of a referendum in September, in which one important question was: Will the Swiss population support renewable energy by paying 0.003 Swiss Franc per kWh on non renewables? Unfortunately, the result of the referendum was 45% in favour and 55% against.

The activities earlier started are ongoing.

The *Passive Houses in Senti Kriens* will be realised with solar installations. The invitation to tender for the solar equipment has been completed. However, the tendering is not according to the "Brutto Documents" of Task 24.

The buyer groups of the *Solar roofs for the city of Zug* have been formed and contacts are being maintained in order to monitor the activities to procure solar installations.

Contacts have been established with different *electricity works* and hopefully projects can start as soon as possible with new-formed buyer groups.

The virtual consumer group, the *SSES virtual buyer group (on Internet)*, is under preparation and public activities will be started next year.

### **3.2 Creation of Tools and Ballot procedure**

Denmark is Task Leader of Subtask B, in which the "Book of Tools" was included. Canada offered as a voluntary contribution to edit the "book" from a paper to a web version.

The first draft edition of the "Book of Tools – produced on the web - was discussed by the Task 24 Experts during the meeting in Ottawa in February/March, when it was decided that Canada would be in charge of the updating and editing of the "book" and the upgrading of the whole Task 24 home page. Canada used a professional editor for the work. The original "Book of Tools" was integrated into a temporary web-site, with the majority of the original content in the section "Business Tools".

At the beginning of June, the ballot procedure started. In the middle of August, the Operating Agent was informed that the IEA SHC Task 24 Report, “Business Tools”, had been approved, subject to the incorporation of some suggested minor additions.

According to plan, the “Business Tools” will be opened up after the inclusion of some of the additions suggested during the Ballot. The other additions will be added in later versions as funding for them has been secured. It is suggested to the Executive Committee that the participating countries contribute a cost sharing for the inclusion of these additions. A yearly maintenance of the Task 24 web-site is also included in the proposal.

### **3.3 Contacts with suppliers**

The work on the tender packages, the “Brutto Text”, was somewhat delayed. However, after intensive work, the first preliminary drafts have now been completed and sent to the supplier organisations ASTIG and ESIF. They have been invited to give their comments and suggestions, if possible before December 15 this year. After comments received and included in the text, the intention is to publish the “Brutto Text” on the web-site. Requests for proposals with co-ordinated structure issued from buyers in different regions would facilitate the tendering procedure and contribute to more efficient purchasing of solar systems.

There have also been different national contacts and meetings with suppliers.

### **3.4 Information activities**

Although the Task 24 Experts agree that general information activities are not the most important issue at the moment, it is still important to inform about Task 24 and to find additional sources of funding.

An *ALTENER* application was sent to the European Commission (EC) in late November 1999, but it was not approved.

A formal application has been sent in by the Task 24 European Union (EU) member countries to the EC for part financing of information activities for raising interest in solar procurement as “accompanying measures” within the “*EU 5<sup>th</sup> Framework Programme*”.

Presentations about Task 24 have been made at several international conferences. At the “*EuroSun 2000*” in Copenhagen, Denmark, in June, presentations were made by the Subtask Leaders from The Netherlands and Denmark and by OPET representatives. There is a continuous interest within *OPET* to include the Solar Procurement projects in their information activities. The funding issue must however be solved. The Operating Agent gave a presentation at the “*Internationales Symposium für thermische und photovoltaische Sonnenenergienutzung*”, in Gleisdorf, Austria, in September.

Brochures, articles and other information material are still being produced and published in the countries. The Task 24 official home page ([www.IEAtask24.org](http://www.IEAtask24.org)), will be updated with the latest version of the “News from the IEA Task 24” newsletter, compiled by Denmark twice a year, and with the Minutes from each Experts meeting.

An “*IEA SHC Award of Excellence*” could further increase the general interest in the Task 24 activities. A first proposal was submitted to the Executive Meeting in June. This proposal has been further developed and is attached in [Appendix 4](#). The Award could also be used as a promotion tool for Solar innovations and important achievements within the whole SHC-area after the Solar Procurement Task.

