

Shower  
with  
heat  
recovery.

joulia<sup>®</sup>  
SWITZERLAND

Over  
**60%**  
profit!

Effective measure  
against **global warming:**

# Taking a warm shower...

with the new Joulia-Twinline.



joulia<sup>®</sup> twinline  
SWITZERLAND

Certified by:

kiwa



SVGW  
SSIGE

WRAS  
APPROVED PRODUCT

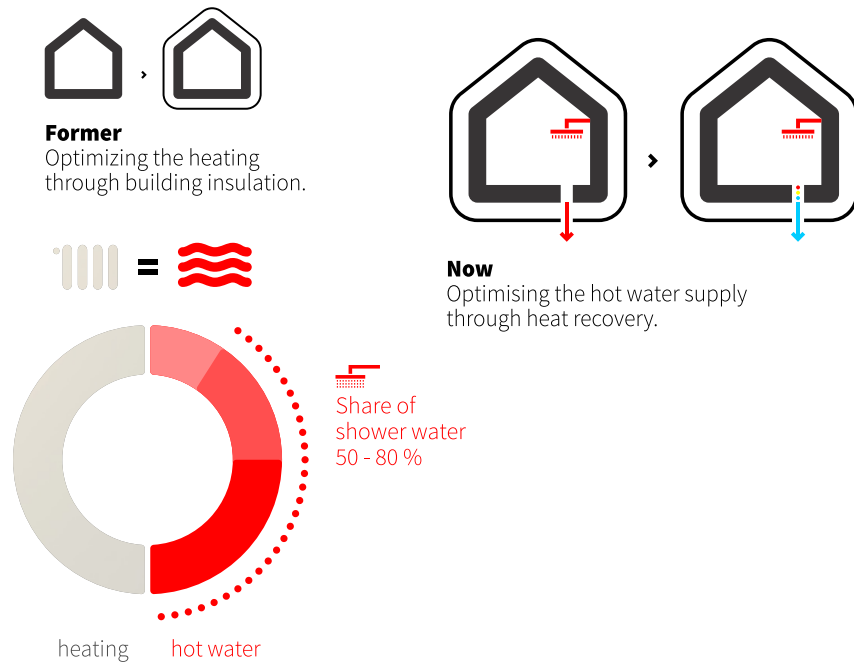
# The Problem

In modern buildings, hot water already requires **the same amount of energy** as the entire heating system.

And after only two seconds of use, we flush this valuable heat energy down into the sewer system.

We at Joulia thought much too bad and developed a simple technology for drain water heat recovery (**DWHR**), which works very efficiently and reliably without moving parts or complex controls

Joulia's heat recovery system thus provides **more efficiency and comfort** while **lowering the cost** of energy and the entire hot water infrastructure.

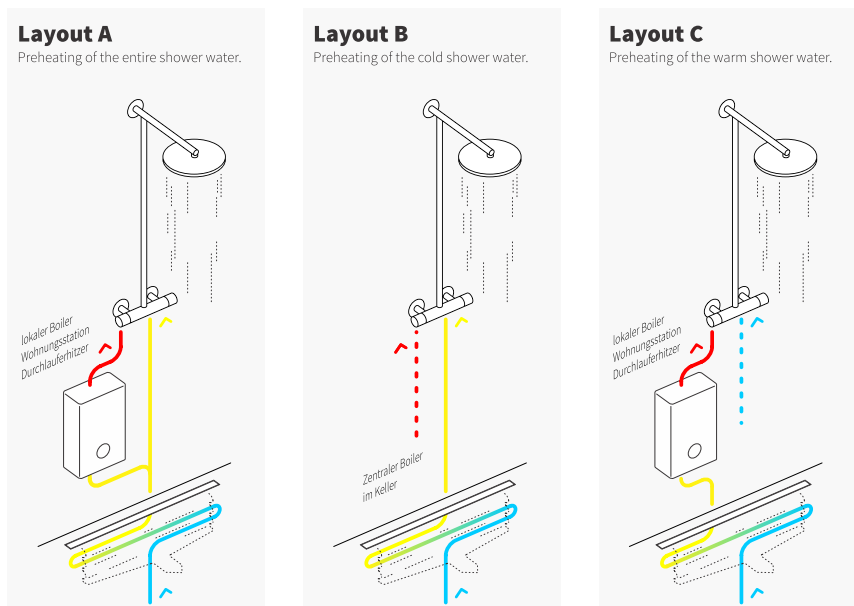


# Small detour - big effect

Instead of flushing the heat directly into the sewer system, **Joulia's shower drains** have a **double-walled heat exchanger** which extracts the heat from the waste water and thus heats the cold fresh water.

