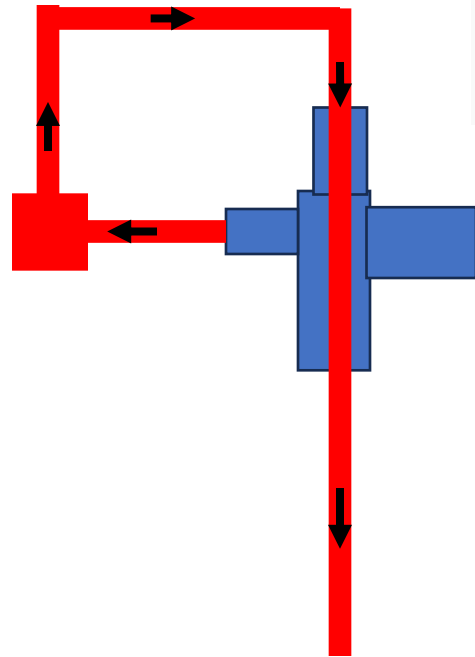


A new invention – A retrofit device to convert existing hot water tanks into low cost heat stores.



Pump

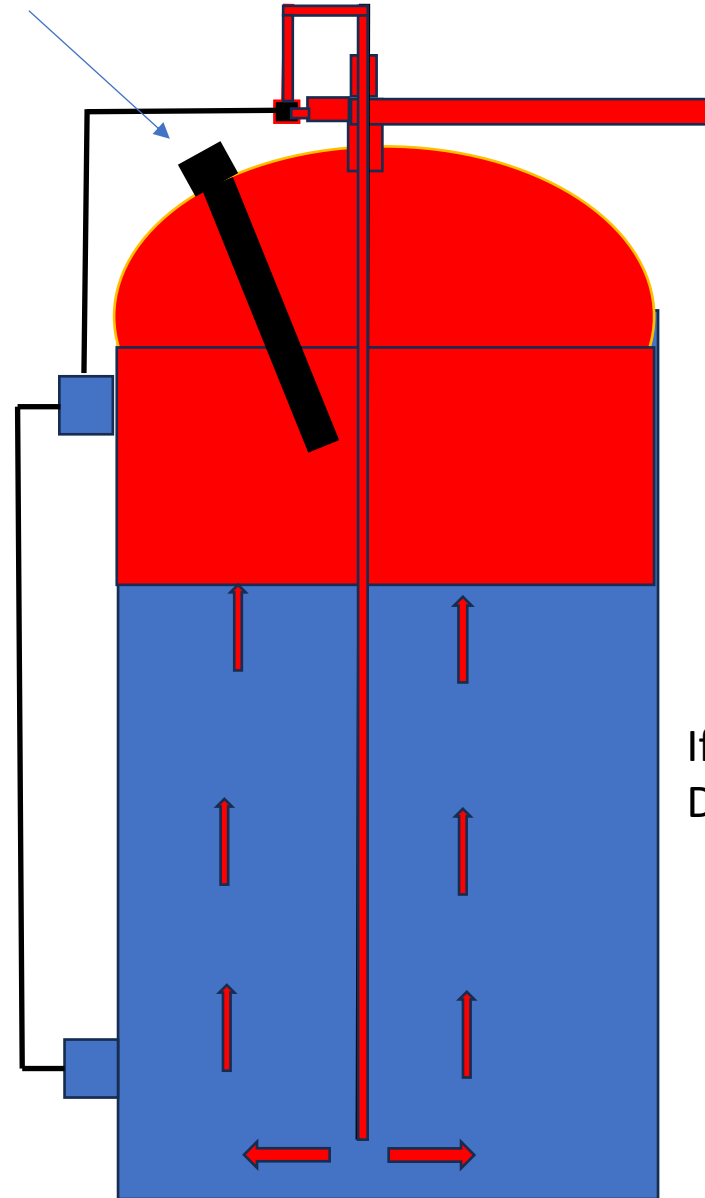


Existing Standard Immersion Heater



T1

T2



The immersion heater will only heat the top 1/3rd of a tank without this device. With this device the whole tank is heated with

If $T1 > 60$ Deg C and $T2 < 50$ Deg C then turn pump on.

