SOLAR COOLING
COOLING BY THE SUN

The market for cold supply is increasing, especially in warmer climates, but also in temperate regions.

Cold generation is very energy-intensive and has an impact on the environment. Furthermore, the power grid is more and more strained by power peaks in summer time. Solar driven cold supply uses the sun as a renewable energy source and is a chance for clean energy supply.

Keywords
- Solar thermal energy generation for cold and heat supply
- Cold supply, air-conditioning of buildings, building services
- Proved thermally driven refrigeration systems with high efficient collectors
- Natural comfort

Industrial Sectors
- Energy supply companies
- Builders, architects, real estate companies, planners of building services
- Public facilities
- Business enterprises
- House owners and private persons
### Technological specification

- Flat-plate collectors, evacuated tube collectors and concentrating collector systems
- $\text{H}_2\text{O}/\text{LiBr}$ absorption chiller with water as refrigerant for chilled water at 6 °C
- $\text{NH}_3/\text{H}_2\text{O}$ absorption chiller for temperatures of $<0$ °C
- Steam jet ejector chiller for chilled water in the temperature range of 0-15 °C
- For temperate climate: chilled water generation by free cooling
- Control system for an automated operating of solar refrigeration: Siemens S7 series 300, fully automated operation with self selecting of the operation modus

### Our service

- Project planning and design of solar thermal refrigeration plants
- Supply and sizing of plant components (chiller, collector field, heat rejection)
- Supervision of plant engineering and construction, putting in operation of the cold supply, instruction of operating staff
- Additional operational services

### Your benefit

- Reduction of energy consumption by substituting electricity by solar energy
- Reduction of operational costs
- Positive image because of the use of a renewable energy source
- Cold and heat supply guaranteed for the future