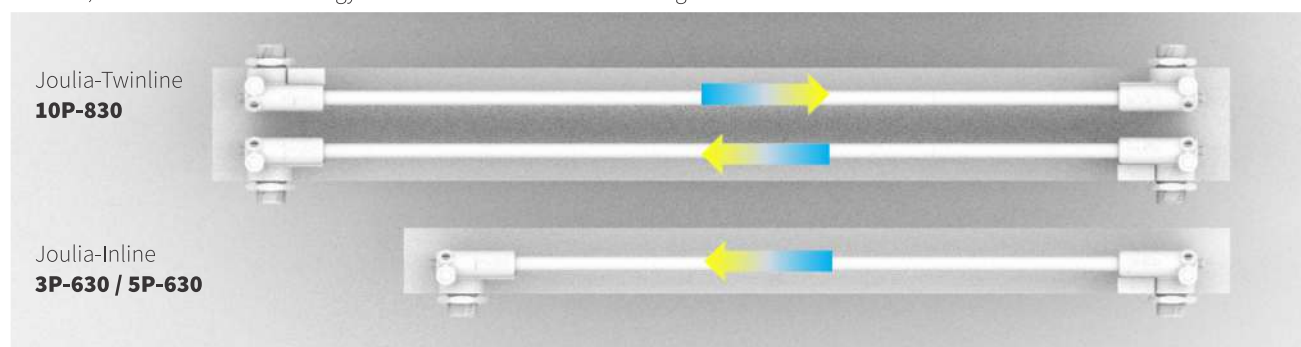
This efficient preheating means that much less hot water has to be added to the mixer tap later, **which saves up to 60% energy and money.**

Joulia's shower channels with heat recovery can be combined with all types of hot water production systems, allowing **decentralised systems** to perform even more efficient.