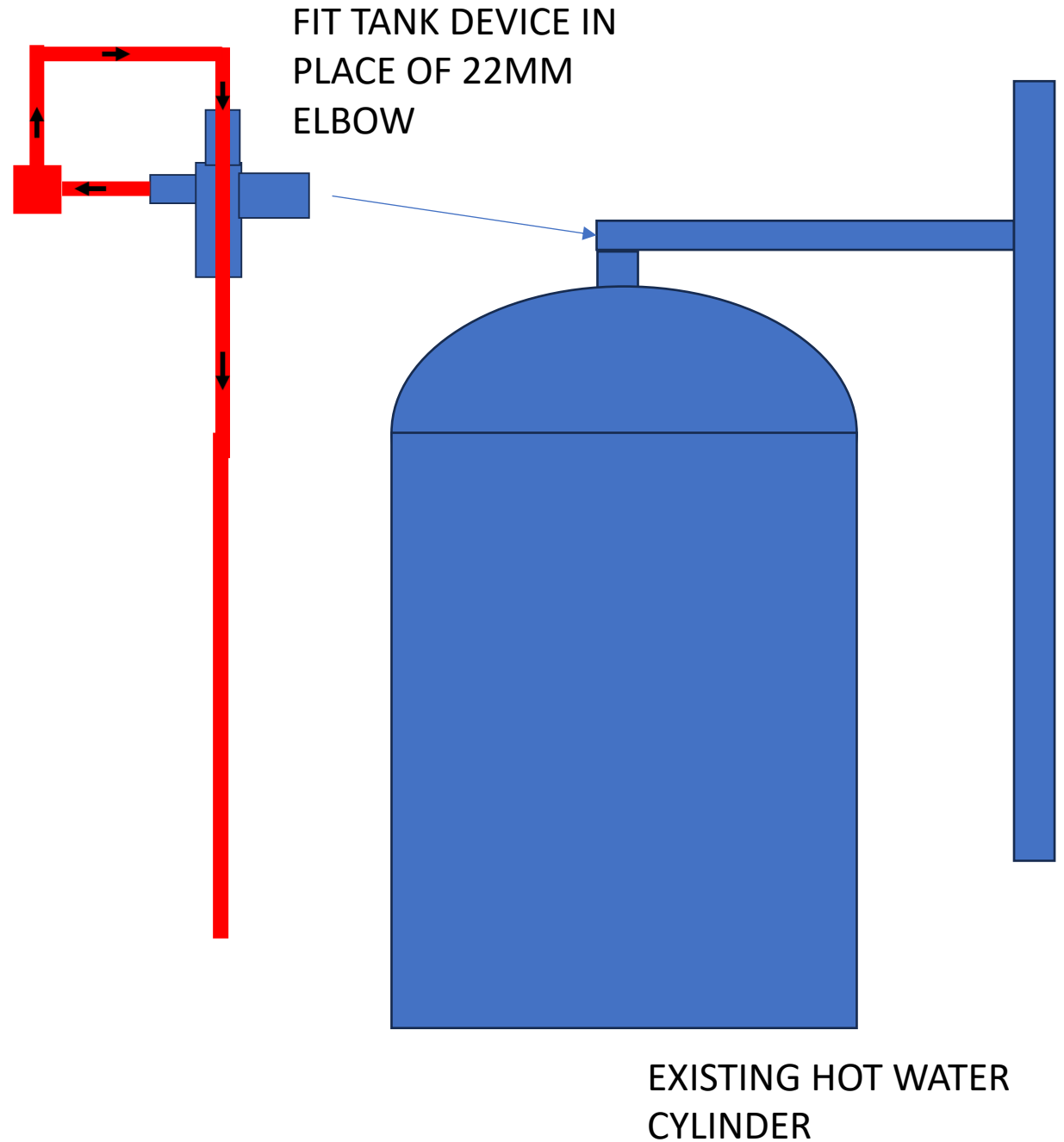
**FOR STORING HOT WATER
FOR WASHING OR BATHING**



If you have a 3/4" to 22mm coupling on top of the tank – leave it alone and only replace the 22mm bend above with a tank device.

