

Large Scale Solar Thermal Energy Plants and Services by SOLID

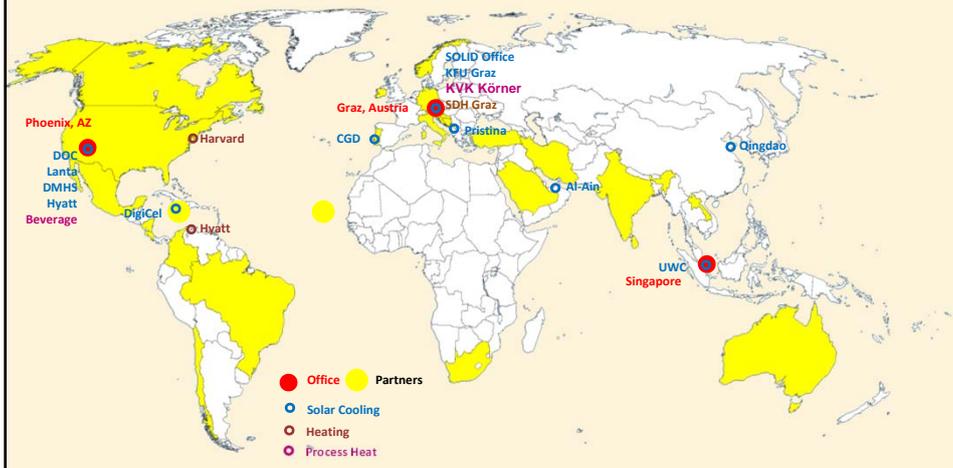
1st SDH-Conference, Malmö, 9-10th of April 2013



S.O.L.I.D. Group

Headquarter in Graz, Austria
Subsidiaries in USA & Singapore

Partners in many other countries
Recent reference plants around the world



Experiences – Solar Cooling



- More than 17,000 m² since 2003 installed by SOLID
- **Selected solar cooling plants:**

- UWC Singapore (3,900 m²)
 - Commissioning: 2011
- CGD-Building, Lisboa (1,580 m²)
 - Commissioning: 2007
- DigiCel, Jamaica (982 m²)
 - Commissioning: 2012

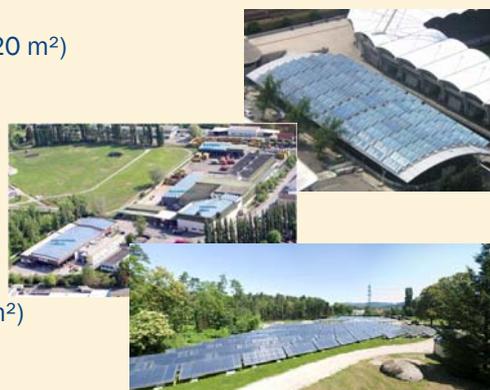


Experiences – Solar District Heating



- Approx. 24,000 m² since 1994 installed by SOLID
- **Selected SDH plants installed in Graz, Austria**

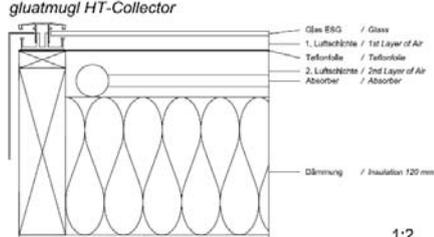
- Stadium Graz-Liebenau (1.420 m²)
 - Commissioning: 2002
- AEVG Graz (4.960 m²)
 - Commissioning: 2007
- Wasserwerk Andritz (3.855 m²)
 - Commissioning: 2009



Flate plate collector technology

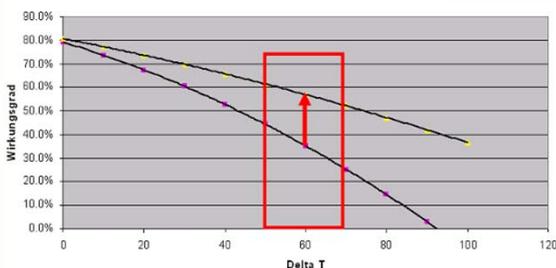


gluatmugl HT-Kollektor



SOLID gluatmugl HT-collector:

- district heating grids, solar cooling
- less heat losses through teflon foil between absorber and glass
- thicker insulation
- In the range from 70° C – 100 °C → **450 kWh/m²year in Austria, Graz**



- **10 years guarantee**
- Collector sizes up to 16 m²
- Less connections between the collectors
- Easy and fast mounting

R & D Activities



Selected current research projects

- SDHplus
- InSun
- GBE Factory
- IEA Task 45, 48 & 49



Selected finished research projects

- BioSolEsco
- High Combi
- IP Solar
- Promise Application



Thank you for your attention!



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