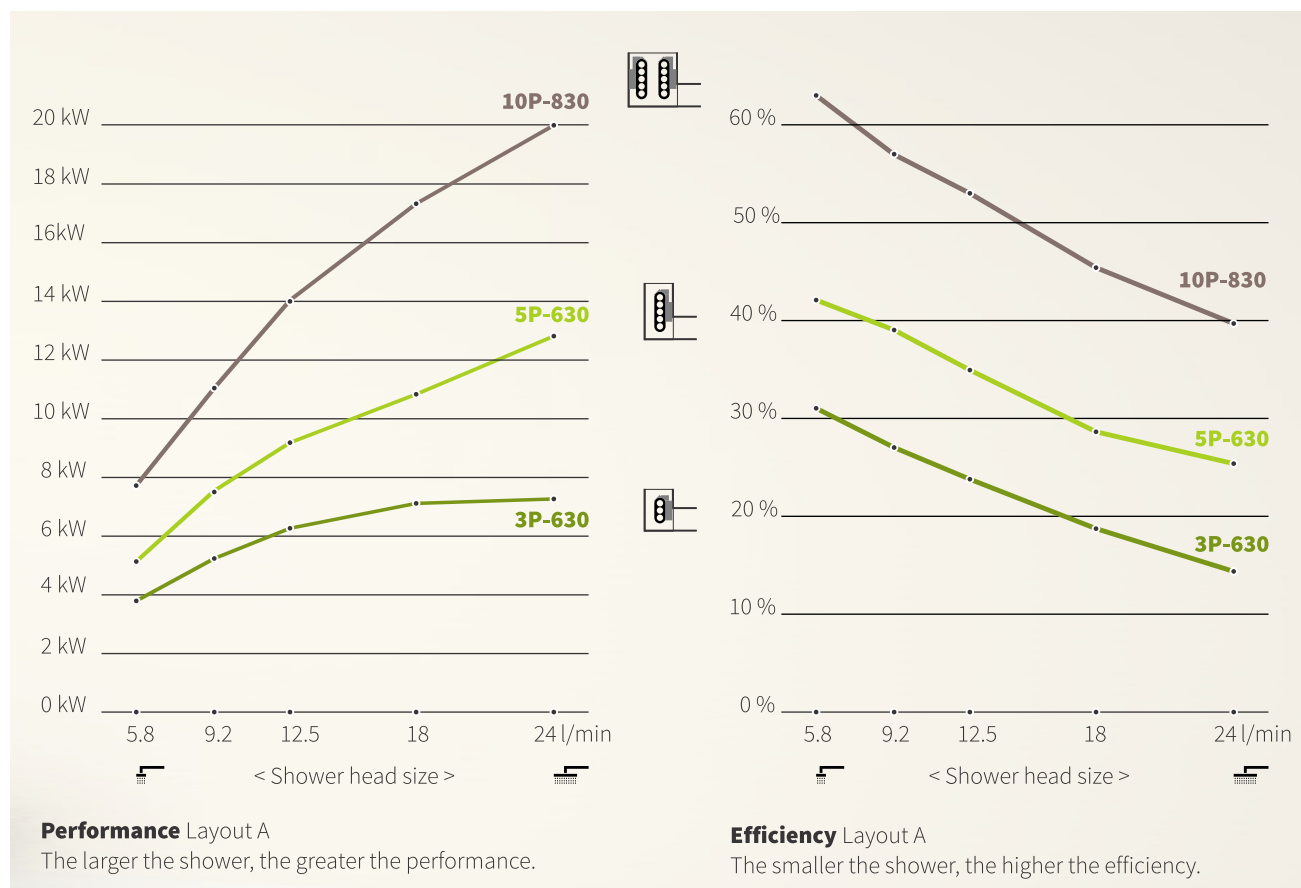


# The solution: the double heat exchanger

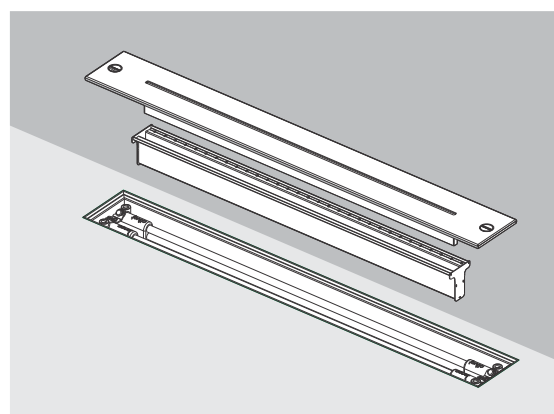
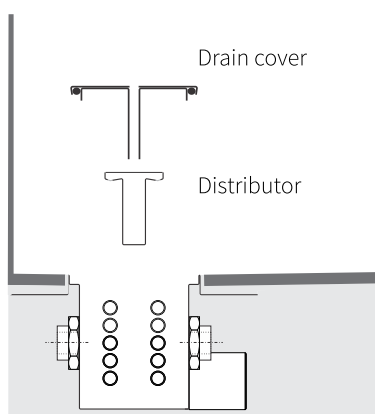
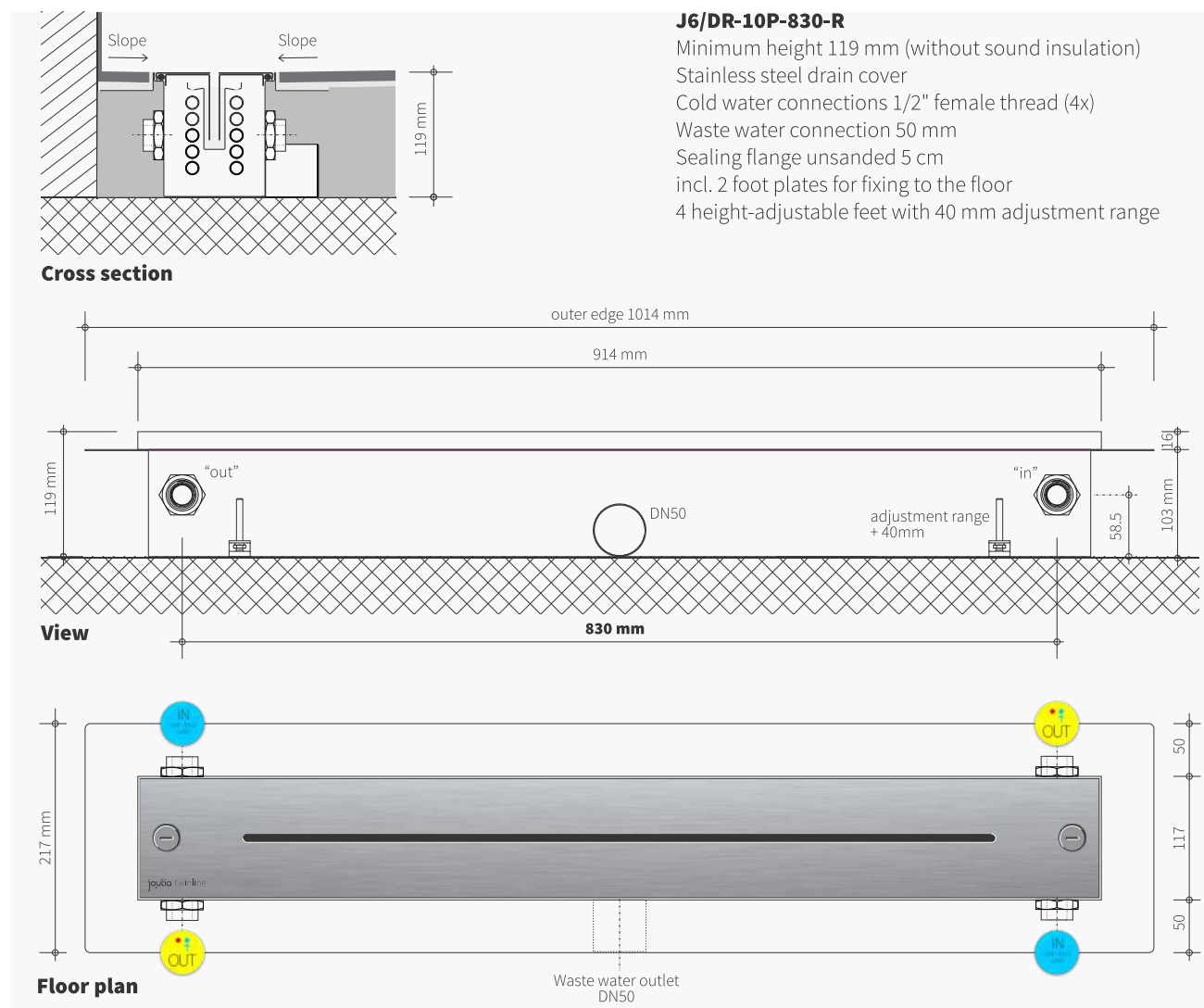
As energy efficiency is playing an increasingly important role, Joulia's heat recovery system is now available in a double version! **Joulia-Twinline** is the name of the new product generation and offers efficiency values of over 60% for small showers and a heat exchanger performance of 20 kW for large showers! Thanks to this powerful heat recovery system, hot water preparation is extremely relieved, as not even half the energy is needed for the same showering comfort!



## Performance & Efficiency



# Shower drain Joulia-Twinline



# Thanks to Joulia's heat recovery easier to the **MINERGIE®** label.

## New reduction measure in the hot water sector:

The calculation of the Minergie index is made up of the four requirement components of weighted final energy: Heating, hot water, lighting and operating equipment..

