



Green Chiller Association

3rd International Conference Solar Air-Conditioning
Palermo, Sicily, Italy, 30.-09.-02.10.2009

Dr. Uli Jakob
Green Chiller – Verband für Sorptionskälte e.V.



- Green Chiller – Association for Sorption Cooling e.V., Berlin , Germany
- Formed in March 2009 as German Industry Association
- Representing around 60% of all European manufacturers of thermally driven sorption chillers in the small and medium-scale cooling capacity range
- Elected President Roland Weidner and Vice-President Dr. Uli Jakob

Green Chiller – Association for Sorption Cooling

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009



Company	Location	Profile
	Kulmbach (Germany)	Manufacturer of Ammonia/Water Absorption Chillers (30 – 500 kW)
	Westenfeld (Germany)	Manufacturer of Water/Lithium Bromide Absorption Chillers (15 – 200 kW)
	Freiburg (Germany)	Research Institute for Solar Energy Systems, Cooperation with SorTech
ILK Dresden 	Dresden (Germany)	Institut für Luft- und Kältetechnik Dresden, Developments in Cooperation with EAW and AGO
	Berlin (Germany)	Manufacturer of Water/Zeolith Adsorption Chillers (7 – 10 kW)
	Langenwang (Austria)	Manufacturer of a Ammonia/Water Absorption Chiller for SolarNext (12 kW)
	Rimsting (Germany)	System Supplier of thermally driven Absorption/ Adsorption Chillers and Cooling Kits (7 – 50 kW)
	Berlin (Germany)	Manufacturer of a Water/Lithium Bromide Absorption Chiller (10 kW)
	Halle (Germany)	Manufacturer of Water/Silica Gel (and Water/Zeolith) Adsorption Chillers (8 – 15 kW)

Founding Members of Green Chiller

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009

**InvenSor
LTC7 & HTC10
Water / Zeolith**



**SorTech
ASC08 & ASC15
Water / Silica Gel**



**Sonnenklima
Suninverse 10
Water / Lithium Bromide**



**SolarNext/Pink
chillii® PSC12
Ammonia / Water**



Adsorption and Absorption Chillers of the Green Chiller Members (small-scale capacity)

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009

EAW
Wegracal SE 15 - 200
Water / Lithium Bromide



Source: EAW

AGO
congelò 50 - 500
Ammonia / Water



Source: AGO

Absorption Chillers of the Green Chiller Members (small to medium-scale capacity)

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009



SolarNext chillii® Cooling Kit PSC12



Source: SolarNext



SolarNext chillii® Cooling Kit ISC10



Source: SolarNext

Solar/ Thermal Cooling Kits of one Green Chiller Member (small-scale capacity)

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009

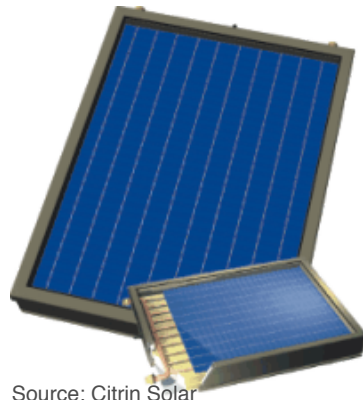


VERBAND FÜR SORPTIONSKÄLTE E.V.

Solar



Source: Tsinghua



Source: Citrin Solar

District Heating



Source: wikipedia

CHP Unit, Biomass, Process Heat etc.



Source: EC-Power



Source: ecopower

Heat Sources for Thermally Driven Cooling and Heating Systems

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009

- Lobbying of Sorption Cooling Technologies in general but especially in the Politics (Small and Medium Cooling Capacity Range)
- Promoting and Developing of the Solar and Thermal Cooling Market in Germany as well as Europe
- Increasing Awareness of Thermal Cooling Technologies (Publicity at Fairs, Conferences, Workshops, etc.)
- Standardization of Chillers/Cooling Kits as a Requirement for Funding
- Preparing of a Design Tool and Related Information on the Association's
- Website

Main Objectives of Green Chiller



VERBAND FÜR SORPTIONSKÄLTE E.V.

Green Chiller | Verband für Sorptionskälte e.V.