### **3.5 Task meetings**

Since last Executive Committee Meeting, one Task 24 *Experts Meeting* has been held – in Lucerne, Switzerland, 2-4 October. In connection with this meeting, there was a Workshop with Swiss organisations interested in solar activities. During this Workshop, Task 24 Experts gave presentations about the ongoing work in the countries.

Next Experts Meeting will be held in Sweden, 21-23 March 2001, and the meeting after that in The Netherlands during the second half of September 2001.

### **3.6 Midterm evaluation of Task 24**

The evaluation of the Task 24 work so far, including the first national procurements, has been planned by the Subtask B Leader. The structure and content of the evaluation was discussed at the Experts Meeting in Lucerne. A draft report is planned to be ready in February 2001.

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

### **4.1 Issue for the whole Executive Committee**

#### ***”IEA SHC Award of Excellence”***

On the way towards large procurements, there will be competitions and promotions. An “*IEA SHC Award of Excellence*” could be used as prestigious recognition for good performance. This Award would mainly be used for the Second Round of the Task 24 procurements. A revised draft description of a future “*IEA SHC Award of Excellence*” is presented in [Appendix 4](#).

#### **Recommendations for resolution**

It is recommended that the Executive Committee:

- Decide to introduce the “*IEA SHC Award of Excellence*”.
- Approve the principles of the “*IEA SHC Award of Excellence*” as presented in [Appendix 4](#).
- Ask the Operating Agent, after consultations with the Task Experts and interested stakeholders, to make further preparations and to launch the Award.



## 4.2 Issue for the Executive Committee Members of Task 24 participating countries

### *Funding of the “IEA SHC Award of Excellence” and future updating of Task 24 web-site, including the “Business Tools”*

The background for the planned Award including the financial resources needed is presented in Appendix 4. Cost-sharing for the years 2001-2003 is suggested for the preparation of the “IEA SHC Award of Excellence” and the Award Ceremony, for the inclusion of the additions suggested during the Ballot and for maintenance of the Task 24 web-site as shown in the table below.

<b>Suggested cost sharing by the Task 24 participating countries</b>			
<b>US dollar</b>			
	<b>2001</b>	<b>2002</b>	<b>2003</b>
Additions to the web-site as suggested in the Ballot	7,000		
Yearly maintenance of the Task 24 web-site	2,000	2,000	1,000
“IEA SHC Award of Excellence” - preparations and Ceremony 2003	6,000	12,000	16,000
Unforeseen	<sup>1)</sup>	4,000	1,000
<b>Total</b>	<b>15,000</b>	<b>18,000</b>	<b>18,000</b>
<b>Per participating country</b>	<b>3,000<sup>2)</sup></b>	<b>3,000<sup>3)</sup></b>	<b>3,000<sup>3)</sup></b>

1) Earlier funding by common fund for brochure, USD 2,500, has not been used since CADDET funded this. This amount could increase the budget by USD 2,500.  
2) Five countries  
3) Six countries

### **Recommendations for resolution**

It is recommended that the Executive Committee members of Task 24 participating countries:

- Decide that the Task 24 participating countries contribute equal amounts of cost sharing, USD 3,000 per year for the years 2001-2003, for the Award and web-site updating and maintenance.

### **Appendices:**

1. Milestones table 1
2. Milestones table 2
3. Overviews of the national projects
4. IEA SHC Award of Excellence

**TASK 24 "SOLAR PROCUREMENT" TASK STATUS REPORT - OCTOBER 2000 - APPENDIX 1**

**MILESTONES TABLE 1**

Project	Project Title	Responsibility	1999				2000				2001				2002				2003				2004					
			Quarter:	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Subtask A	Procurement and marketing	NL				▽ <sup>1</sup>	▽ <sup>2</sup>		▽ <sup>3</sup>	▽ <sup>4</sup>								▽ <sup>5</sup>										
						▲ <sup>1</sup>	▲ <sup>2</sup>		▲ <sup>3</sup>	▲ <sup>4</sup>																		
Subtask B	Creation of Tools	DK		▽ <sup>1</sup>			▽ <sup>2</sup>			▽ <sup>3</sup>	▽ <sup>4</sup>								▽ <sup>5</sup>						▽ <sup>6</sup>			
					▲ <sup>1</sup>			▲ <sup>2.1</sup>	▲ <sup>2.2</sup>			▲ <sup>3</sup>																

