

Solar Heat from Solar Specialists



Heat for Free

Environmentally aware thoughts, cost-aware actions

Our reserves of fossil fuels such as oil or coal for the production of energy are slowly but constantly becoming exhausted. In the search for new, environmentally friendly sources of energy, the sun offers the greatest potential – and it's free!

For effective utilisation of solar heat, our production in Althofen develops efficient complete systems that provide the greatest possible convenience for the user.

High-quality solar collectors, tanks and pumps make the solar systems into „energy centres“, and they will do so for years and decades.

Solar is always right. Whether for a new building, modernisation, renovation, or expansion - for any need, we have the right solar system to supply homes, swimming pools, or businesses with made-to-measure heat.



Heating – the greatest cost factor in the energy budget

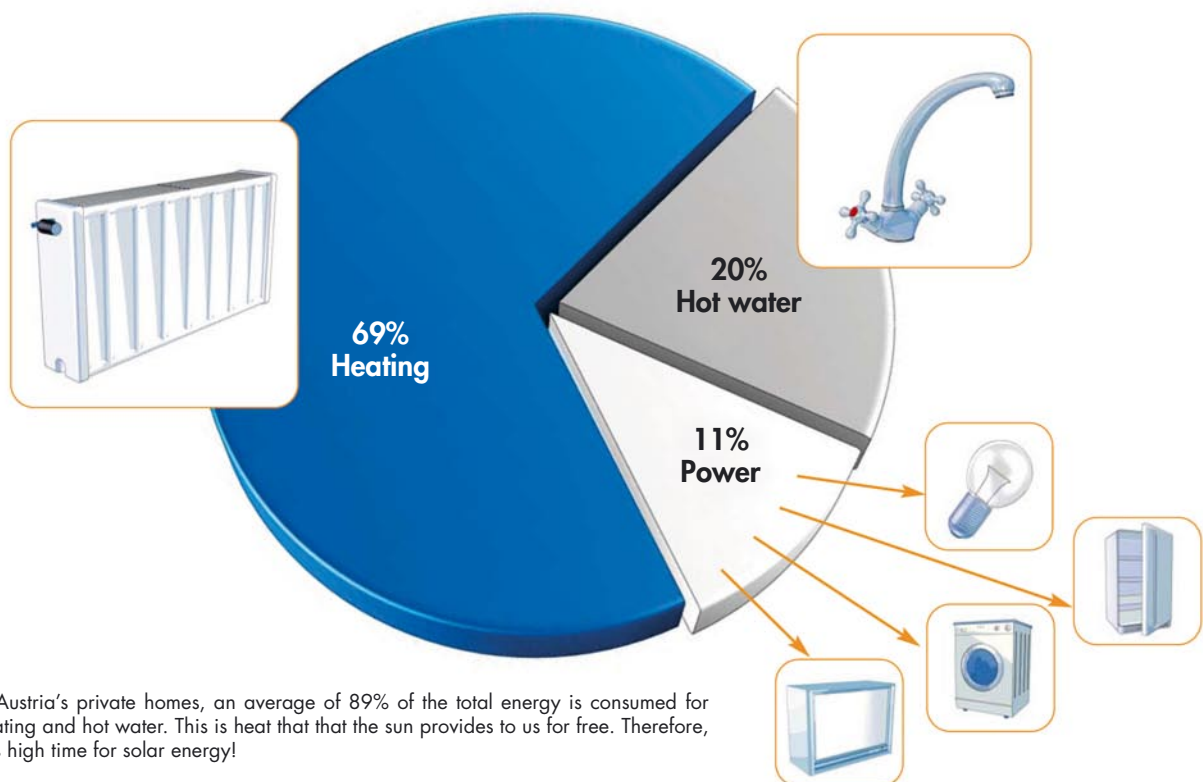


Illustration: Example using a single family home built in 1990

The energy centre on the roof: How a solar heating system works.