## Domestic hot water now accounts for half or more of the heat energy requirements of new Minergie buildings.

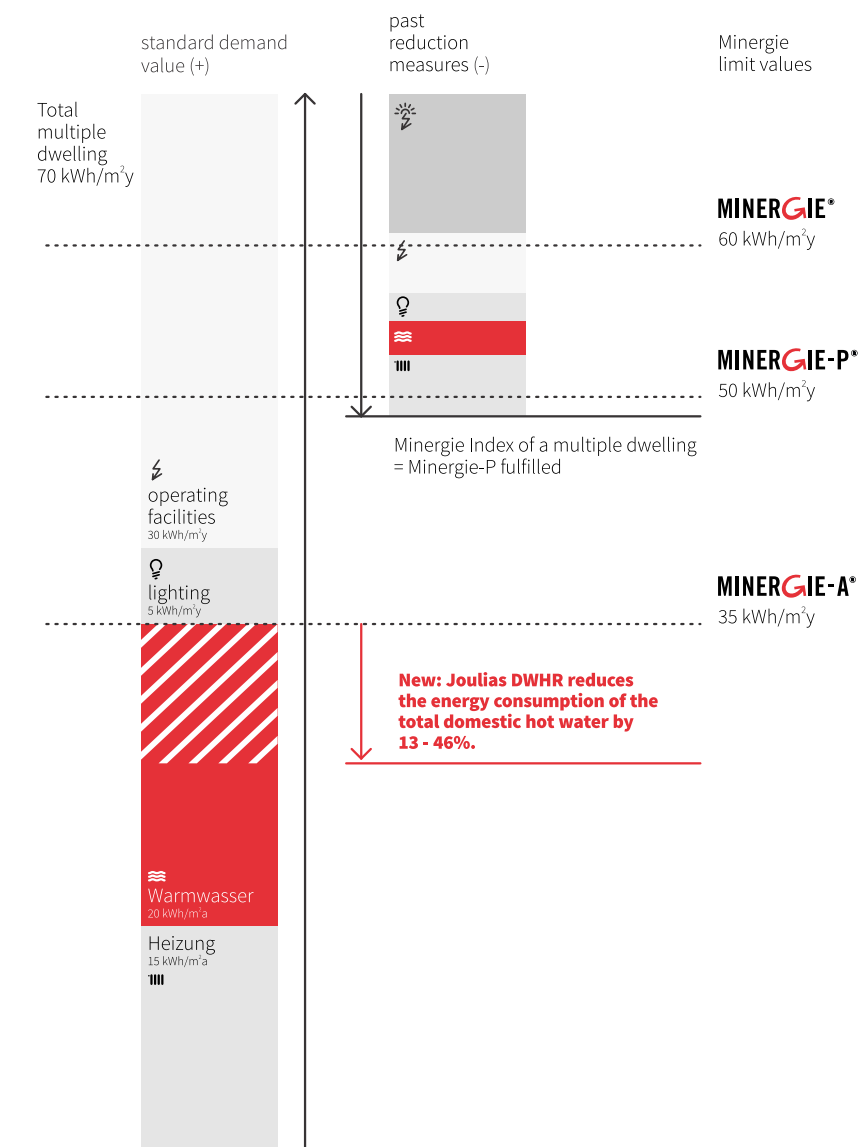
Up to now, there have only been possibilities for optimisation by the installation of "tap fittings» with an energy efficiency label A and a optimisation of the warming of the hot water distribution.  
> max. 10% reduction potential for each measure.

Thanks to Joulia's DWHR, a third option is now available, which can **save between 13 - 46% of the energy of the total domestic hot water.**