**Subtask A: Procurement and marketing**

1. Buyer groups formation/goals – *October 1999*
2. Distribution of invitation for tenders 1<sup>st</sup> Round - *January 2000*
- 3-4 Delivery start 1<sup>st</sup> Round – *August – December 2000*
5. Distribution of invitation for tenders 2<sup>nd</sup> Round - *October 2001*
- 6-7 Delivery start 2<sup>nd</sup> Round – *November 2002 – April 2003*

**Subtask B: Creation of Tools**

1. Book of Tools\* - content, 1<sup>st</sup> draft Chapt. 1-3/outline Chapt. 4 - *May 1999*
2. 1. Book of Tools - 1<sup>st</sup> edition in draft *January 2000*  
2. Book of Tools – updated 1<sup>st</sup> edition as web version for ballot *June 2000*
3. Book of Tools - Updated 2<sup>nd</sup> edition in draft - *December 2000*
4. Evaluation of 1<sup>st</sup> Round – *February 2001*
5. Book of Tools - 3<sup>rd</sup> edition in draft - *July 2002*
6. Evaluation of 2<sup>nd</sup> Round - *July 2003*

Hans Westling, 25 October 2000

\*) The Book of Tools is now called “Business Tools”.

**TASK 24 “SOLAR PROCUREMENT” TASK STATUS REPORT - OCTOBER 2000 - APPENDIX 2**

**MILESTONES TABLE 2**

Activity	Resp.	Milestones achieved Last 6 months	Milestones not achieved				Milestones next 6 months
			Milestone	Comment	Recommendation	Impact	
Procurement & Marketing	NL	A3-4 Deliveries in the 1 <sup>st</sup> Round have started or are planned to start before the end of 2000.					
Creation of Tools	DK	B3 “Book of Tools” as web pages has been updated according to some of the suggestions in the Ballot and new material about projects has been included.		Has been changed from “Book of Tools” to “Business Tools”		Provides easier possibilities for updating more often as new material is created.	B4 (February 2001)

Hans Westling, 25 October 2000



**IEA SH&C Task 24 Solar Procurement – Overview of National Projects**

<b>Country: CANADA</b> <b>Contact person:</b> <b>Gerald Van Decker</b>	<b>Name of project:</b> <b>Project with two community-based organisations: Peterborough Green-Up and EnerACT (Energy Action Council of Toronto)</b>
1. Preliminary status	Phase I: -Peterborough GreenUp has installed their first 9 systems, which were tendered and selected from 3 manufacturers and are undergoing extensive testing at the National Solar Test Facility. -EnerAct, having a long-standing history of delivering energy efficiency products and services in Toronto, has installed their first 9 systems from two of the same suppliers. Phase II: -Peterborough GreenUp and EnerACT have jointly tendered for 15 and 20 systems, respectively. They shall purchase more systems and plan to install a total of 20 and 30 systems, respectively. Systems will be installed during Fall 2000 and Spring 2001. Three other communities were to join the group but they will now wait for the results from Phase II before proceeding.
2. Feasibility study	
3. Performance specifications	Phase I: -Systems must supply >35% of annual energy load -Scores were based upon cost, energy performance, and quality Phase II: -Systems must supply >40% of annual energy load -Scores are based upon cost/energy, warranty, and quality -Heat transfer fluid degradation was a major concern addressed by a pass/fail condition
4. Buyer groups:  Buyer Names: Type of buyers:	Phase II “Suntario 2000” – unofficial name  -Peterborough GreenUp and EnerACT -NGOs in partnership with utilities and municipal governments, and the federal government
5. Official information	-Phase I Subsidy: 50% (this is an exception) -Phase II Subsidy: 25%
6. Supplier contacts	N/A
7. Call for tender	Phase II: September 21, 2000
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: TBD
11. Comments and remarks; problems, if any	Phase I: Installation schedule was not met Phase II: Delay in issuing tender
12. Other information	-A market transformation activity (which will result in a generic business plan) will be undertaken in 2000/01. Funds have been allocated from at least 2 partners. Market survey, detailed study of the Toronto market, new performance and system specifications and the value of peak saving electric load with solar water heating will be included in this activity