Solar heating systems usually consist of a solar collector on the roof, a control unit with a pump, and a well insulated hot water tank in the heating room or basement.

How a solar heating system works

| The solar system brings the sun into your hot water and your room heating.

| **Collector.** In the solar collector, coated copper plates collect the energy radiated by the sun. Under the plates, copper pipes are fastened through which a heat transfer liquid flows.

| **Controller.** If the liquid in the solar collector (a) is hotter than in the domestic water tank (b), then the controller (c) switches on the circulating pump (d). Through the heat exchanger, the heat is transferred from the heat transfer liquid to the domestic water in the storage tank. The now cooled heat transfer liquid is once again fed through the collector to collect heat. And so, the cycle continues to run without interruption.

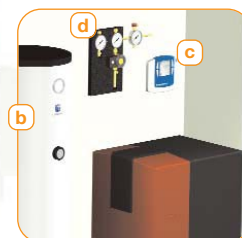
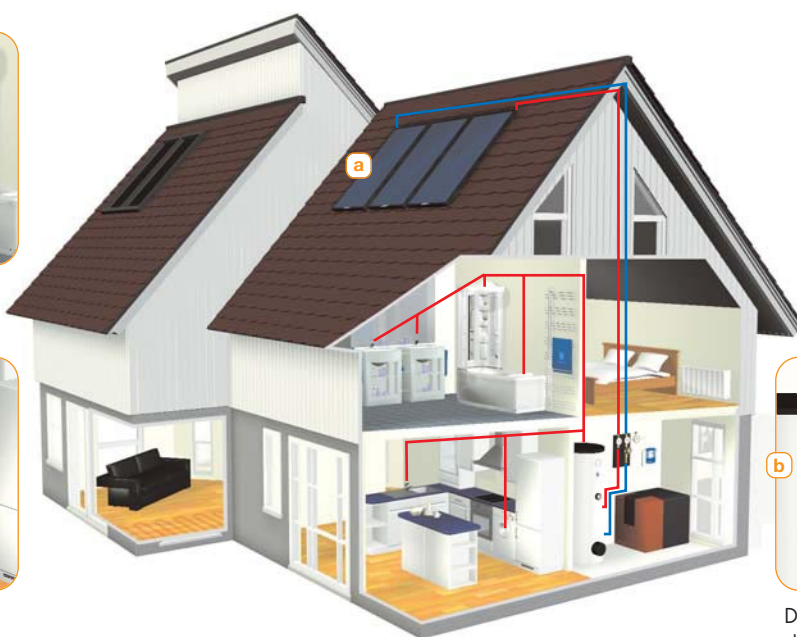
| **Storage tank.** The solar system heats the storage tank through a built-in heat exchanger. If the solar radiation is insufficient to completely heat up the storage tank, then the solar system still helps for preheating. Through this solar preheating, the connected boiler requires considerably less energy to get the storage tank up to the desired temperature. The results are considerable fuel savings and a reduced load on the environment as well.



