IEA TASK 45
Relevant R&D

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Large Scale Solar Thermal Plants:

• Project Development, Design
• Engineering
• Turnkey Solutions for several 1000m²
  Solar Cooling, Solar Process Heat and Cold, SDH, DHW
• Operation & Maintenance
• Finance (ESCo)
• Research & Development
- Exchange know-how in cooperation with universities and business
- Improvements to existing products and steady development of new products
- Partner and co-ordinator in national and international R&D projects

Current R&D Project Topics:
- Automated solar system control
- Solar cooling applications
- SC & SH for industrial processes
- Solar District Heating
- Solar thermal in tropical climates
- Solar Energy Contracting
250 KW Heatpump for 3.900m² SDH Plant – new

GBE Factory – new

SDH-TakeOff – ongoing

SC-Monitor - ongoing

SolarCoolingOpt - ongoing

IP-Solar www.ip-solar.com - ongoing

Automated failure detection and monitoring
Relevant R&D @ S.O.L.I.D.

- **BioSolEsco** – ongoing
- **High Combi** – Optimization efficiency SC; DEMO - ongoing
- **SOLEREA** - ongoing
- **POLYSMART** - ended 2010
- **InnoCool** - ended 2010
- **Promise Application** - ended 2010
- **ST-ESCOs** - ended 2008
Reference Plant 2011

- Sheik Zayed Desert Learning Center (UAE/Al Ain)
- Solar Cooling
- Commissioning 2011
- Cooling power 350 kW
- Collector area 1100 m²
- Expected Solar yield: 825 kWh/m²/year
World Wide biggest SC Installation

UWCSEA (Singapore)

- Solar Cooling and DHW
- Operating August 2011
- Cooling power 1.5 MW
- Collector area 4000 m²
- Expected Solar yield: 2200 MWh/year
Thank you!