**IEA SH&C Task 24 Solar Procurement – Overview of National Projects**

<b>Country: DENMARK</b> <b>Contact persons:</b> <b>Torben Esbensen and</b> <b>Lotte Gramkow</b>	<b>Name of project:</b>  <b>“Sol over Thy og Morsø” (“Sunshine over the regions Thy and Morsø”)</b>
1. Preliminary status	The fusion between Thy Højspændingsværk (utility) and Morsø Elforsyning (utility) was final in march 2000. The tendering material for solar systems was sent out to Danish solar heating manufactures in March 2000, and the campaign started in May 2000 and is still running.
2. Feasibility study	No actual feasibility study has been undertaken.
3. Performance specifications	The systems have undergone a test in accordance to the Danish Government requirements and Solar Test Lab.
4. Buyer groups:  Name: Type of buyers:	Customers of the utilities Thy Højspændingsværk and Morsø Elforsyning  Various customers. Utilities customers.
5. Official information	A very nice information leaflet has been produced with the heading “Sprængfyldt med energi”. The leaflet tells about the solar energy, how the utility will be responsible for all practical issues, how much can be saved, the economy, financing plan and some price examples.
6. Supplier contacts	A number of the Danish suppliers were interested in bidding for the project. The supplier will mainly be: Djurs Solvarme, Hannebjergvej 24, Langkastrup, 8900 Randers.  Also the solar system from Velux Roof windows and skylights called Velsun is available for the customers. However these solar systems are more expensive than traditional solar collector systems, but the fitting might be more elegant.
7. Call for tender	The invited suppliers received the tendering package on 20 March 2000.
8. Deadline for submitting tenders	The invited suppliers were asked to forward their bids on the 10 April 2000.
9. Evaluation of tenders	The bids were submitted to Troels Kildemoes Møller (Kildemoes Solvarme) and Ole Barslev (Thy Højspændingsværk). Esbensen Consulting Engineers agreed to the final decision to choose Djurs Solvarme and Velsun.
10. Products on market	Djurs Solvarme has several different solar systems on the market for hot water and combined hot water/space heating. 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> . These components will be used in the systems. The tank units are fully equipped with pump section, safety equipment and solar controller. For more information on Velsun please see homepage on: <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	The campaign material was sent out to the customers of Thy Højspændingsværk and Morsø Elforsyning at the end of May 2000. Thy Højspændingsværk and Morsø Elforsyning have altogether 28.000 customers of which approximately 1.000 are electrical heated dwellings meaning a greater potential for sold systems for these types of customers.
12. Other information	The campaign has until now sold 8 larger 12 m <sup>2</sup> systems, 6 systems of 8 m <sup>2</sup> and 1 system of 6 m <sup>2</sup> – all together 15 systems. Fifty customers have shown interest in the campaign and 41 customers have been visited by the utilities. A total of 26 have expressed their interest of having a solar system for heating both the hot water and room heating. Thy Højspændingsværk and Morsø Elforsyning expects a total number of sold systems of 25 before Christmas.