Germany | Deutschland
10559 Berlin
Stendaler Straße 4

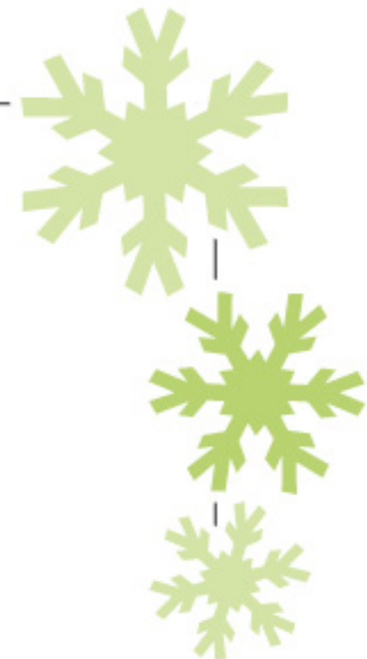
ANSPRECHPARTNER:

Roland Weidner (Vorstandsvorsitzender)

→ roland.weidner@greenchiller.de

Dr. Uli Jakob (Stellvertretender Vorstandsvorsitzender)

→ uli.jakob@greenchiller.de

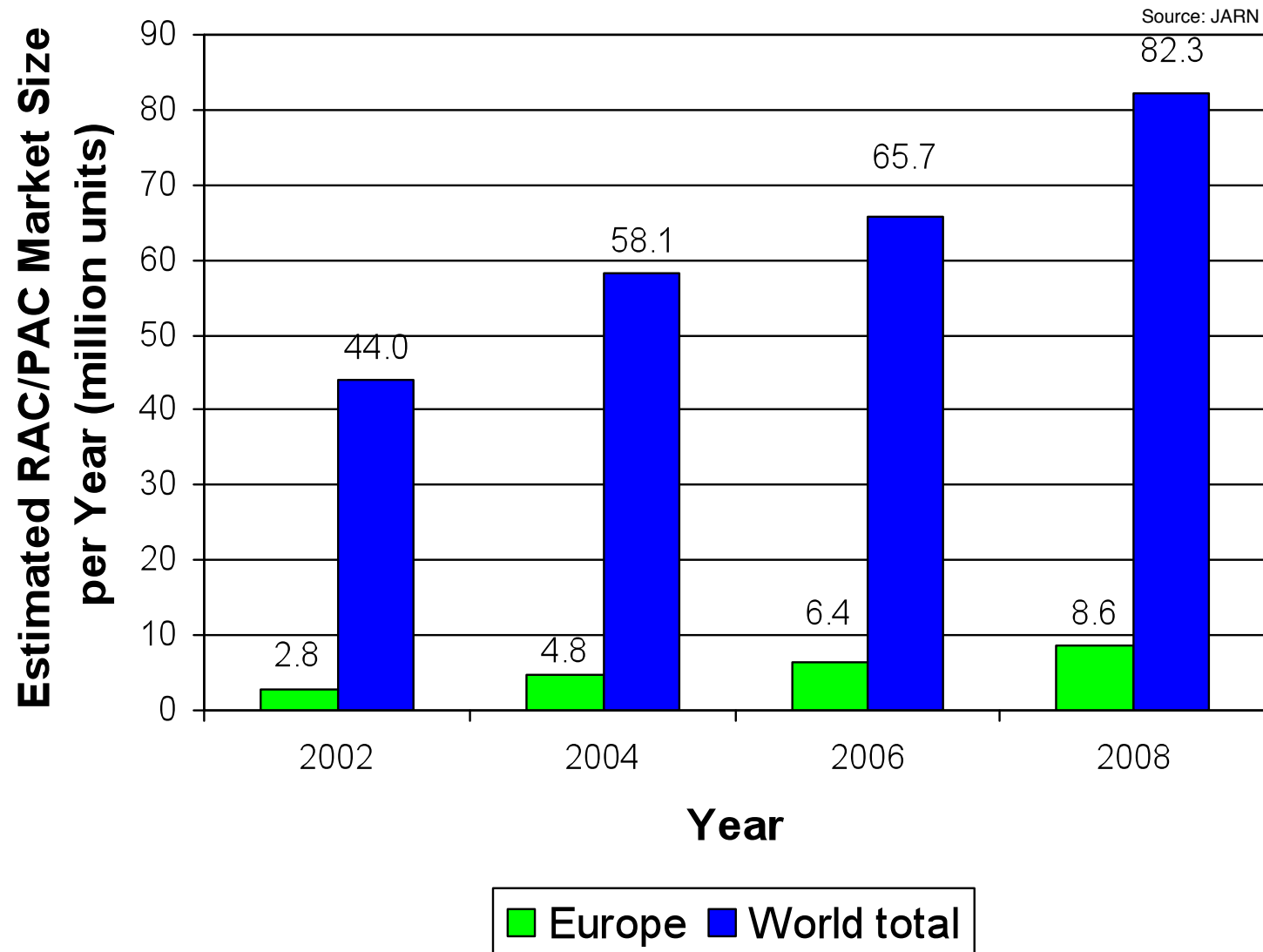


Green Chiller website

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009

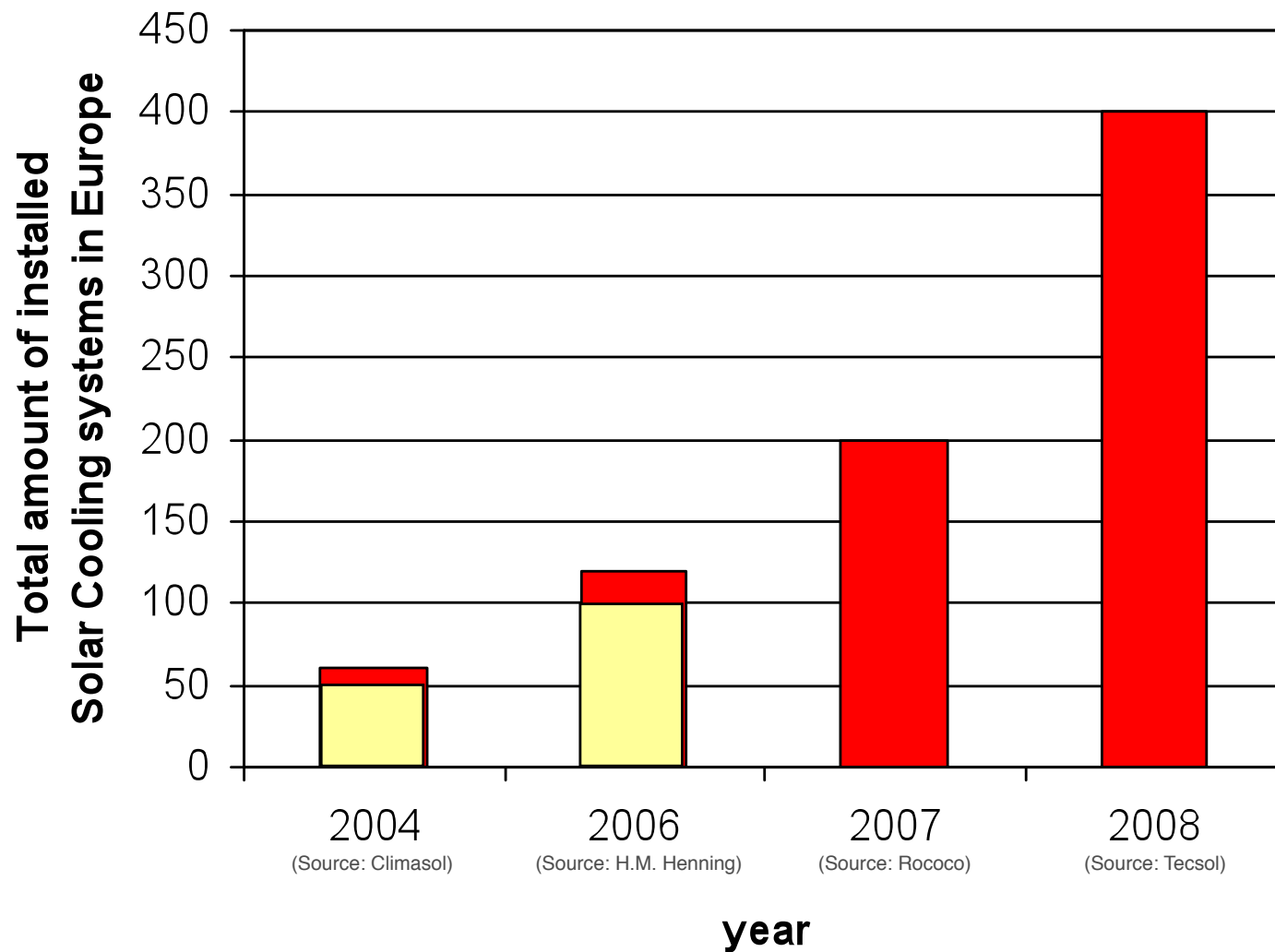


VERBAND FÜR SORPTIONSKÄLTE E.V.



