

Model document for Tender

Solar heating systems

Incomplete preliminary draft

February, 2001

IEA 24 Solar Procurement - Subtask B

Guide for tender

Solar heating systems

Incomplete preliminary draft

The “guide for tender” package contains documents that are intended as examples of tendering for a project within IEA task 24 Solar Procurement.

The guide contains the following documents:

Model document for tender

This document contains generic text, which could be applicable in most tenders, while paragraphs that will be specific for the specific project or country are left out.

Example documents (until now two examples):

Solar Heating Systems for Single-Family Houses.

Collector Subsystems for Large Solar Heating Systems.

In addition to the fact that the two documents have been prepared as examples of different solar heating systems, the two documents have also been prepared as examples of projects with different levels of information and specification requirements.

The document for *Large Solar Collector Systems* reflects a high level of information that is often required for large projects while the documents for *Solar Heating Systems for Single-Family Houses* reflect a lower level of information for minor and more informal projects.

Tendering documents used for actual tendering

xxxx

For comments or suggestions about the documents please contact *Klaus Ellehaug*:
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IEA Task 24, "Active Solar Procurement" evolved in 1998, with the objective of creating a sustainable, enlarged market for active solar heating systems. It will run for five years. For more information see Appendix D or the website address: <http://www.ieatask24.org>

February, 2001

IEA 24 Solar Procurement - Subtask B

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Xxxx refers to text from example documents

1 REQUEST FOR PROPOSAL

Technology procurement competition

XXXXXXXXXXXXX

A National/International technology procurement competition forming part of IEA Task 24, Solar Procurement

On behalf of the xxxxxx

And the Buyer Group xxxxxx

for IEA Task 24

1.1 Executive Summary of the request for proposal

Address

Tenders in **sealed envelopes**, clearly marked: xxxxxxxx, and addressed to

Organisation: xxxxxxxx

Attention: xxxxxxxx

Box: xxxxxxxx

Address: xxxxxxxx

Phone, Fax, e-mail xxxx, xxxx, xxxx

Deadline:

Tenders must be received no later than xxxxxxxxxx (local time).

Proposals received after the closing time will not be accepted. Proposals received by fax will be rejected.

Scope

This request for proposal deals with xxxxxxxxxxxx.

The request for proposal is part of the IEA 'Technology Procurement, Solar Heating' project (International Energy Agency, Solar Heating and Cooling, Task 24, Solar Procurement), where Sweden, Denmark, Canada, the Netherlands and Switzerland are co-operating on joint procurements of solar heating technology for a sustainable enlarged solar market.

1.2 General information

1.2.1 Project description - scope of work

xxxxxxxxxx

(Aim - site - types of systems - number of systems etc. IEA 24 Solar Procurement)

1.2.2 Delivery

xxxxxxxxxxxxx

(A more precise description of what the entrepreneur/supplier is going to deliver.)

1.2.3 IEA Solar Procurement

This request for proposal is part of an international collaboration with the objective of creating a sustainable, enlarged market for active solar heating systems. IEA Task 24, "Active Solar Procurement" evolved in 1998 and will be in force for five years. A further description is given in Appendix D.

1.2.4 The project organisation and the Buyer Group (national)

XXXXXXXXXXXX

1.2.5 Phases of the technology procurement competition

XXXXXXXXXX

1.2.6 Marketing, sales promotion and fees

XXXXXXXXXXXX

1.2.7 Advertising the technology procurement competition

XXXXXXXXXXXXXXXXXXXX

1.2.8 Qualifications for submitting entries

XXXXXXXXXXXX

1.3 Submission of tenders

1.3.1 Submission date and address

Tenders must be received by the XXXXXXXXX no later than XXXXXXXXX (local time). XXX sets of all documents, in the form of one original and two copies, shall be supplied.

Please note: Tenders received after the closing time and date will not be accepted. It is in the Tenderers' best interest to deliver their tender to the XXXX well in advance of the closing time and date.

Tenders should be submitted in **sealed envelopes**, clearly marked: XXXXXX, and addressed to

Organisation: XXXXXX
Attention: XXXXXX
Box: XXXXXX
Address: XXXXXX
Phone, Fax, e-mail XXXX, XXXX, XXXX

Also mark envelopes, wrappers etc.: XXXXXXXXXXXXX.

