



SOLAR  **HYDRO**
SOLUTIONS

*Keeping homes healthy
and warm for a fraction
of the running cost!*

 **SMART
SYSTEMS**



Solar/Hydro is a designed solar energy and heating solution that combines photovoltaic (PV) solar panels with hydronic heating.

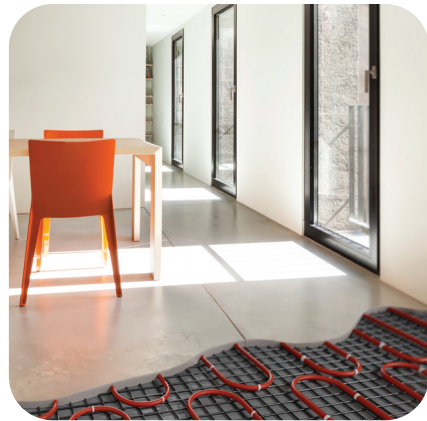
PV solar panels convert the sun's energy into electrical energy, which can be used to power your home. They can also be connected to the grid, allowing you to sell any excess energy back to the power company.

Hydronic heating uses water to transfer heat energy. The water is heated by a hydronic heat pump and then circulated through a series of pipes in your concrete slab to heat your whole home.

Smart System hydronic heat pumps are 3-4 times more energy efficient than standard electric heating.

When PV solar panels and hydronic heating are combined, they create an efficient and sustainable heating and power system for your home that runs at a fraction of the standard cost.

The hydronic heating system can also be used to heat domestic hot water, further reducing energy consumption.



Solar/Hydro solutions are whole home ecosystems of solar energy production and energy efficient hydronic heating for central heating and hot water.

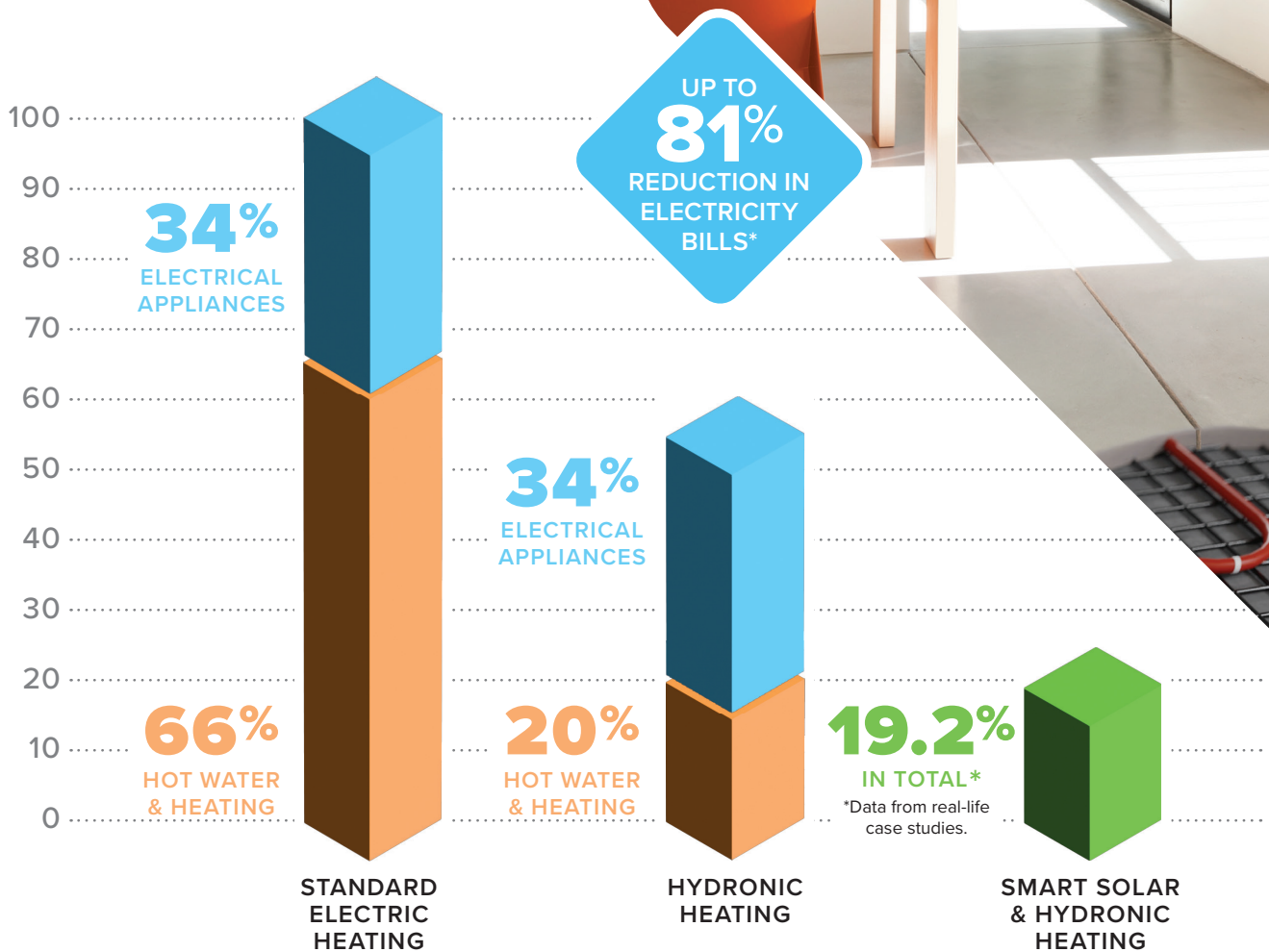
Vastly reduce household electricity bills with Solar/Hydro - tailored Smart Solar and hydronic central heating.

