

Solar Thermal Air- Conditioning



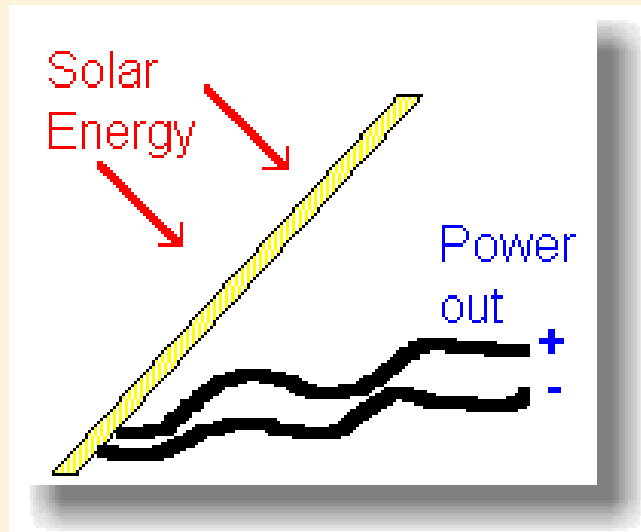
c.holter@solid.at

www.solid.at

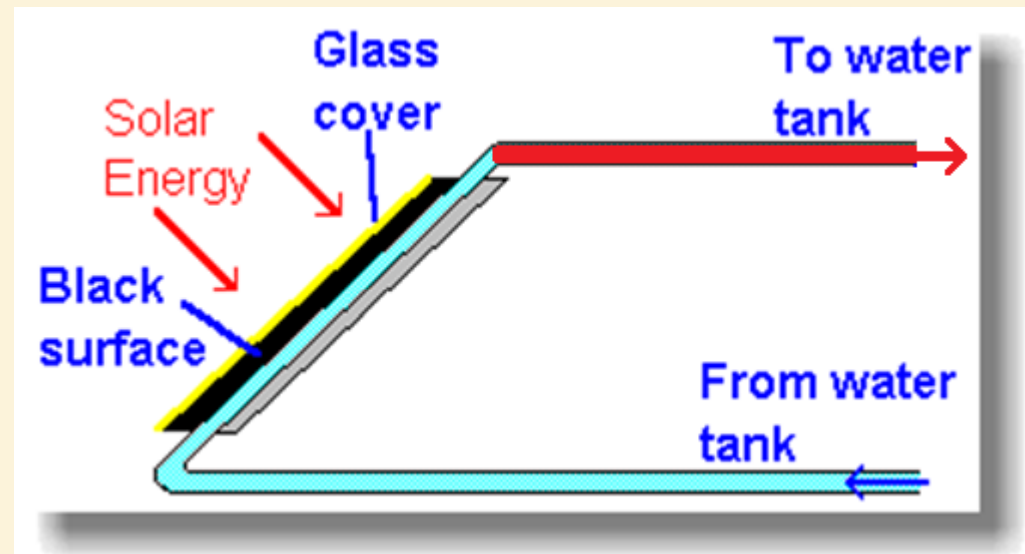
Graz, Austria, Phoenix, US, Singapore

We work on Solar THERMAL

- Solar PV (Electricity)



- Solar Heating (Heat)



Large scale solar thermal systems

- Project Development
 - Design & Engineering
 - Construction supervision
 - Operation and Maintenance
 - Project Financing
-
- Research & Development
 - Consulting, Training
 - Policy development
 - **In the Caribbean since 2004**



Caribbean- Solar Hot Water Hyatt



- Heating is often inefficient and uses fuels with complicated logistic/ high costs
- Standard hot water system in commercial scale

357 rooms, 6
restaurants, 4 bars,
Panel area: 500 m²
Storage: 4x6.5 m³

Commissioning 2012

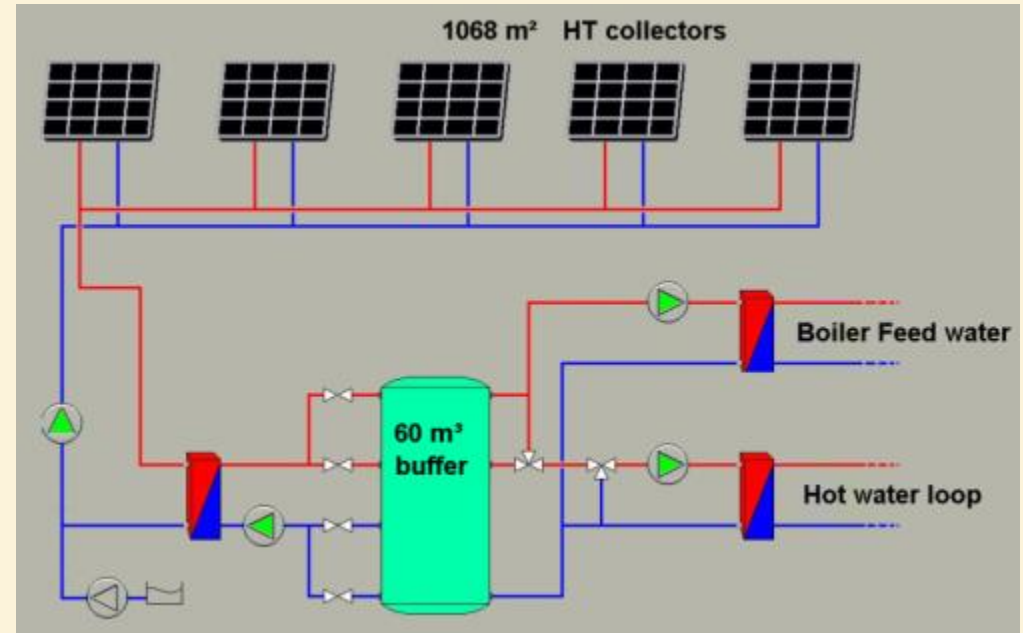
Solar Process Heat

Solar energy in industry

- Cleaning
- Pasteurization
- Drying
- Cooking
- Preheating make up water

Branches

- Beverages
- Food
- Textile
- ...and many others



Solar cooling - Digicel, Kingston, Jamaica



Office space: 13,685 m²

Solar Panels:
982 m² / 680 kW

Single stage LiBr chiller: 600 kW

Hot storage: 2 x 5.5 m³

492 MWh cooling energy per
year

In operation since 2012

Realised in partnership with
RED, Jamaica

From first call to start up in 16 months!
Energy Globe Award 2014

Starting Point

- Commercial Buildings in tropical countries need 50% -70% of their energy bill for cooling
- Hospitals, Hotels use up to 20% of their bill for hot water
- Additional cooling demand is a key driver for overloaded grids and troubles in electricity generation



Solar energy helps on that !

- Solar energy is **available** when the **highest cooling demand** is there !
- Solar energy can easily provide up to 100% of the hot water (incl. Laundry) and a big part of the air conditioning
- A one time investment with attractive financing opportunities brings **free energy for many years**
- The solar system strongly supports the independence of the facility, and smart interfaces cut down costs.

Air conditioned and hot water production with Thermal Solar System

Hospital Militar Dr. Alejandro Dávila Bolaños

