

energystore

Thermal Stores for **Renewables**

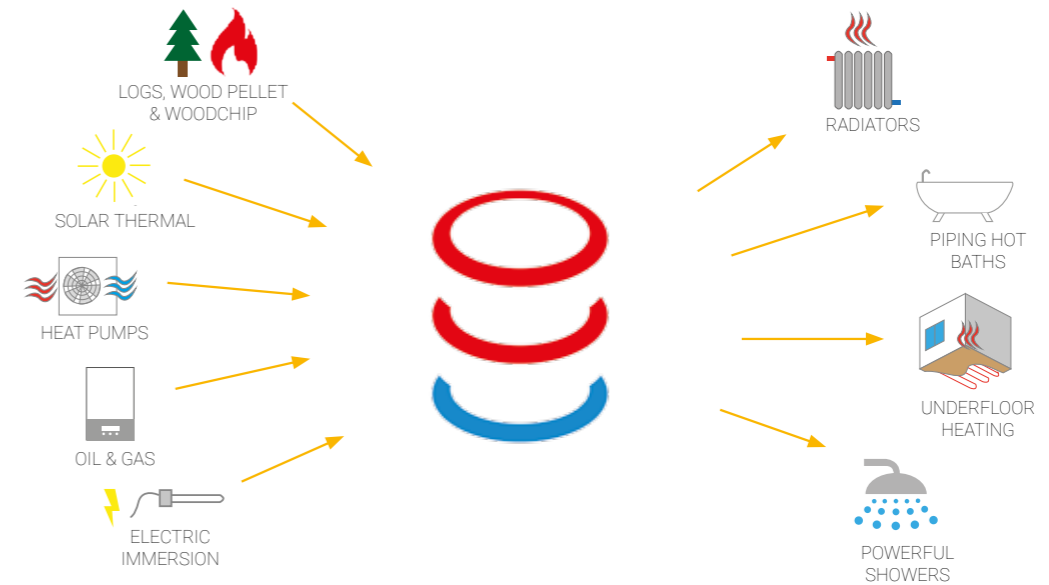


Enjoy all the benefits of a renewable, low-carbon, 21st century heating system that comes on automatically and provides heating and hot water the moment it's needed.

Energystores are high specification thermal stores designed to take in heat from numerous renewable sources and then retain it over long periods. They include options for automated backups such as a conventional boiler or an immersion element so that you can be sure that there will always be heat when it's needed.

An Energystore not only provides the central hub of the heating and hot water system, but also optimises the performance and efficiency of each renewable heating technology. An Energystore is designed to be at the heart of an adaptable, efficient and effective low carbon heating system to ensure that there will always be heating and hot water when it is required.

Helping to create sustainable homes powered by renewable energy, yet without scrimping on convenience and enjoyment.



**Heat exchange coils**

Effective heat transfer, mains pressure hot water, solid-state: minimal maintenance.

**High specification 100mm polyurethane insulation:**

equivalent to 600mm of foam insulation, limiting heat losses to as low as 1-2 °C in 24 hours.

**Stratification baffle**

Makes the heat go further by helping to preserve the precious hot water at the top of the store.

**Pressure rating 3 bar**

All Energystore tanks are suitable for pressurised or open vented systems.



**Flush tappings:** faster, simpler and cheaper installation.

**Plenty of tappings and probe pockets:** wide flexibility of installation design.

**Dual hot water coils:** get more hot showers per tankful, plenty of hot water at high flow rates.

**Dual solar coils:** extract more heat from the sun and provide usable hot water quickly.

**Adjustable and Removable Feet** Make it easy to get the store into position and level.

# Types of thermal store

We have three types of thermal store: Bio Quattro, Bio Duo and Bio Prime, available in 300, 500, 750, 1000, 1500, 2000, 2500, 3000, 4000 and 5000lt volumes. Volumes up to 20,000lt are available as a rapid bespoke tank. Conveniently placed connections and sensor pockets make it easy to integrate and control multiple energy sources,, forming the heating hub of the home.