Keep your home healthy and warm for a fraction of the running costs, and minimal environmental impact!

On average, heating and hot water make up 2/3's of a household's annual electricity bill.

Smart System's hydronic heat pumps only require a quarter to a third of the electrical energy to get the same heat output reducing the overall annual bill by almost a half.

When hydronic heating is combined with photovoltaic (PV) solar panels, in a designed Solar/Hydro solution, your whole home stays healthy and warm for a fraction of the running cost.



*Based on data from real-life NZ case studies

Solar power can also be used in:

BATTERIES AND EV

Store excess energy into residential and EV batteries, further reducing grid power.

HEAT RECOVERY AND VENTILATION

Heat recovery and ventilation (HRV) systems provide efficient ventilation while minimizing the loss of heat. They keep indoor air fresh and healthy without wasting energy by letting warm air escape. Use HRV systems with solar power and hydronic heating, to create an energy-efficient home that is warm and healthy.



In addition, hydronic heating can also be used in:

RADIATORS

For homes with wooden floors, water heated radiators provide extremely comfortable heat.

HIGH WALL AND FLOOR STANDING HEAT PUMPS

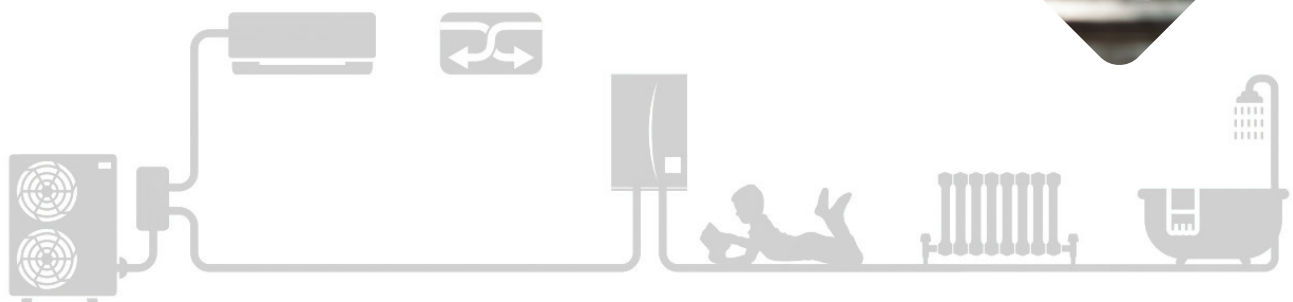
Bring the immediacy of heating and cooling into your home in the most energy efficient way.

DUCTED HEAT PUMP

Be warm all winter and sleep comfortably and cool during hot summer nights with discrete ducted air.

POOLS AND SPAS

Keep your pool at a comfortable temperature, year-round, without costing the earth.



For design and quote, and more information contact Smart Systems
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