THE INVENTION AND HOW IT IS FITTED - OPTION 1

Replace the 22mm elbow and an existing tank is converted to a heat store.



THE INVENTION AND HOW IT IS FITTED - OPTION 2



If you have a ¾" to 22mm bend on top of the tank – you need to replace it with a tank device **plus** a short length of 22mm pipe **plus** a ¾" to 22mm coupling

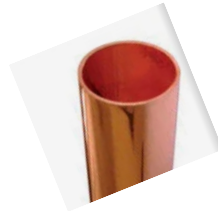
Method of fitting

Cut the existing horizontal pipe with a pipe cutter at position A. Use the pipe leverage to progressively rotate the existing bend anti clockwise until it is removed. Rotate the bend back and forth – slow and steady. Fit the 22mm slip joint provided to reconnect the tank to the household plumbing system.

REPLACE WITH THESE FITTINGS



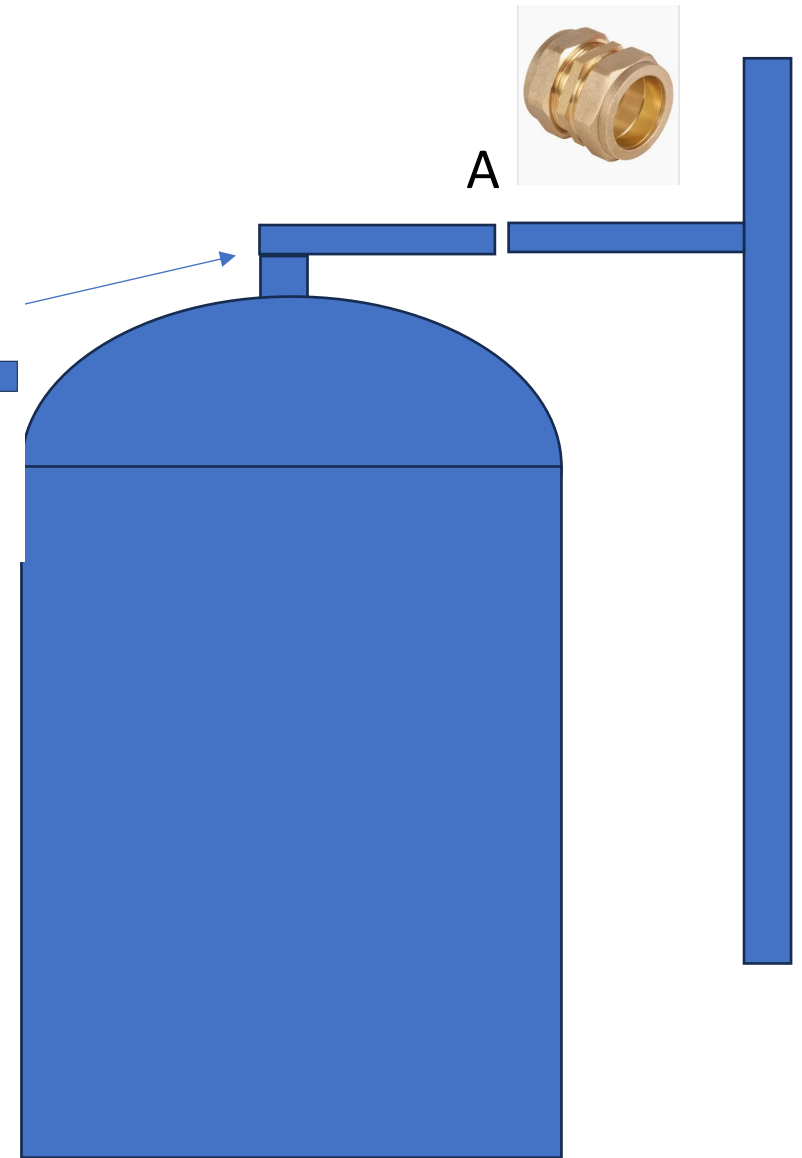
TANK DEVICE



PLUS A SHORT LENGTH OF PIPE



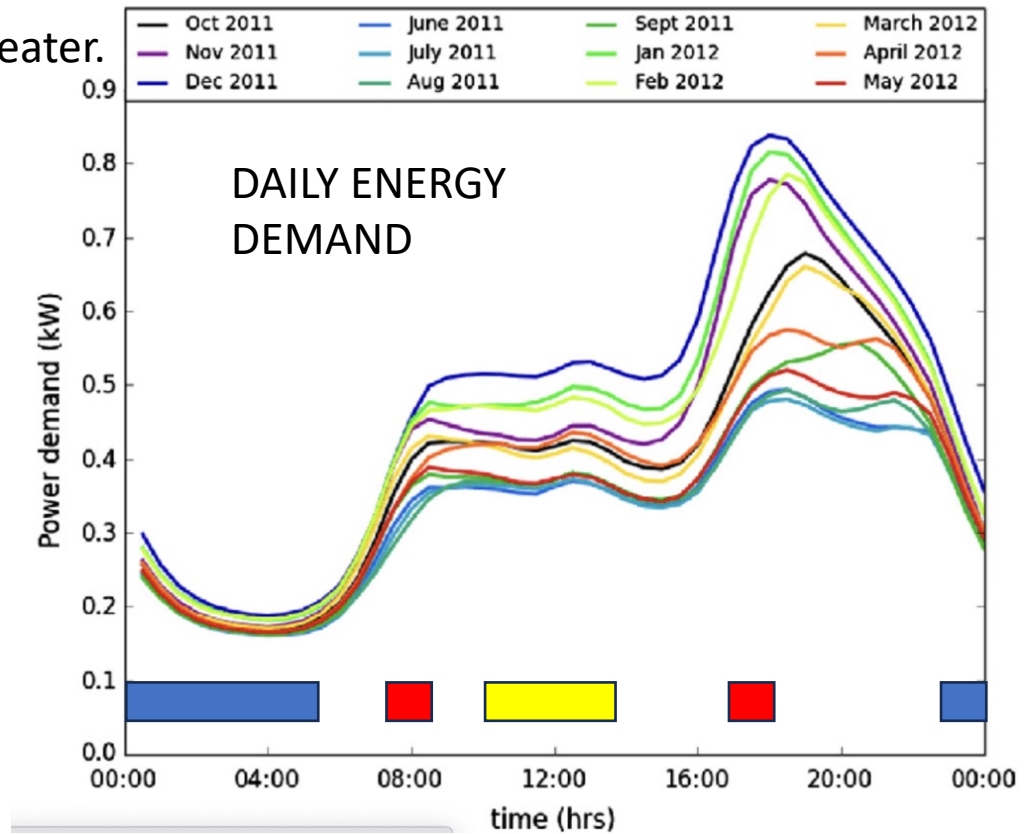
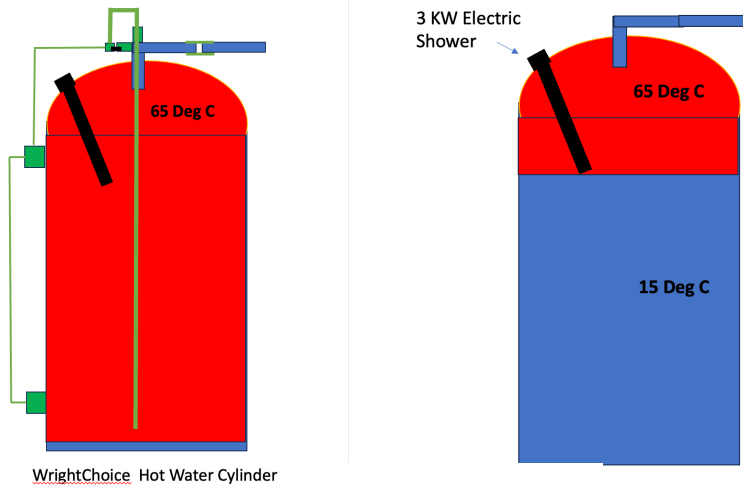
PLUS A ¾ TO 22MM COUPLING



EXISTING HOT WATER CYLINDER

In every 24 hour period there are off peak times when spare electricity can be sent to the immersion heater.