**Bio Quattro** has twin solar thermal coils as well as twin DHW coils.

**Bio Duo** has twin DHW coils.

**Bio Prime** is intended as a buffer vessel for use with larger biomass boilers

	Bio Quattro	Bio Duo	Bio Prime
Twin solar coils allow you to capture heat from the sun	✓		
Twin DHW coils provide mains pressure hot water	✓	✓	
A baffle stops mixing in the tank, promoting good stratification	✓	✓	
Numerous tappings designed with renewable energy sources in mind	✓	✓	✓
Outstanding insulation levels	✓	✓	✓

# Bespoke sizes, up to 20,000lt

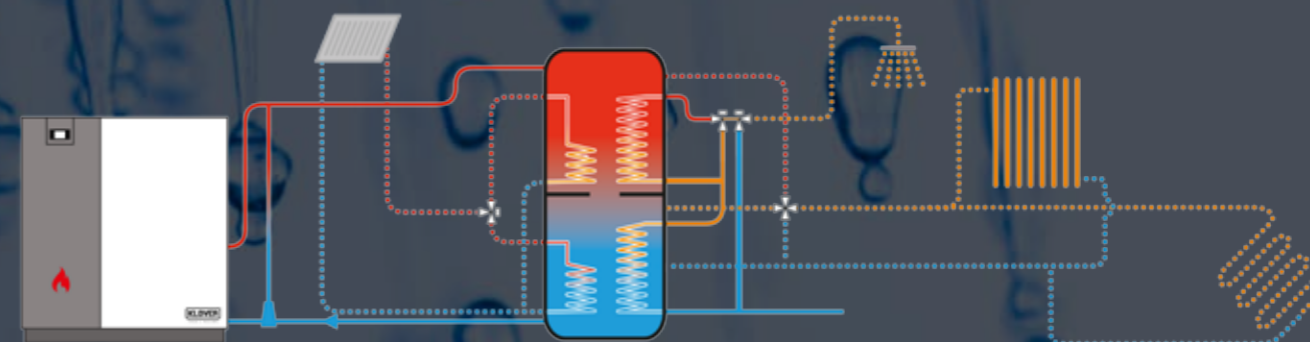
Every project is unique which is why you can order bespoke thermal stores up to 20,000lt. Our modern production techniques mean that this is a fast-turnaround service, providing the exact configuration you need, on site, fast.

- ✓ Removable sides for narrow access
- ✓ Custom heights
- ✓ Volumes up to 20,000lt
- ✓ Extra tappings and pockets
- ✓ Access hatches

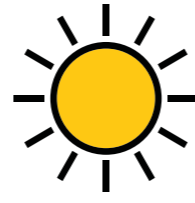


# Mains pressure hot water

Enjoy the benefits of mains pressure hot water throughout your home. Powerful and luxurious showers, baths and basins quickly filled, with the added satisfaction of knowing that the heat was created using renewable energy.



# The heart of your heating system



An Energystore forms the heart of your renewable heating system. Connect it to a boiler stove, a wood pellet boiler, solar thermal panels or evacuated tubes, or a heat pump to store up heat for when it is needed. You can also use a conventional oil or gas backup boiler or install an electric immersion element.

The Energystore provides mains pressure hot water at your taps, for showers and to fill your bath. It will power central heating in whatever form that takes - radiators, underfloor heating, towel rails.

An Energystore can be connected to multiple inputs. Solar thermal in this case.

Towel rails, radiators, and underfloor heating.

