

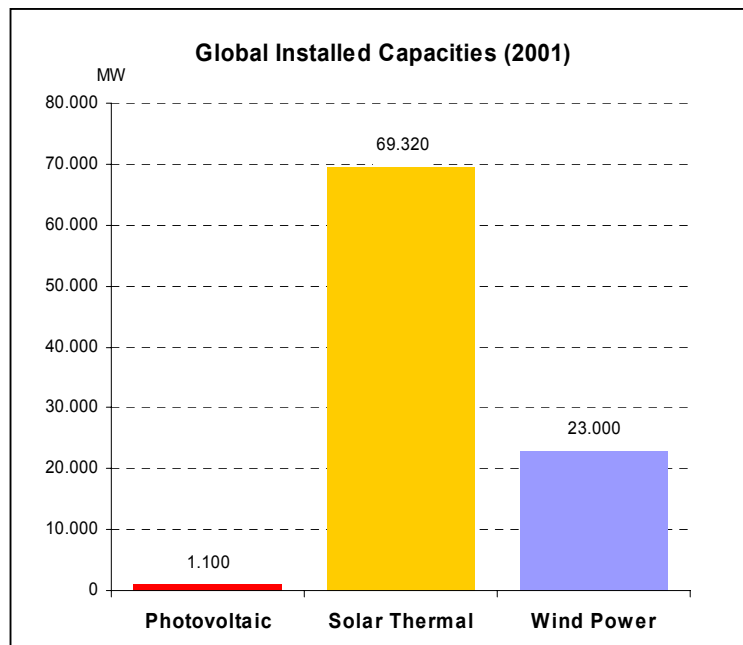
## The IEA Solar Heating and Cooling Programme and the Solar Industry agree on a common methodology to calculate the installed capacity of solar thermal collectors

The International Energy Agency's Solar Heating and Cooling Programme (IEA SHC) and several major solar thermal trade associations agreed upon a methodology to present the installed capacity of solar collectors in  $\text{GW}_{\text{th}}$ . This will make it possible to compare the installed capacity of solar thermal collectors with other renewable sources. The absence of such a methodology prevented the energy output from solar thermal collectors from being included in many official statistics on renewable energy.

The definition that was chosen is similar to that for photovoltaic modules. A detailed description of the method is given in the technical note referenced below. Because the conversion factor is nearly the same for all collector types, it was decided to use one factor that is  $0.7 \text{ kW}_{\text{th}}$  per  $\text{m}^2$  of solar collector area for all collector types.

Using this conversion factor, the installed capacity of solar thermal systems was calculated, based on the data from the IEA Solar Heating and Cooling Programme for solar thermal collectors. They are compared with the capacities of photovoltaic and wind power as published in UNDP's World Energy Assessment.

**Global Installed Capacities of different Renewable Energies in 2001**



Source: Solar Thermal from IEA SHC, PV and Wind Power from UNDP's *World Energy Assessment: Overview 2004 Update*.

## Organisations involved

This common methodology was approved at a workshop in Gleisdorf, Austria on 8 September 2004 by the following organisations:

- Austria Solar – [www.austriasolar.at](http://www.austriasolar.at)
- Bundesverband Solarindustrie, Germany (BSi) – [www.bsi-solar.de](http://www.bsi-solar.de)
- Canadian Solar Industries Association (CanSIA) – [www.cansia.ca](http://www.cansia.ca)
- European Solar Thermal Industry Federation (ESTIF) – [www.estif.org](http://www.estif.org)
- Holland Solar – [www.hollandsolar.nl](http://www.hollandsolar.nl)
- Solar Heating and Cooling Programme of the International Energy Agency (IEA SHC) – [www.iea-shc.org](http://www.iea-shc.org)
- Solar Energy Association of Sweden (SEAS) – [www.solenergiforeningen.se](http://www.solenergiforeningen.se)
- Solar Energy Industries Association, USA (SEIA) – [www.seia.org](http://www.seia.org)

## References

- Technical note: *Recommendation: Converting solar thermal collector area into installed capacity ( $m^2$  to  $kW_{th}$ )*, available from [www.iea-shc.org](http://www.iea-shc.org).
- *Solar Heating Worldwide: Markets and Contributions to the Energy Supply 2001*, IEA-SHC 2004, [www.iea-shc.org/outputs/activities/iea\\_shc\\_solar\\_heating\\_worldwide\\_2001.pdf](http://www.iea-shc.org/outputs/activities/iea_shc_solar_heating_worldwide_2001.pdf)