This hot water can be stored for washing and bathing



Electric showers draw power at peak demand



Grid energy stored at periods of off-peak demand at night and used at peak demand periods



Solar energy stored at periods of solar supply and used at peak demand periods

Tank Size Litres	Ht Metres	WrightChoice Energy Stored 65-40 Deg C (KW Hr)	Standard Hot Water Cylinder (KW Hr)	Energy stored for (x) number of showers
130	1.2	7.5 KW/Hr	1.9 KW/Hr	1.3 showers increased to 5 showers
180	1.3	10.5 KW/Hr	2.4 KW/Hr	1.6 showers increased to 7 showers
300	1.9	17.5 KW/Hr	2.8 KW/Hr	1.8 showers increased to 11.6 showers
*500	2.1	29.0 KW/Hr	4.1 KW/Hr	2.7 showers increased to 19.3 showers

WHY TRANSFORM AN EXISTING TANK TO A HEAT STORE OTHER THAN JUST BECAUSE IT IS CHEAP TO DO SO?

Advantages of heat store

Store surplus energy from home solar pv.

Take advantage of cheap off peak energy.

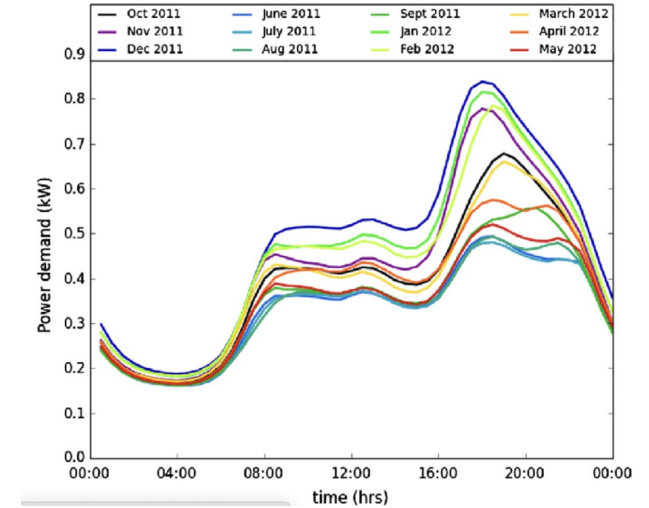
Help grid stabilization and store surplus energy on windy or sunny days.



PUBLIC WIND POWER.



PRIVATE SOLAR PV

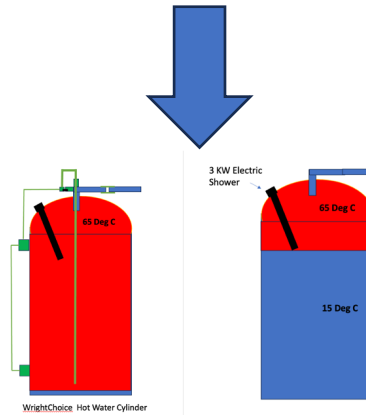


DEMAND OVER 24 HOURS VARIES
HIGH DEMAND IS UP TO X5 LOW DEMAND

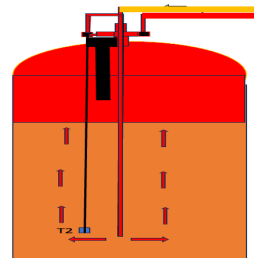
AS WELL AS DAILY **DEMAND** CHANGES
THERE ARE DAILY AND WEEKLY **SUPPLY**
FLUCTUATIONS