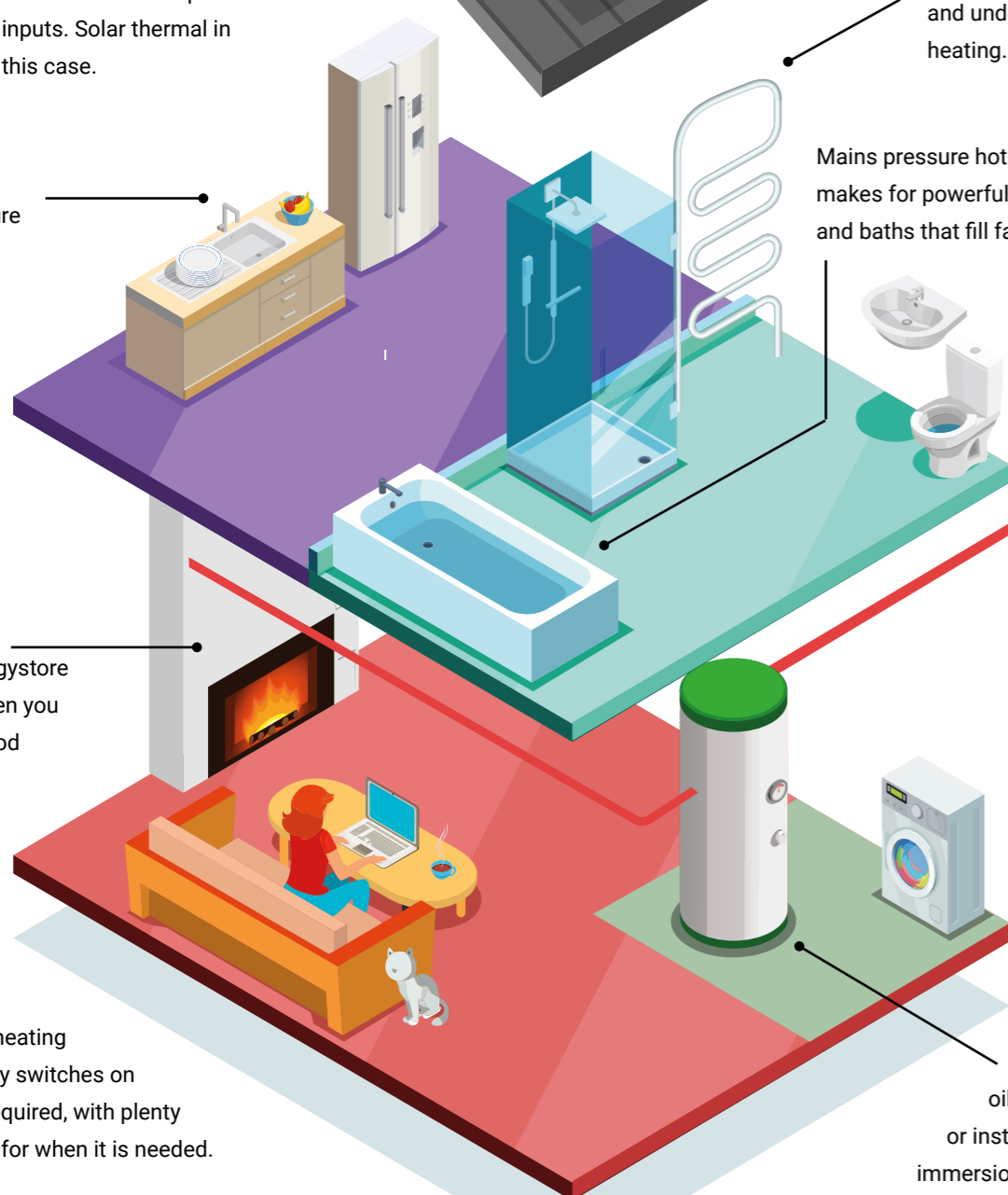
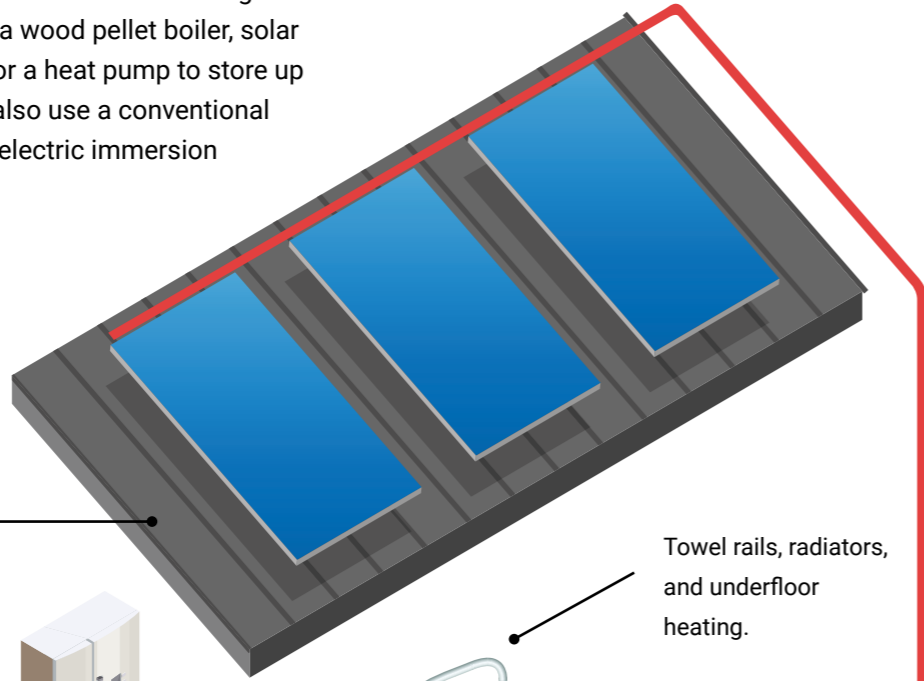
Mains pressure hot water makes for powerful showers and baths that fill fast.