1.3.2 Forms to be used

XXXXXXXXXXXX

1.3.3 Information to be included

XXXXXXXXXXXX
(see forms)

1.4 Opening of tenders

XXXXXXXXXX

1.5 Evaluation

1.5.1 Who is going to select the tenders?

XXXXXXXXXX

1.5.2 How will the evaluation be done?

See chapter 3

1.5.3 Nomination of winners

XXXXXXXXXX.

1.5.4 Right to accept or reject tenders

XXXXXX

1.6 Property in the goods/system, origination rights etc.

XXXXXXXXXX

1.7 Secrecy of competition entries and development

XXXXXXXXXX.

1.8 Questions and Addenda

Please submit any questions concerning these documents in writing, to:
XXXXX, or by e-mail to XXXXX

Questions received will be collated and replied to not later than XXXXXX. All questions and answers, in Danish and in English, will be available from this date on web sites <http://XXXXXX> and www.ieatask24.org .

Any alterations required will be issued to all Tenderers as written addenda. Addenda shall be considered as an integral part of the contract documents. The Tenderer shall list in its tender all addenda that were considered when the tender was prepared.

1.9 Time plan

Competition documents (Stage 1) sent out/published	XXXXX
Submission of written questions concerning the competition documents	XXXXXX
Written replies to written questions received	XXXXXXXX
Latest date for submission of competition entries	XXXXX
Evaluation	XXXXXX
Nomination of the winner(s)	XXXXX
First deliveries	XXXXXX
Last order in this Contract	XXXXXX
Last delivery in this Contract	XXXXX

1.10 Prices

XXXXXXXX

1.11 Warranty

XXXXXXXX

1.12 General Conditions

See APPENDIX B, General Conditions of Contract

1.13 Contractual structure

XXXX

1.14 Laws

XXXXXX

1.15 Litigation (Alternative if applicable)

XXXXXXXX

2 Evaluation criteria

2.1 How will the evaluation be done?

XXXXXXXXXXXX

Detailed specifications of systems are given under "Technical specifications".

2.2 Examples of criteria:

Reliability and durability

Energy production

Installation

Costs

Aesthetics

Life cycle analysis

Energy payback time

Environmental aspects

Warranty on products/installation – insurance

Labelling EC standards

Documentation for installers/users EC standards

3 SPECIFICATIONS

3.1 Documentation

Documentation consists of:

- Test certificates
- Documents required in standards (i.e. installer instruction manual etc.)
- Specifications given in Form for submission of tender, technical description (Appendix A)
- Additional documents

The requested documentation is specified in connection with the requested specifications as given below.

3.2 General specifications and test certificate

Solar heating systems offered within these tendering procedures have to fulfil requirements according to existing or upcoming European test standards for:

- Solar Collectors
- Factory made systems (piping safety etc) and/or
- Custom built systems (piping, safety etc.)

For references to standards and test methods see section 3.

Documentation:

- Test certificates from internationally recognised test institute preferably working according to EN45001, and/or other documents stating that requirements and tests are fulfilled".
- Documents required in standards (i.e. installer instruction manual etc.)

and/or

- other documents stating that requirements and tests are fulfilled.

3.3 Additional specifications and documentation

Additional specification will be given e.g. regarding design, environmental aspects, installation, performance, cost etc

Specification and requested documentation can be given as mandatory or desired

See examples

xxxxxxx

4 STANDARDS, REFERENCES AND TESTS

4.1 General

4.1.1 Standards and tests

It is generally recommended that testing would be required according to existing or upcoming European test standards:

Solar Collectors:

- *CEN TC 312 prEN 12975-1 Thermal solar systems and components - Collectors - Part 1: General requirements*
- *CEN TC 312 prEN 12975-2 Thermal solar systems and components - Collectors - Part 2: Test methods*

Factory made systems (complete system testing):

- *CEN TC 312 prEN 12976-1 Thermal solar systems and components - Factory made systems - Part 1: General requirements*
- *CEN TC 312 prEN 12976-2 Thermal solar systems and components - Factory made systems - Part 2: Test methods*

Custom built systems (storage and control):

- *CEN TC 312 prEN 12977-1 Thermal solar systems and components - Custom built systems - Part 1: General requirements*
- *CEN TC 312 prEN 12977-2 Thermal solar systems and components - Custom built systems - Part 2: Test methods*
- *CEN TC 312 prEN 12977-3 Thermal solar systems and components - Custom built systems - Part 3: Performance characterisation of stores for solar heating systems*

The above standards are only for domestic hot water systems while standards for combined systems (space heating and domestic hot water) do not exist. In IEA task 26 Combisystems work is being carried out on characterisation of combisystems. It is recommended that user groups make use of the national participation in IEA task 26 or the national expertise on specifications for combisystems.