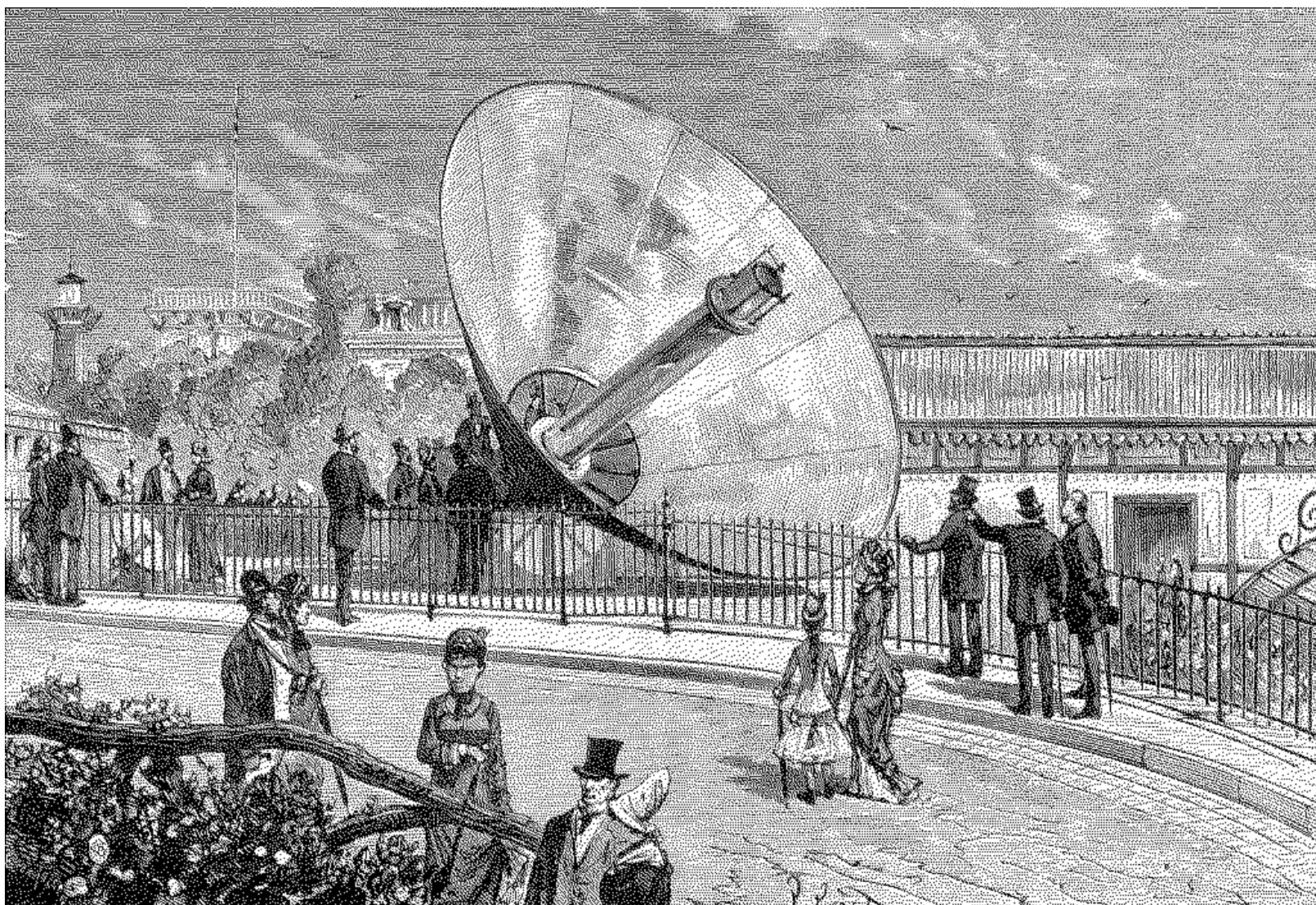
Market Situation of Conventional Air-Conditioning up to 5 kW (1.4 RT) Worldwide and Europe

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009



Solar Cooling Market in Europe

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009



World Exhibition 1878, Paris - A. Mouchot Produced the First Ice Block Through Solar Energy

© Green Chiller e.V. & SolarNext AG / 3rd International Conference Solar Air-Conditioning, Palermo, Italy / Dr. Uli Jakob – 30.09.-02.10.2009



Thank you.

Dr. Uli Jakob
Green Chiller – Verband für Sorptionskälte e.V.

www.greenchiller.de