PUBLIC SOLAR PV



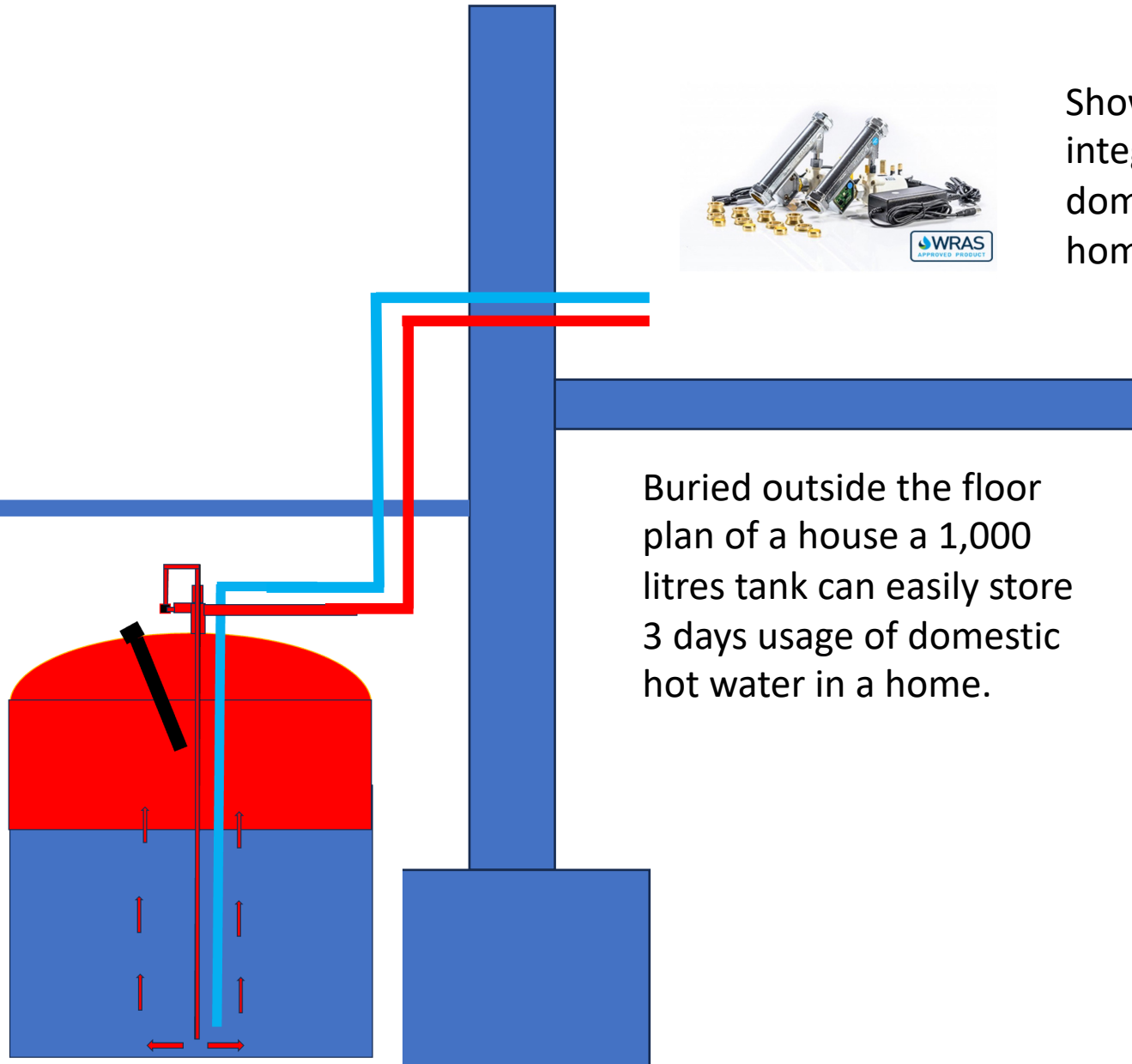
TANKS WITHIN THE HOME CAN STORE
SURPLUS ENERGY FOR 24 DAYS



TANKS ADJACENT TO THE HOME CAN
STORE SURPLUS ENERGY FOR 3 DAYS


Ground level

Factory Insulated steel cylinder
Approximately 1,000 litres capacity



ShowerPowerBoosters can integrate the heat store with any domestic water system in a home

Buried outside the floor plan of a house a 1,000 litres tank can easily store 3 days usage of domestic hot water in a home.



