The Soltrain Programme and the South African Solar Thermal Technology Platform (SA-STTP)

Solar Thermal Power Seminar

CENTRE FOR RENEWABLE AND SUSTAINABLE ENERGY STUDIES

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Unite Building, Howard College Campus UKZN

UNIVERSITEIT STELLENBOSCH UNIVERSITY

science & technology Department Science and Technology REPUBLIC OF SOUTH AFRICA

NRF National Research Foundation

Eskom

sasol reaching new frontiers

AEE INTEC

financed by

Austrian Development Cooperation

SOLTRAIN

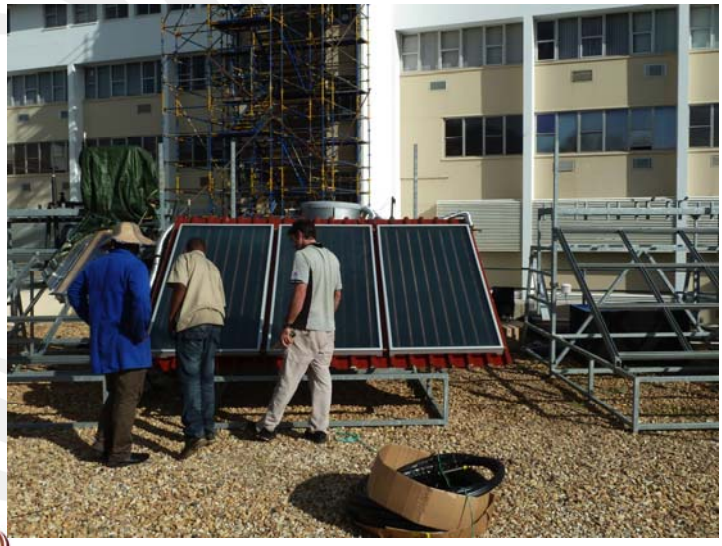
Soltrain

- Funded and supported by the ADA and AEE – INTEC
- Soltrain 1: 2009 – 2012
- Soltrain 2: 2013 – 2015
- South Africa, Mozambique, Namibia, Zimbabwe and Lesotho
- Partners - Educational institutions, renewable energy institutions and companies

Soltrain

- Focused awareness
- Centres of Competence
- Technical Training
- Solar Thermal Technology Platforms
- Flagship Demonstration Districts
- Solar thermal demonstration systems
- STTPs to produce a joint regional solar thermal technology road map

Solar roof demo system



Solar roof demo system

Training courses

Conferences

Demo Systems

financed by Austrian Development Cooperation

SA-STTP launch

financed by Austrian Development Cooperation

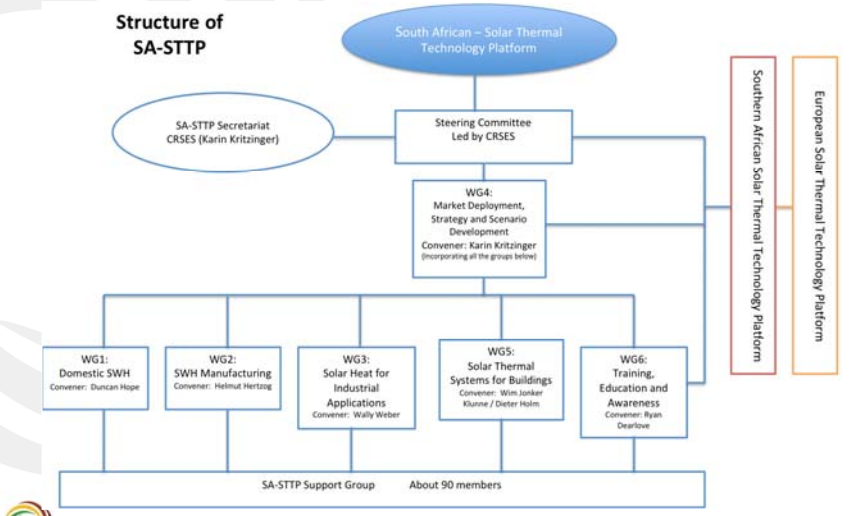
SA-STTP

- Launched on 17 May 2013
- Brings together all interested parties to;
  - Share information on technical
  - practical and
  - financial aspects of solar thermal energy
- Identify knowledge gaps and opportunities
- Mobilise institutions or individuals to do the required research
- Disseminate the results and keep record of the roll-out of solar thermal energy systems in the country
- a Southern African STTP as well as the STTP in Europe

Typical members of the SA-STTP

- Research institutions
- Academic institutions
- Training centres
- Utilities
- Government
- Industry associations
- NGOs
- Manufacturers
- Equipment suppliers
- Installers
- Regulators
- Standards organisations

Organogram



Vision

½ m^2 of solar thermal collector area per person by 2030

Mission

The South African Solar Thermal Technology Platform is a forum that brings together a wide range of stakeholders to share knowledge and information and discuss:

- awareness raising;
- market transformation; and
- research & development

and compile, through a consultative and inclusive process, a mutually agreed upon road map document in order to have a unified voice to:

- promote solar thermal technologies;
- raise awareness of these technologies; and
- pool resources

to achieve the vision.

Objectives

- Share information on technical, practical and financial barriers and opportunities to implement solar thermal energy systems.
- Identify gaps in solar thermal training at all levels (excluding schools) and address the formalisation of national solar training by working directly with relevant government and NPO structures
- Identify knowledge gaps, barriers and opportunities of solar thermal technologies.
- Mobilise institutions and/or individuals to complete awareness, research and development projects.
- Disseminate the results and information of the work of the SA-STTP as well as other information and data as it becomes available.
- Keep track of and record the data of the installed solar thermal energy systems in the country.
- Liaise with the proposed Southern African STTP as well as the European STTP and other international entities in the field.

Stakeholders

- Research institutions
- Universities and other academic institutions
- Training centres
- Utilities and IPPs
- Local and provincial government structures
- National Government
- Industry associations
- NGOs
- Manufacturers and equipment suppliers
- Other solar thermal companies such as installers
- Regulators and standards organisations
- Consumers
- Architects / City Planners / Professionals from the Built Environment
- Building Inspectors
- Any other person / institution with interest in solar thermal energy

Working Group 1

Domestic Solar Water Heaters

- Collectors, types, test and certification
- Storage of thermal energy, mainly solar geysers
- Low cost SWHs
- Localisation of SWHs and components

Working Group 2

Solar Water Heater Manufacturing

- Collectors, types, test and certification
- Localisation and industrialisation of components
- Incentive and support schemes
- Training and certification of manufacturers

Working Group 3

Solar Heat for Industrial Applications

- Large scale SWHs for commercial and industrial applications
- Process heat
- Water treatment
- Refrigeration
- Air-heating and drying
- Collectors, high efficiency and concentrating collectors
- Agricultural applications of solar heat

Working Group 4

Market Deployment, Strategy and scenario development

- Market assessment & incentive schemes
- A Solar Thermal Roadmap

Working Group 5

Solar Thermal Systems for Buildings

- Collectors
- Storage of thermal energy in buildings
- System design and performance measurements
- Applications

Working Group 6

Training, Education and Awareness

- Training and education of technical specialists, installers, etc.
- Awareness activities of SWH
- Certification of installers
- Address language barriers

Thank you