## Easier to the Minergie label:

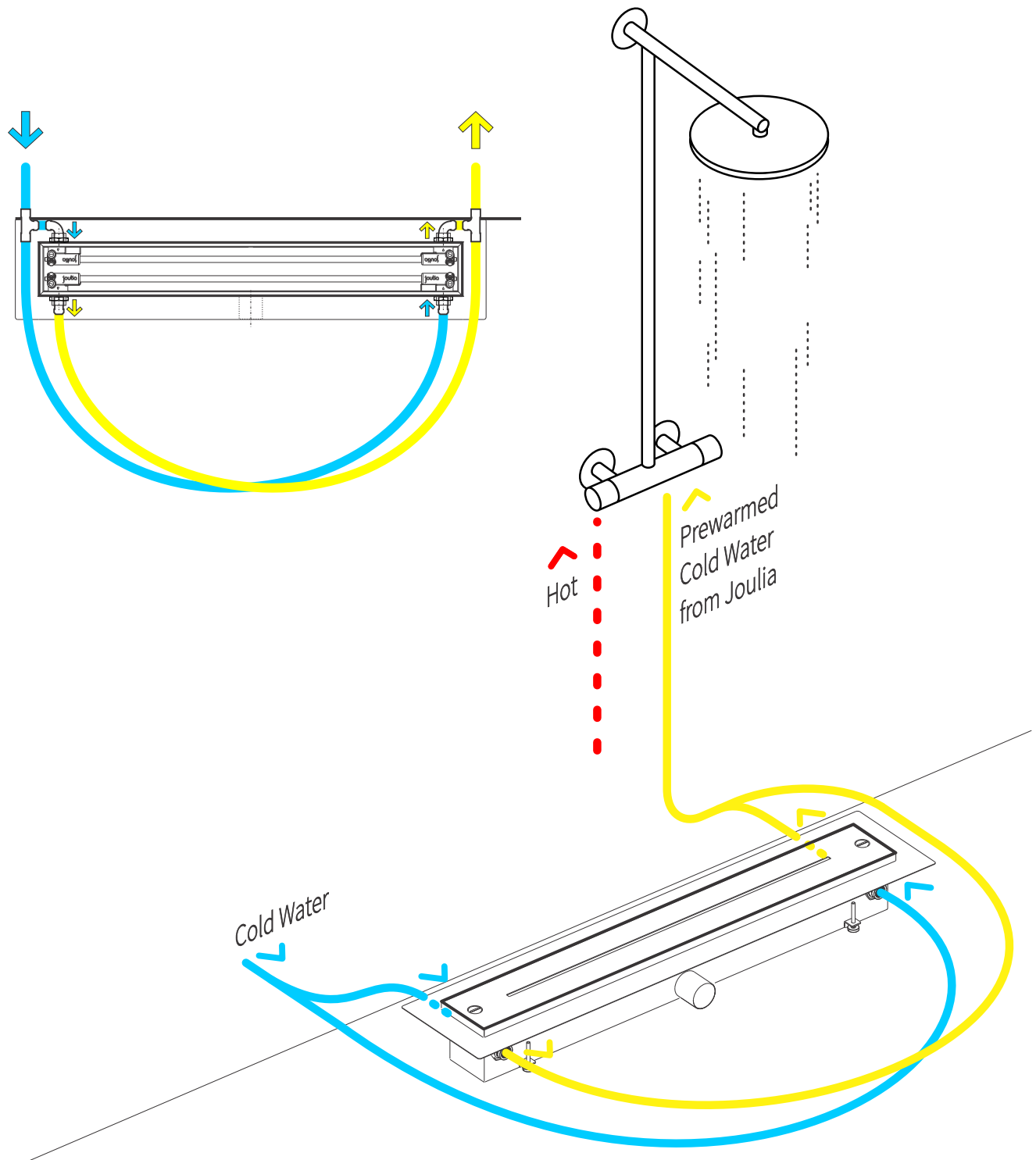
This further reduction measure makes it easier to achieve the targeted Minergie labels. In the case of Minergie-A, this also reduces the Minergie index, which must be compensated with PV. In this case, the owner saves in three ways:

- **Hot water preparation can be designed smaller.**  
> break the inefficient peaks.
- **lower running costs** for unproduced hot water
- **Reduction of the PV system**



The figure above shows schematically, using the example of a new multi-family house, how the four demand components are combined to form the standard demand value and how the effective planning value of the Minergie indicator is obtained by deducting the reduction measures, which then has to satisfy the targeted Minergie limit value.

# Connection Diagram Joulia-Twinline



Sketch 1:1