**IEA SH&C Task 24 Solar Procurement – Overview of National Projects**

<b>Country: NETHERLANDS Contact person: P.G. Out</b>	<b>Name of project: “Space for Solar”</b>	<b>Name of project: “Solar energy in the ESSENT supply region”</b>	<b>Name of project: “Solhas”</b>	<b>Name of project: SOL*id, WWF, ASN</b>
1. Preliminary status	Running	Running	Running	Running
2. Feasibility study	January-June 2000	n.a.	For tender specifications: Netherlands: Feb – Aug 00; Europe: Feb – Sept 2000 <sup>1)</sup>	June-December 1999
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	In tender documents.
4. Buyer groups: Name:  Type of buyers:	Space for Solar  Foundation of housing associations	Essent for property developers & housing assoc. Property developers & housing associations	Housing associations  Housing assoc. in The Netherlands & 9 other European countries	SOL*id, WWF, ASN Bank  ASN Bank for clients, WWF for members, SOL*id for installers
5. Official information	n.a. yet	n.a.	Dutch tender 2001. International tender in 2 <sup>nd</sup> round of the Task	National tender
6. Supplier contacts	Sept-Oct 2000	March-April 2000	n.a.	November 1999 – May 2000
7. Call for tender	Oct-Nov 2000	March 2000	See 5.	30 Nov. 1999
8. Deadline for submitting tenders	Dec-Jan 2000/2001	March 2000	See 5.	10 Dec. 1999
9. Evaluation of tenders	Dec-Jan 2000/2001	April 2000	Dutch tender 1 <sup>st</sup> quarter 01, international 2001	December 1999 – February 2000
10. Products on market	Feb 2001	August 2000	2001	Since February 2000
11. Comments and remarks; problems, if any	Delay in tendering process due to late decision on system subsidy (positive decision has been taken) -	-	Delay in Dutch tender due to incorporation medium size systems	Tight tendering schedule due to start publicity campaign. No real problem for manufacturers, standard tendering documents used as for previous campaigns.
12. Other information	-	-	-	-

1) The procurement will be part of a strategy to develop the market segment of housing associations on a European scale. For this market segment basic data will be obtained and the market strategy to be developed must be suitable for the special situation of housing associations with respect to ownership, management, legal and financial aspects.

**IEA SH&C Task 24 Solar Procurement – Overview of National Projects**

<u>Country: SWEDEN</u> Contact person: Hans Isaksson	Name of project: “Systems for solar-heated domestic hot water supply in detached houses”	Name of project: “Solar collectors for use in large solar heating systems”
1. Preliminary status	Ongoing procurement activities for 1,000-2,000 systems (approx. 5,000-10,000 m <sup>2</sup> collector area)	Ongoing 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 starts 16 May, ends 31 July 2000	June-July 2000
10. Products on market	November 2000 (tentative according to agreement with winners)	December 2000 (tentative according to agreement with winners)
11. Comments and remarks; problems, if any	Ongoing discussion in September/October 2000 with winners about a framework agreement for deliveries	Requests for complementary information about erection and mounting cost were addressed to the participants in the beginning of September 2000
12. Other information	Announcement of winners in October/November 2000	Ongoing evaluation. Announcement of winners in November/December 2000



**IEA SH&C Task 24 Solar Procurement – Overview of National Projects**

<u>Country:</u> <u>SWITZERLAND</u> Contact persons: Markus Portmann/Christian Völlmin	Name of project: “Passive houses in Senti Kriens”	Name of project: “Solar roofs for the city of Zug”	Name of project: “SSES virtual buyer group (on Internet)”
1. Preliminary status	Offer	Project sketch	Idea
2. Feasibility study	Yes	Not yet	On its way
3. Performance specifications	Not yet	Not yet	SSES members will get their own solar hot water installation
4. Buyer groups: Name:  Type of buyers:	Contractor  Owners	Energy and water supplier  Utility	Not yet decided (work name: “Virtual Buyer Group”) Private house owners
5. Official information	None	Not yet	Organised
6. Supplier contacts	Not yet established	Not yet	Yes
7. Call for tender	Yes, but not IEA Task 24 conform	Not yet	Will be according to the Task 24 guidelines
8. Deadline for submitting tenders	On the way	None	Not yet known
9. Evaluation of tenders	Summer 2000	Not yet	-
10. Products on market	Autumn 2000	-	Yes
11. Comments and remarks; problems, if any	The project will only be supervised by the Task 24 group. No special activity yet planned.	The project is slowly on its way	None in sight
12. Other information	-	-	We will form a local project team with PR specialist, computer internet expert from SSES, suppliers, contractors and the local IEA Task 24 representatives

## **IEA SHC AWARD OF EXCELLENCE**

### **A. Background**

As a part of different programmes for the promotion of more efficient and/or environmentally adapted solutions, Awards have been introduced in different countries and internationally. Within the IEA DSM Implementing Agreement, an “IEA DSM Award of Excellence” has been used in procurement and promotion projects. Awards have been given to successful producers of energy-efficient clothes driers, electric motors and copiers.

