

The SOLPOOL Project

SOLPOOL is an international project which aims the increased use of solar thermal systems for heating the water in open air swimming pools.

Based on a detailed status quo analysis two promotion campaigns will be prepared and performed for the main target groups:

- Owners and operators of open air swimming pools
- Installers for solar systems

Promotion materials and elements will be:

- Contact Data Bases
- Flyers
- Brochures
- CD-ROM
- Impact advisor
- Workshops and Information seminars
- Information panels

Materials, tools and dates will be found under www.solpool.info

Good reasons for using solar energy for Heating Open Air Swimming Pools

- Swimming pool heating by solar thermal systems is one of the most suitable applications
- Technical solutions are mostly easy to integrate into the existing system
- Solar installations for swimming pools are less expensive than conventional heating systems
- Costs for maintenance will rise exponential in the near future

Expected Results

It is estimated that 10 % more of the outdoor pools in the participating regions will equip their pools with a solar thermal system, what means a significant improvement of the energy efficiency of the outdoor pool stock by the use of renewable energies.

Join and benefit from the SOLPOOL Project:

- Get information for technical solutions
- Find your installer in the data base
- Use the Impact advisor as planning tool
- Get support by the information panels
- Receive newsletters
- Be part of the stakeholder pool

Stakeholder Pool

To join the project's Stakeholder Pool please register on:
www.solpool.info/1798.0.html

Contact

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Notice

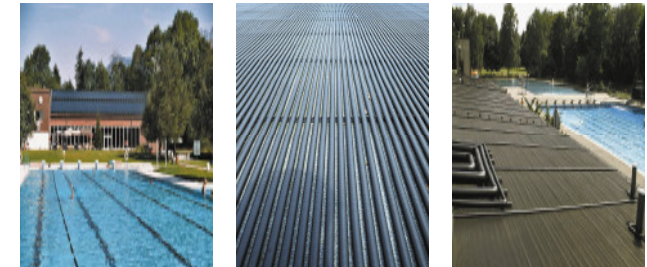
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Deutsche Gesellschaft für Sonnenenergie e.V.
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SOLPOOL

Solar Energy Use in Outdoor Swimming Pools



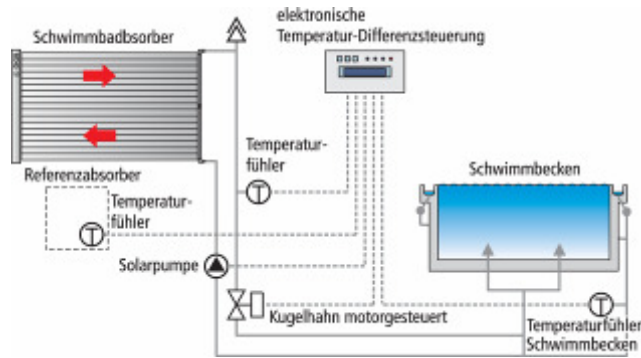
www.solpool.info

Intelligent Energy  Europe

Available solar heating systems

Short description of the most common solar thermal system for heating swimming pool water

- System scheme



- Explanation of the functioning principle:

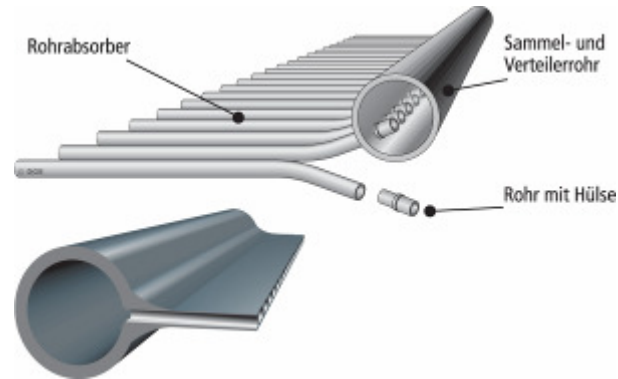
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Collector types

Most common in solar systems for heating swimming pool water are unglazed absorbers made of synthetic material. In some cases also glazed flat plate collectors may be installed.

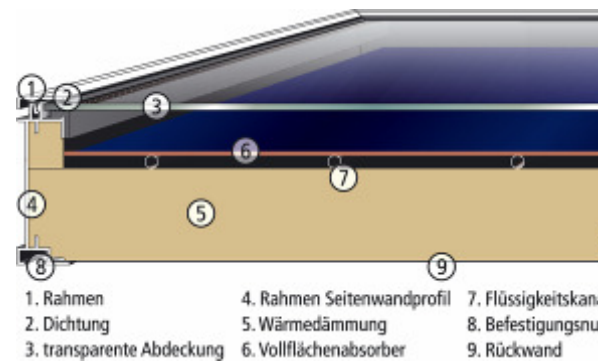
- Unglazed absorbers

Short description...



- Flat plate collectors

Short description ...



Energy gains

Dependant on the radiation conditions and used collector type specific energy gains will be reachable (kWh/m²season).

Collector type Region	Unglazed	Flat plate
Northern Germany	150	250
Middle Germany	200	300
South Germany	250	350

Environmental benefits

- Reduction of CO₂-Emission in g per kWh produced by the solar system, depending on the substituted fossil energy

Fossil Energy	Reduction of CO ₂ -Emission
Gas	249
Liquid Gas	263
Oil	303
Electricity	647
District heating	217-408 (depending on KWK)

Costs

- Specific investment costs

- Maintenance costs

	konventionelle Beheizung (Gas)	solar beheizt
Investition	36.000 €	81.800 €
Kapitalkosten	3.708 €/a	8.425 €/a
Nutzenergie	325.000 kWh/a	276.000 kWh/a
Hilfsenergie	1.625 kWh/a	5.520 kWh/a
Brennstoffbedarf	342.000 kWh/a	—
Gas- und Stromkosten	14.196 €/a	705 €/a
Wartung	715 €/a	818 €/a
Jahresgesamtkosten	18.619 €/a	9.948 €/a
Wärmepreis	0,054 €/kWh	0,036 €/kWh