Cu Copper Alliance

INITIATIVES FOR SPEEDING UP IMPLEMENTATION OF SOLAR WATER HEATING SYSTEMS

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JNNSM Target for Solar Collectors

PRESENT STATUS		
Upto 11 th Plan March 2012	60,00,000 sq. mtr.	6 million sq. mtr.
During 12 th Plan 2012 - 17	60,00,000 sq. mtr.	6 million sq. mtr.
As on 30.06.2015	89,00,000 sq. mtr.	8.9 million sq. mtr
During 13 th Plan 2017 – 22	80,00,000 sq. mtr.	6 million sq. mtr.
Total Mission Target	2,00,00,000 sq, mtr.	20 million sq. mtr.

Sample Documents & Schemes

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SCHEMES FOR SWH SYSTEMS
• MNRE Standard available for ✓ All Glass (Glass in Glass) Evacuated Solar Collector Tubes ✓ All Glass (Glass in Glass) Evacuated Tubes Solar Water Heating System ✓ Storage Water Tank for All Glass (Glass in Glass) Evacuated Tubes Solar Collector ✓ **FPC & FPC based SWH Systems**
• Issue of rating Certificate to Channel Partners for installation of Solar Water Heating Systems (SWHS) under various MNRE off-grid Solar Thermal Schemes
• Online application of Solar water Heater Installations (SOLARWHIN)
• **Installation of SWHS for institutional and Industrial sector - National Clean Energy Fund – 4,00,000 sq. mtr (Rs.108 Cr. Subsidy) within 24 months from Jan, 2014**

Speed up implementation of SWH Systems

POSSIBLE INITIATIVES FOR SWH SYSTEMS
• INDUSTRIAL APPLICATION OF SWH SYSTEMS
• ENERGY EFFICIENCY IN SWH SYSTEMS
• STANDARDISATION OF SWH SYSTEMS
• SKILLED MANPOWER FOR SWH SYSTEMS

• **SUGGESTION** : - Include one representative each from STFI & ICAI in various Policy or Project Committees which will help in
  • increasing interface with Industry;
  • faster implementation of various Government Schemes

Possible Initiatives - 1

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INDUSTRIAL APPLICATION OF SWH SYSTEMS

Objective : To Increase implementation of Solar Water Heating Systems in Industrial Applications

Methodology :

- Identification of Possible Sectors;
- Assessment of Hot water requirement in each sector;
- Feasibility of using SWH Systems technically / commercially;
- Designing of SWH Systems & methods of Interface with existing practices;
- Defining Installation, Operation & maintenance guidelines

Activities :

- Knowledge sharing, Interactive sessions;
- Pilot Projects with Industry partnership;
- Preparation of Standards, Guidelines, Manuals etc.;

Output : At least three sectors are streamlined for installation of Solar Hot Water Heating Systems for meeting their Hot Water requirements.

Possible Initiatives - 2

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ENERGY EFFICIENCY IN SWH SYSTEMS

Objective : To achieve maximum efficiency from the Systems installed / to be installed so as to maximise Solar resource

Methodology :

- Assess areas where losses could be minimised;
- Define process, materials, dimensions to minimise losses;
- Define efficiency based Testing, Inspection & Certification methodology separately for Collectors, Tanks & Systems as a whole;

Activities :

- Interactions with Industry through Seminars / Workshops;
- Documentation for efficiency based Testing, Inspection & Certification;
- Demonstrate sample standardised SWH Systems with different efficiency parameters;

Output : Efficiency levels for SWH Systems are defined together with their compliance mechanisms

Possible Initiatives - 3

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STANDARDISATION OF SWH SYSTEMS

Objective : To standardise SWH Systems both at Manufacturers end & Users end for ease of implementation

Methodology :

- Identify different methods of Standardisation of SWH Systems i.e., based on capacity / Collector size / etc.;
- Assess advantages / efficacy of each method of Standardisation;
- Define all parameters of Standardisation

Activities :

- Consultation with all stakeholders for identification of Standardisation methods;
- Documentation of Standardisation parameters;
- Dissemination of methods to all Stakeholders;

Output : To make available (as in other Products or services) a simple method of identification of SWH Systems

Possible Initiatives - 4

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SKILLED MANPOWER FOR SWH SYSTEMS

Objective : To provide sustainable system for creation of skilled manpower for (IM) Installation & Maintenance of SWH Systems

Methodology :

- Identify skill requirements for IM;
- Arrange Training Manuals for Trainers & Students for IM;
- Prepare Assessment criterion for Trainers & Students and Certification;
- Arrange methodology for Training Centre selection;

Activities :

- Prepare Training Manuals and other documents (hard & soft copies both);
- Translate in Regional Languages;
- Make available first set of Training Centres, Trainers & Students duly certified;

Output : Self sustaining system is available for creation of skilled Manpower for SWH Systems

PROJECTS

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WITH MNRE & STFI FOR SWH SYSTEMS
Objective : To take forward the Possible Initiatives
MNRE : is the Ministry driving implementation of Solar Thermal nationally; - To provide Project support with Policy and Finance; **STFI** : is national body representing Solar Thermal Industry; has carried out many activities with MNRE; - To provide necessary implementation support from Industry; **ICAI** : is a Solar Industry neutral body & not for Profit entity; has been a Project Partner with MNRE along with UNDP; - To provide support as Knowledge Partner and for coordinating activities;
Activities : Initiative – 1 Time required – 12 Months Initiative – 2 Time required – 09 Months Initiative – 3 Time required – 09 Months Initiative – 4 Time required – 18 Months
Output : Possible initiatives are completed in a time bound manner

THANK YOU

For further information may please contact

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