Similar Awards have been created, for instance by the Climate Technology Initiative, Natural Resources Canada, the Danish Energy Agency, the Civil Engineering Research Foundation in the United States and the Globe Award presented at the World Sustainable Energy Day in Austria. Some additional competitions with receipt of Awards or Prizes have been mentioned, like the “European Solar Prize” and the “Swiss Solar Prize”. A short summary of the characteristics is shown in the enclosed table (Encl. 1).

More background material about the Awards is enclosed in the Documentation for and Minutes after the Task 24 Experts Meeting in Ottawa in February-March 2000 (pages 122-136 in the Documentation for the meeting and Appendix 18 in the Minutes).

If a decision in favour of an “IEA SHC Award of Excellence” will be made at the Executive Committee Meeting, further information and experience will be collected during future preparations.

At workshops held in 2000, the Task 24 Experts have discussed the principles of giving Awards. The Experts have agreed that there is an interest in establishing an Award, primarily for the coming international projects in the 2<sup>nd</sup> Round of the Task 24 procurements, but have also pointed out the possibility for the national teams of establishing Awards in collaboration with Task 24.

The SHC Executive Committee discussed a preliminary Award proposal at the Meeting in June 2000. The Executive Committee displayed positive interest and asked for further information about organisation, budget and risks for an “IEA SHC Award of Excellence”, see B below.

## B. Organisation, budget and risks

### *Organisation*

#### Summary

Organisation, budget and risks are further presented below. IEA SHC Task 24 will be responsible for all preparations and practical arrangements. A budget for Task 24 from the 1<sup>st</sup> of January 2001 is proposed and presented below.

#### Preparations

Preparations will be made in 2001 for suitable statue, Award Symbol, further clarifications of the Award principles, organisation and mechanisms for avoiding or minimising possible risks in connection with the introduction of an Award.

In early 2002, the Award will be launched and a suitable event for the Award Ceremony in 2003 is the "ISES World Solar Congress 2003" in Gothenburg, Sweden.

### **Budget, USD**

		Total per year
1. In 2001:		
Preparations	<u>6,000</u>	6,000
- More experience from other Awards		
- Competition conditions etc		
- Layout of invitations		
2. In 2002:		
Preparations	7,000	
- Printing and distribution of invitations		
- Receipt and analysis of applications		
- Active collection of alternatives		
Design of Award symbol/statue	<u>5,000</u>	12,000
Jury work. Members of the SHC Agreement participate on condition that they fund their own expenses		
3. In 2003:		
Event preparation	2,000	
Production of the statue – first one	5,000	
2 extra copies of the statue	6,000	
Information about winner(s)	<u>3,000</u>	16,000
4. Additional Rounds incl. Statues		(16,000)

The above estimated costs have been calculated based on the experience from the IEA DSM and the Danish Solar Cities Awards.

Additional Rounds within Task 24 or for other SHC achievements would rely on preparations already made within Task 24.

## ***Risks***

In the invitations it should clearly be stated that the IEA SHC disclaims any liability for solutions, products or software that have received the Award.

The risk of not reaching sufficient publicity has to be reduced through careful preparations and choice of the best event for the Award Ceremony, which will facilitate the informative image.

The jury members should be chosen among persons with no financial interest of their own in the winning organisation. These persons should represent different backgrounds in order to include many perspectives on the Solar Solutions.

During the further preparations, additional experience should be collected from some of the other Awards. Especially the Climate Technology Initiative, organised by the IEA, should be analysed.

## **C. Principles of an “IEA SHC Award of Excellence”**

An Award would be an alternative supplementary way of recognising promising new solutions and initiatives in the thermal solar field.

After studying the rules of some other Awards, the following principles are suggested. They should be approved in principle by the Executive Committee Meeting on condition that the proposal be further refined.