Hot water for showering and bathing



Hot water for cooking and washing



Domestic water tank stores hot water

Solar Heat Makes Sense

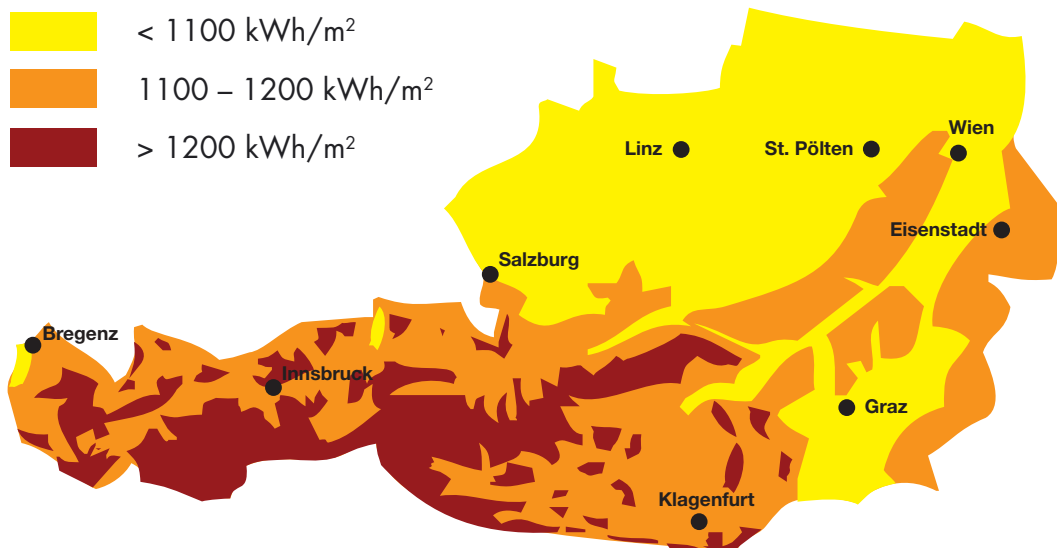
Goes easy on the environment and your wallet:

The benefits of a solar heating system

- | **Only the sun makes it free.** Use of a free source of energy. Save with the sun. More independence from oil and gas price changes
- | **Profit from the sun.** Make use of state funding for solar heating systems. (You can find the current funding rates and application forms at www.riposol.at)
- | **The sun leads the way.** Active environmental protection through CO₂-free energy utilisation.
- | **The sun will last longer.** Clean and inexhaustible source of energy.
- | **The sun is a clean source.** Savings of fossil fuels
- | **The sun adds value.** Value and image increase for the real estate.
- | **A good feeling with the sun.** Visible signs of an environmentally aware lifestyle.
- | **Whether in Vienna or Bregenz.** There is enough sun for a solar heating system anywhere in Austria.



Annual sunlight exposure in Austria



Possible uses: The "dual system" of solar heating

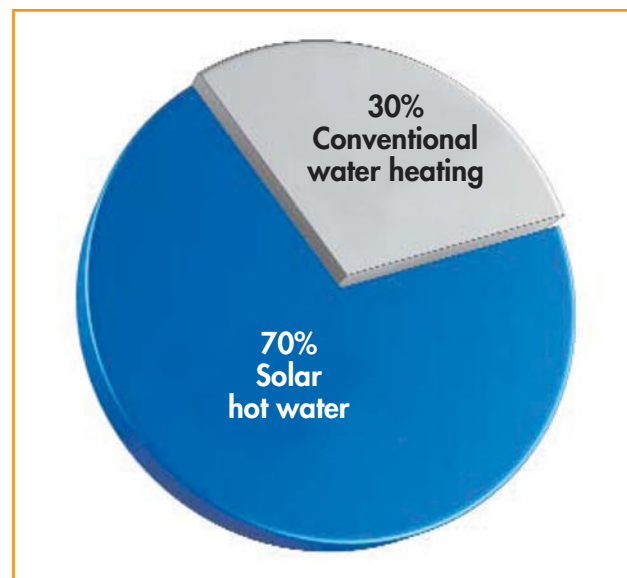
Solar heating in private homes can be used two ways: for heating domestic water (from the shower to the swimming pool) as well as for heating support.

Solar Domestic Water Heating

Solar domestic water heating has long been established as a fixed part of heat generation. Mature technology and longstanding experience facilitates carefree operation of the solar system. Domestic water heating is the simplest way to use solar heating.

