

**no. Solar hot water system**

Solar hot water systems are used as an alternative to more conventional electric or gas storage systems. They use energy from the sun to heat water that is used for a range of purposes within buildings.

The system consists of two flat plate collectors, a storage tank, and associated plumbing and electrical components, suitable for a one-family dwelling. The water is pumped from the storage tank to the collectors, where it is passed through thin tubes to be heated by direct solar radiation. Heated water is then stored in the storage tank until it is needed.

The flat plate collectors consist of an insulated steel absorber plate, encased in an aluminium frame and toughened glass. The storage tank is manufactured from steel and aluminium alloy and is insulated with polyurethane foam.

**Category** *Miscellaneous*

**Type** *Other ferrous metals*

**Functional unit** *no.*

**Common uses**  
*Water heating*

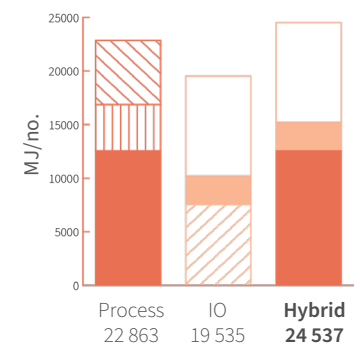
**Process name**  
*Solar system, flat plate collector, one-family house, hot water/CH/U/AusSD U*

**Input-output sector**  
*Domestic Appliance Manufacturing*

**Further information**  
*doi.org/10.26188/5da557a8720ed*

**TOP THREE INPUTS**

- 4.5%** Propylene glycol, liquid, at plant/RER U/AusSD U
- 4.1%** Road Transport
- 2.2%** Wholesale Trade

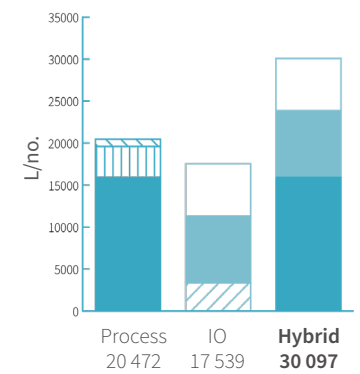


**ENERGY**

**24 537 MJ/no.**

**TOP THREE INPUTS**

- 10.4%** Propylene glycol, liquid, at plant/RER U/AusSD U
- 3.0%** Wholesale Trade
- 1.7%** Tube insulation, elastomere, at plant/DE U/AusSD U

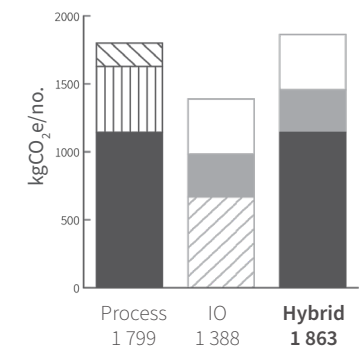


**WATER**

**30 097 L/no.**

**TOP THREE INPUTS**

- 3.7%** Propylene glycol, liquid, at plant/RER U/AusSD U
- 1.9%** Wholesale Trade
- 1.7%** Road Transport



**GREENHOUSE GAS EMISSIONS**

**1 863 kgCO<sub>2</sub>e/no.**