### ***1. Competition should be open to:***

- Suppliers and installers
- Private and public organisations and individuals representing buyers and users

### ***2. Overall goal***

”For outstanding initiatives and achievements in the Solar Thermal Field”.

### ***3. Categories***

- A. Innovative systems, components and installations
- B. Leadership among policy-makers and buyers (including co-operation in forming buyer groups)

The organising body may grant one or more Awards in each of the two categories.

#### **4. Criteria**

##### **A. Innovative systems, components and installations**

The ...../year/ ...../category/ will recognise the contributions of organisations and individuals involved in innovative concepts for solar thermal heating system components and installations using the following criteria:

1. Performance
2. Price, LCC, productivity and project delivery time
3. Reliability and quality
4. Outstanding way of organising the production, marketing and/or installation process

##### **B. Leadership among policy-makers and buyers**

The aim is to recognise success in large-scale application of Solar Systems through innovative buying and financing concepts, large-scale buying, creative financing schemes and/or outstanding leadership and information to all stakeholders by policy-makers and buyers, or outstanding co-operation in forming buyer groups.

#### **5. Jury and selection process**

All entries will be reviewed by a jury made up of representatives of academic, corporate and government communities within countries participating in Task 24.

The jury has large freedom of action to evaluate proposals in accordance with the above-mentioned criteria.

#### **6. The Award**

The winner(s) of the “IEA SHC Award of Excellence” will each receive one ..... statue/globe ..... and a diploma.

Additional statues/diplomas may be purchased from Task 24 by the collaborating organisations participating in the winning application.

A large publicity campaign will be made by the organisers in collaboration with the winner(s) in order to raise the awareness in general and the new solutions in particular.

#### **7. Award Ceremony**

The Award will be presented at a major Solar Sustainable Event in 2003 by ..... /high-level person/.

#### **8. Application Checklist**

(To be drawn up)

## **9. *Official Form for Entry and Suggestions***

(To be drawn up)

The Jury may also take own initiatives and select winners from submitted applications and suggestions and own collected information.

Encl. 1 Examples of relevant Awards

**Examples of relevant Awards** (will be further elaborated during the final preparation)

Name of Award	<i>Canada Energy Efficiency Awards</i>	<i>Climate Technology Initiative</i>	<i>Energy Globe Award</i>	<i>Solar Village of the Year (Denmark)</i>
1. Open to	<b>Canadian companies, organisations and individuals</b>	<b>Outstanding organisations and individuals</b>	<b>World-wide companies, private/public institutions, individuals</b>	<b>Danish villages, cities, etc.</b>
2. Overall goal	<b>Innovation and Leadership in Energy Efficiency</b>	<b>Success in deploying climate-friendly technology in developing and transition countries</b>	<b>Energy efficiency, Renewable</b>	<b>Inspire to further diffusion of Solar Energy</b>
3. Categories	<b>Commercial, residential, student etc, different regions</b> <b>15 Awards</b>	<b>Climate Technology Award. Climate Technology Leadership Award.</b>	<b>Buildings/housing, commerce, industry, utilities, traffic, public</b>	
4. Criteria		See “ <a href="http://www.ClimateTech.net">http://www.ClimateTech.net</a> ”	See “ <a href="http://www.esv.or/energyglobe">http://www.esv.or/energyglobe</a> ”	<b>Special outstanding profile ready or planned activities. Thermal or PV.</b>
5. Jury	<b>NRC Office of Energy Efficiency</b>	<b>CTI Jury UNFCCC Secretariat</b>	<b>Prominent selection. Brochures, CD for invitation</b>	<b>8 members incl. Ministry of Housing</b>
6.1 Award Symbol	<b>CTI Technology CIT Leadership</b>	<b>Plaque and diploma</b>	<b>Statue</b>	<b>Sculpture of artistic; solar village sign</b>
6.2 Prize/other positive treatment	<b>Press information</b>	<b>Prestigious impression</b>	<b>10,000 EURO/category</b>	<b>Media campaigns “Solbyskiltet”</b>
7. Ceremony		<b>At UNFCCC Conference (Awards presented by Robert Priddle)</b>	<b>At World Sustainable Energy Day &amp; Conference</b>	<b>In the winner’s area. (Chairperson of the Parliamentary Energy Committee</b>
8. Responsible organisation	<b>National Resources Canada</b>	<b>IEA &amp; UNFCCC Secretariat</b>	<b>Oberösterreichische Energisparverband Austria</b>	<b>Energistyrelsen, Danish National Energy Agency</b>