Mains pressure hot water at your tap.

Fill your Energystore with heat when you light your wood boiler stove.

The central heating automatically switches on and off as required, with plenty of hot water for when it is needed.

Connect a conventional oil or gas boiler or install an electric immersion for backup.



# A full service



### Extras

We supply a full range of extras to go along with our Energystores such as immersion elements (1, 2, 3, 6 and a dual 1&3kW), temperature gauges, remote digital temperature displays, safety groups (aav, prv, pressure gauge), domestic hot water mixer valves, central heating mixer valves, weather compensating electronic mixers, load units, high temperature header tanks, expansion vessels (60 - 700lt), and much more.



### System design

In order for you to feel the full benefit of an Energystore your whole heating system needs to work well. Our team will be pleased to discuss your requirements, help to specify the right size and type of Energystore, as well as providing guidance and schematics for how you should connect up to your wider heating system. We can also put you in touch with a recommended installer that is part of the network of engineers and dealers that we work with.

### Beyond the store

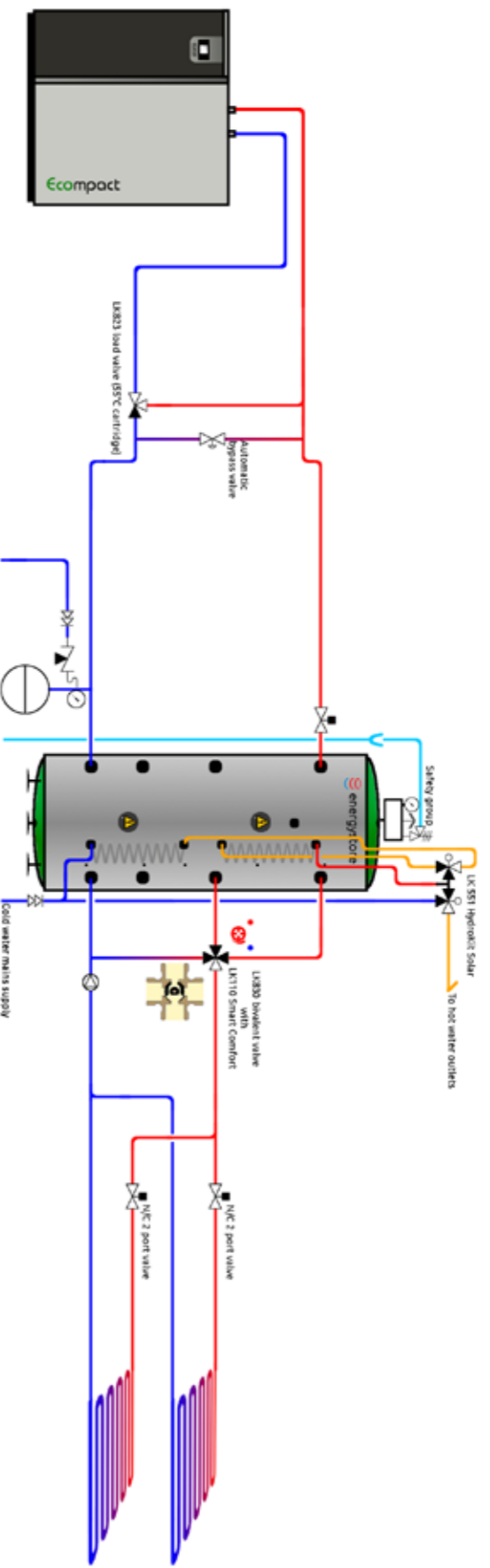
We design Energystores to compliment the full range of wood boiler stoves, wood pellet boilers and commercial boilers which we supply. We also supply chimney, boiler and stove controls, in fact everything needed for the system. For further details please see [www.firepower.co.uk](http://www.firepower.co.uk)