Specifications for domestic hot water systems can refer to the draft standards, but further specifications are needed to specify specific user wishes, products and/or installation circumstances.

APPENDIX A, Form for submission of tender
xxxxxx

APPENDIX B, General Conditions of Contract

Not included here – may be national or international well known
Conditions

APPENDIX C, Model form of framework agreement

Xxxx

APPENDIX D, IEA task 24 Solar Procurement

Introduction

A sustainable and much larger market for active solar water heating systems is necessary if the sun is to be an important source of energy for water heating in the future.

An important way to create such a market is through price reductions. This can be done from the demand and supply sides. This task focuses on the demand side via the creation of large Buyer Groups. Large volume purchasing can reduce marketing costs and stimulate innovation in the development of products with improved cost performance.

With the objective of creating a sustainable, enlarged market for active solar heating systems, IEA Task 24, "Active Solar Procurement" evolved in 1998 and will run for five years. Interested parties, such as utilities, homebuilders, and non-governmental organisations (NGOs), are invited to take part in purchasing solar water heaters.

Background

As part of the IEA, Solar Heating and Cooling Implementing Agreement Canada, Denmark, the Netherlands, Sweden and Switzerland are co-operating in Task 24 "Active Solar Procurement" on joint procurements of solar heating technology.

The Danish Energy Agency is the main financier of the (national) element of the work.

It has been noted at the international level that:

- although many countries have put a considerable amount of work into research, development and demonstration of solar heating technology there has not yet, despite this, been any significant market breakthrough. However, the work that has been carried out in these fields over many years has created a sound knowledge base for solar heating technology.
- the market for solar heating is local, and sales are generally through local contractors to a few environmentally aware buyers. Most systems are manufactured in the same country as that in which they are installed, and there are significant price differences between countries.
- today, solar heating installations are too expensive to achieve any larger scale market penetration. A considerable fraction of this cost is simply due to the high proportion of marketing input needed in order to sell just a few installations. In addition, production volumes are low, insufficient to support rational production, which also contributes to an unnecessarily high cost.

Objectives

The objective of this IEA project is to create an organised Buyer Group interest in solar heating systems. This potential market exists in the form of the Buyer Groups in each of the countries: other countries are considering joining the project. The purchasing volumes thus created create new opportunities for manufacturers to invest in more efficient production processes and to rationalise their marketing and distribution. In this way, technology procurement projects can open the way for manufacturers to find larger national or international markets.

The overall objective is to create and maintain an expanding market for solar heating systems. An important factor in any such attempt to influence the market is that the cost/performance relationship must be improved. This also includes more rational installation methods, as installation costs constitute an important part of the total cost.

Scope - Solid initial market

By pooling the market into strong buyer groups, forward-looking buyers can influence production and encourage manufacturers to use more innovative technologies to develop products, components, and systems. Through the introduction of buyer groups, a solid initial market base will be formed, which will reduce investment risks and unit costs.

This will be fulfilled through major cost and price reductions for all cost elements, including marketing and installation, as well as performance improvements by means of joint national and international purchasing. The task deals with small active solar water heaters, although large systems may also apply.

The major results of this work will be to encourage a steady growth in the solar domestic hot water (SDHW) market and to promote the evolution of the market, from being national to becoming international.

The project organisation and the Buyer Group (national)

One of the tasks of the project group is to bring together a *Buyer Group*, whose members commit themselves to the purchase, within the framework of the project, of solar collectors for larger solar heating systems.

Further information on IEA task 24 Solar Procurement

More information on solar procurement and the opportunities available together with cases of procurement projects within solar heating and within other technologies can be found on the website address:

<http://www.ieatask24.org>