**Examples of relevant Awards** (will be further elaborated during the final preparation)

Name of Award	<i>Solar City of the Year (The Netherlands)</i>	<i>IEA DSM Award of Excellence</i>	<i>CERF Charles Pankow Award of Innovation</i>	SOLAR 91 (Switzerland)
1. Open to	<b>Dutch municipalities</b>	<b>Manufacturers of components</b>	<b>US and internat. Public</b>	<b>Swiss organisations and individuals</b>
2. Overall goal	<b>Inspire to further diffusion of Solar Energy. Initiate competition between municipal.</b>	<b>Reduced energy substantially</b>	<b>Organisations working collaboratively. Ideas into practice.</b>	<b>For best action for solar and wood/biomass use</b>
3. Categories	<b>Municipalities</b>	<b>Driers, Electric motors, Copiers, LED Traffic Lights</b>	<b>Innovative applications, different materials etc. Innovative concept.</b>	<b>8 including wood and biomass</b>
4. Criteria	<b>Activities to promote solar water heaters in renovation and new housing development.</b>	<b>Very specified in performance criteria. In two cases, testing of prototypes.</b>	<b>Innovative technologies: Research &amp; implementation. High performance materials. Green Building/Market Readiness</b>	<b>10 criteria + 7 prerequisites</b>
5. Jury	<b>5-7 members, incl. Prominent representatives of Ministry of Economics, politicians and building sector</b>	<b>Technical specialists appointed by IEA DSM Annex III</b>	<b>CERF's Academic Research Council + Jury from design and construction government academic</b>	
6.1 Award Symbol	<b>Sculpture, signs at the entrance of the municipality. Eternal fame.</b>	<b>Designed globe and diploma</b>	<b>10-inch bronze sphere custom-designed. Silver plaque to finalists</b>	<b>7-25 independent members</b>
6.2 Prize/other positive treatment	<b>Media campaign. Host for seminars and conferences.</b>	<b>Information actions, brochures, press releases</b>	<b>Showcases at major engineering event</b>	<b>Prize and recognition</b>
7. Ceremony	<b>At special event.</b>	<b>At important Trade Fair if possible. Award presented by senior IEA official</b>	<b>CERF Global Innovation Black-tie Dinner</b>	
8. Responsible organisation	<b>Novem</b>	<b>IEA DSM Agreement</b>	<b>CERF</b>	<b>Arbeitsgemeinschaft Solar91</b>



**Examples of relevant Awards** (will be further elaborated during the final preparation)

Name of Award	<i>European Solar Prize (11 countries)</i>	<i>Outstanding Civil Engineering Achievement</i>		
1. Open to	<b>All public &amp; private European installations 1kW-1MW</b>	<b>U.S. projects</b>		
2. Overall goal	<b>Support Solar Energy in Europe</b>	<b>Contribution to wellbeing of people and communities, resourcefulness.</b>		
3. Categories	<b>Solar community, enterprises, individuals, owners of installations, institutions, media, best integrated vehicles</b>	<b>Design challenges pronouncing use of materials and methods, innovations in construction, effect on environment.</b>		
4. Criteria	<b>9 criteria + 5 prerequisites. Innovation, solar surface, optimum solution, etc.</b>			
5. Jury	<b>Regional commissions. 7-15 independent members. European Solar Prize Jury.</b>	<b>OCEA Jury, Chairman editor of "Civil Engineering", other editors.</b>		
6.1 Award Symbol		<b>Diplomas.</b>		
6.2 Prize/other positive treatment				
7. Ceremony				
8. Responsible organisation	<b>Regional &amp; Eurosolar &amp; EU</b>	<b>ASCE</b>		