FLOWFLEX

SHOWER POWER BOOSTER
INLINE MICRO PUMP

Information Manual
www.showerpowerbooster.co.uk

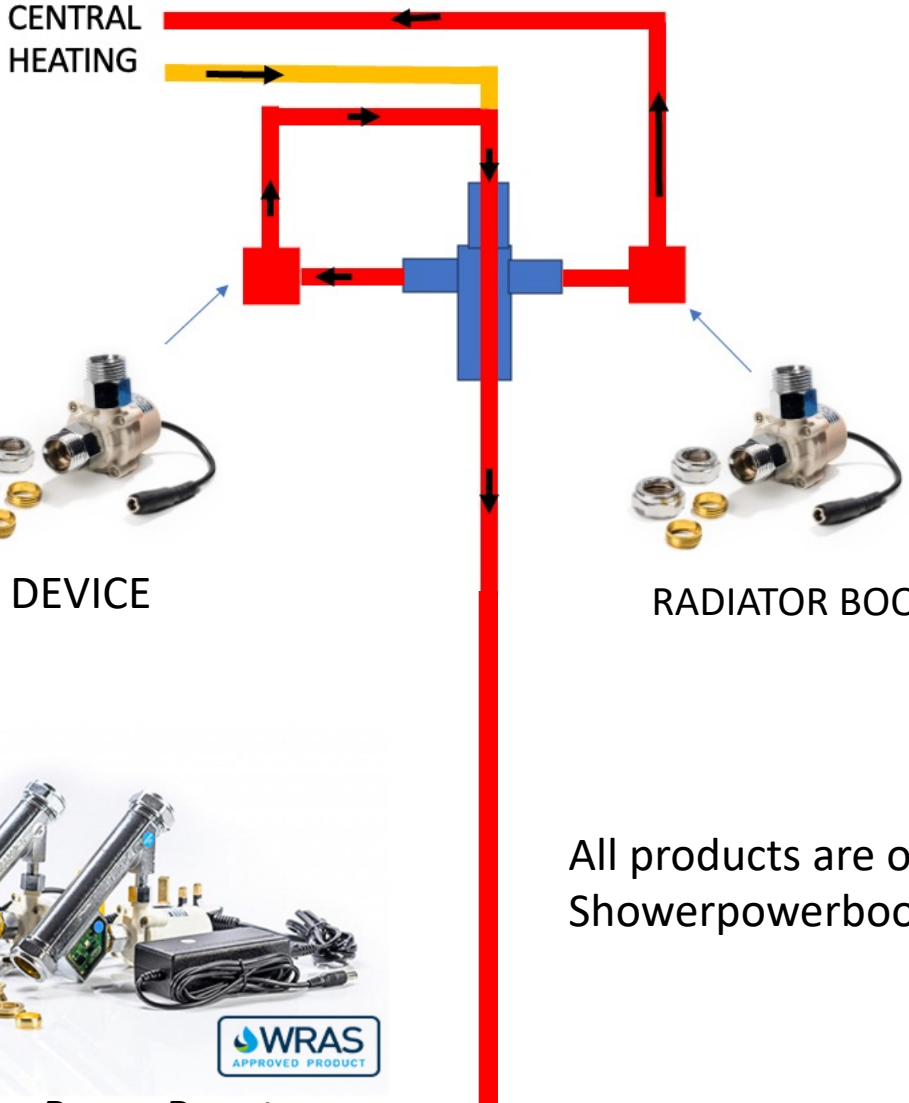
Boosts water flow to any shower, tap & so much more!

30/11/2023

THE WRIGHT CHOICE

Trustpilot

WRAS APPROVED PRODUCT



CENTRAL HEATING

TANK DEVICE

RADIATOR BOOSTER

ShowerPowerBooster SP21S

WRAS APPROVED PRODUCT

All products are on sale at Showerpowerbooster.co.uk