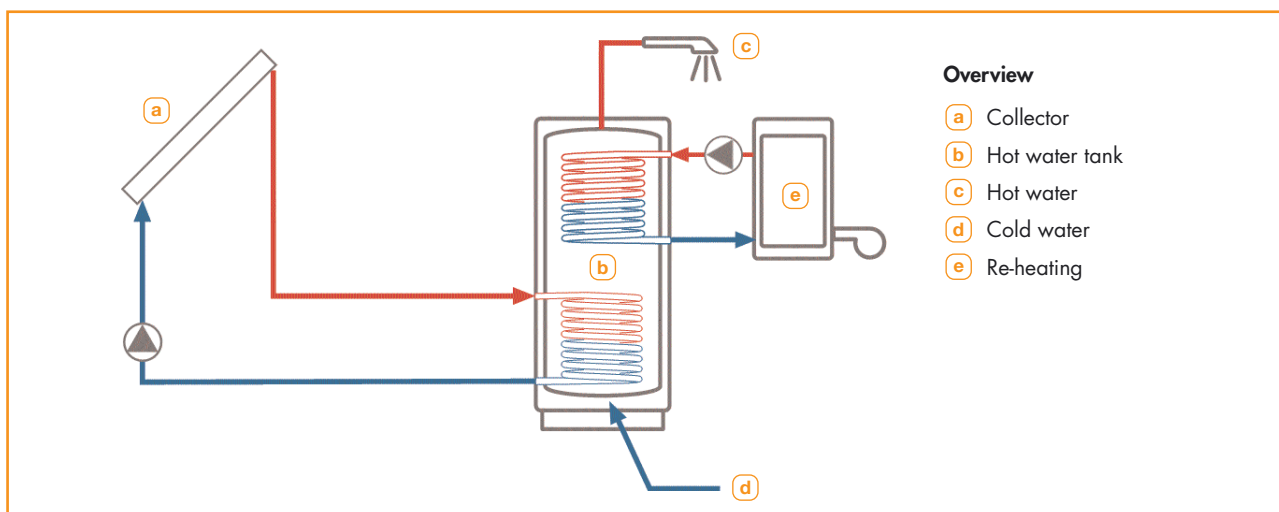


Coverage of the hot water needs of a single family home with solar heat



Benefits at a glance:

- | Suitable for any building
- | Up to 70% energy savings for domestic water heating
- | 1–2 m² collector surface area per person
- | Combinable with all common heating systems
- | Retrofitting is no problem
- | High level of convenience for hot water
- | Tried and proven and durable technology
- | Sign of environmentally aware thinking



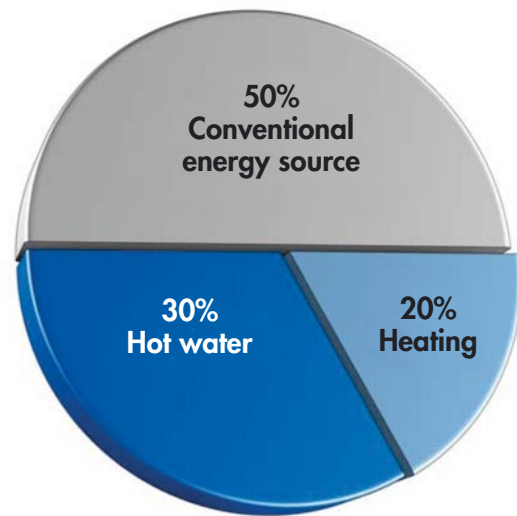
Quality that pays for itself

Solar Heating Support

Solar heating support is always worth it. The lower heat requirements in low-energy houses in combination with increasingly efficient solar systems lead to savings of total heating needs of up to 50%. However, even existing systems can be retrofitted for solar support, mostly without much effort. That way, a great deal of heating oil or natural gas can be saved.

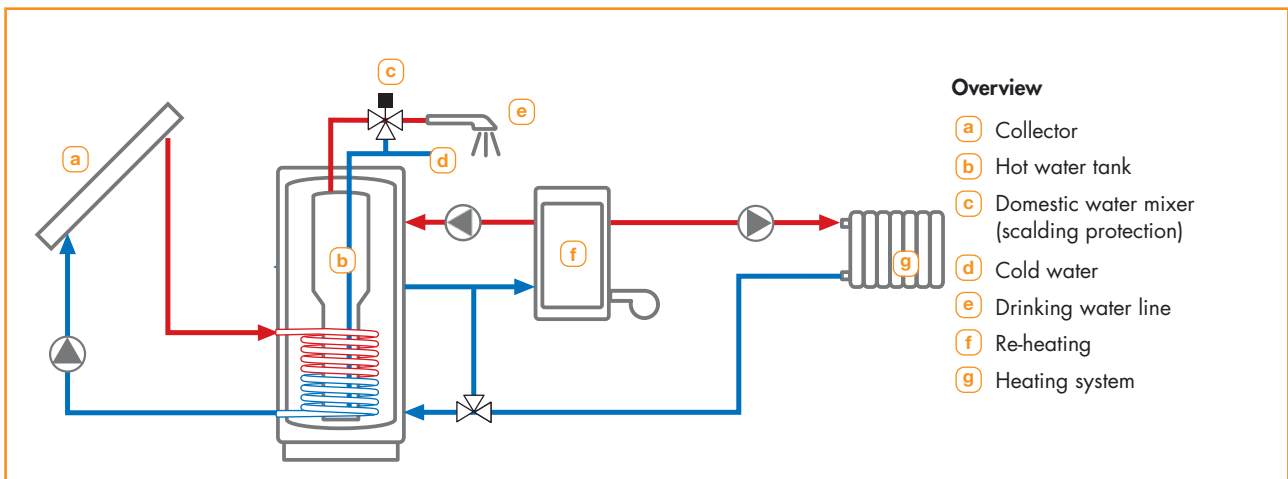


Solar system's share of total heating requirements for heating support



Benefits at a glance:

- | Up to 50% of the total heating requirements for a building can be generated by a standard solar system
- | 10–20m² collector surface area
- | Combinable with all common heating systems
- | A great variety of applications
- | Space-saving combo-tank possible
- | Fast and easy to retrofit
- | Tried and proven and durable technology



Quality that pays for itself

Solar heating systems with the highest quality right from the start: Our many years of know-how guarantee the high durability and long service life of the individual products.

P and I Series: Flat collectors for any use

The flat collector series are manufactured in Austria with the use of the most modern production methods. In order to guarantee constantly high processing quality, strict quality checks are conducted continuously. It is ultimately important to us in product development to make optimum use of materials and to have product characteristics

that are made-to-measure for the customer's requirements. All products are designed for a long service life and easy assembly.



In the original collector connection on the long side on the top side.



In the original collector connection on the short side on the top side.

P Series

The P Series consists of two different collector sizes: the P 2100 with 2.11 m² of gross surface area and the P 3000 with 2.75 m² of gross surface area.

Range of applications of the P Series:

- | Solar domestic water heating
- | Solar heating support
- | Solar swimming pool heating
- | New buildings, old buildings, renovations
- | Installation: roof mounted / all types of roofs
flat roof / all types of roofs
upright format, crosswise format

I Series

The I Series consists of three collector models: the I 2000, which was developed as a pure kit collector, and the two in-roof collectors I 2000 AL with an aluminium frame and the I 2000 HR with a wooden frame and a hard fibreboard back panel.

Range of applications of the I Series:

- | Solar domestic water heating
- | Solar heating support
- | New buildings, old buildings, renovations
- | Installation: in-roof, upright format

	P 2100	I 2000 AL
Dimensions (WxHxD)	1035 x 2035 x 103 mm	1015 x 2140 x 115 mm
Collector surface area	2.1 m ²	2.04 m ²
Aperture area	1.87 m ²	1.87 m ²
Weight	48 kg	48 kg
Collector frame	Aluminium frame, brown anodised	Aluminium frame, grey anodised
Glass	Solar safety glass, 4 mm	Solar safety glass, 4 mm
Absorber coating	Highly-selective blue	Highly-selective blue
Range of applications¹	Dw, DwHs, Ph	Dw, DwHs, Ph1

¹ Domestic water systems (Dw); Heating supporting systems (DwHs); Process heat (Ph)

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