Insulation, 2 component		Isocyanate 174 and Isofoam SS 6270W	
Initial thermal K factor	0.023 W/mK	Initial U-value	0.22 W/m <sup>2</sup> K
GWP	1	Max tank pressure	3 bar
Max coil pressure	10 bar	Max temperature	95°C

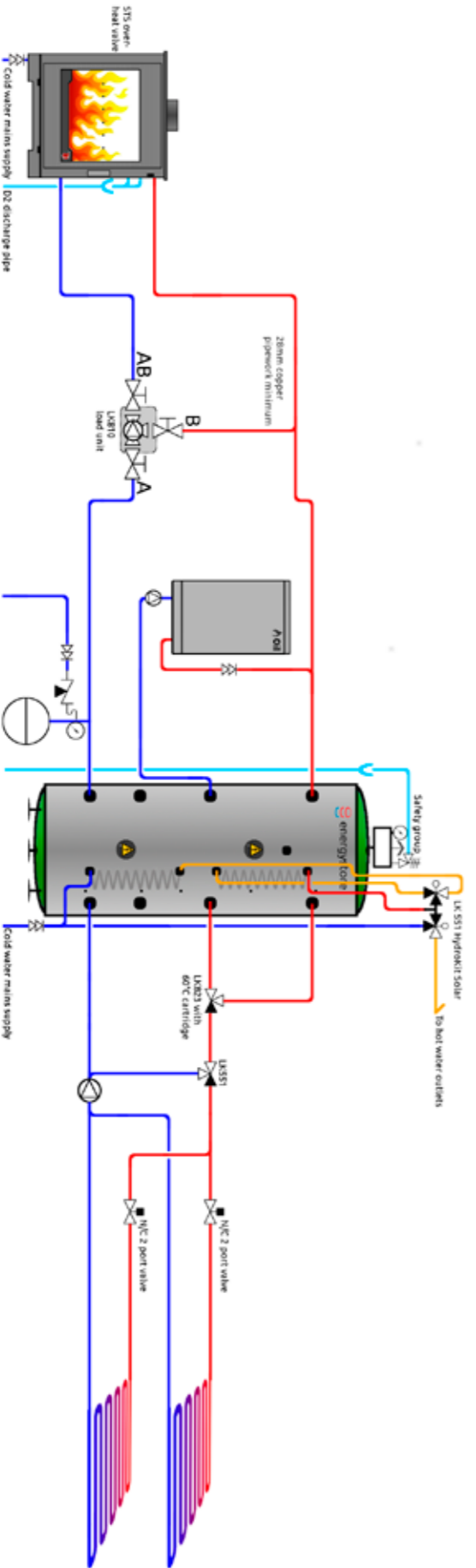
Volume	300 lt	500 lt	750 lt	1000 lt	1500 lt	2000 lt	2500 lt	3000 lt	4000 lt	5000 lt
Height	1975mm	2050mm	2100mm	2150mm	2200mm	2200mm	2250mm	2300mm	2300mm	2350mm
Diameter	695mm	800mm	950mm	1050mm	1250mm	1400mm	1500mm	1600mm	1800mm	2000mm

	Bio Quattro	Bio Duo	Bio Prime
Solar coils	Lower solar coil: 13.1 m <sup>2</sup> @ 22mm diameter (3-500lt lower solar coil: 8 m <sup>2</sup> ) Upper solar coil: 8 m <sup>2</sup> @ 22mm (300lt no upper solar coil)	-	-
DHW coils	Lower & Upper DHW coil: 13.1 m <sup>2</sup> @ 22mm	-	-
Tappings	2 x 2", 1 x 3/4", 5 x dry thermostat/probe pockets.	-	4 x dry thermostat/probe pockets.



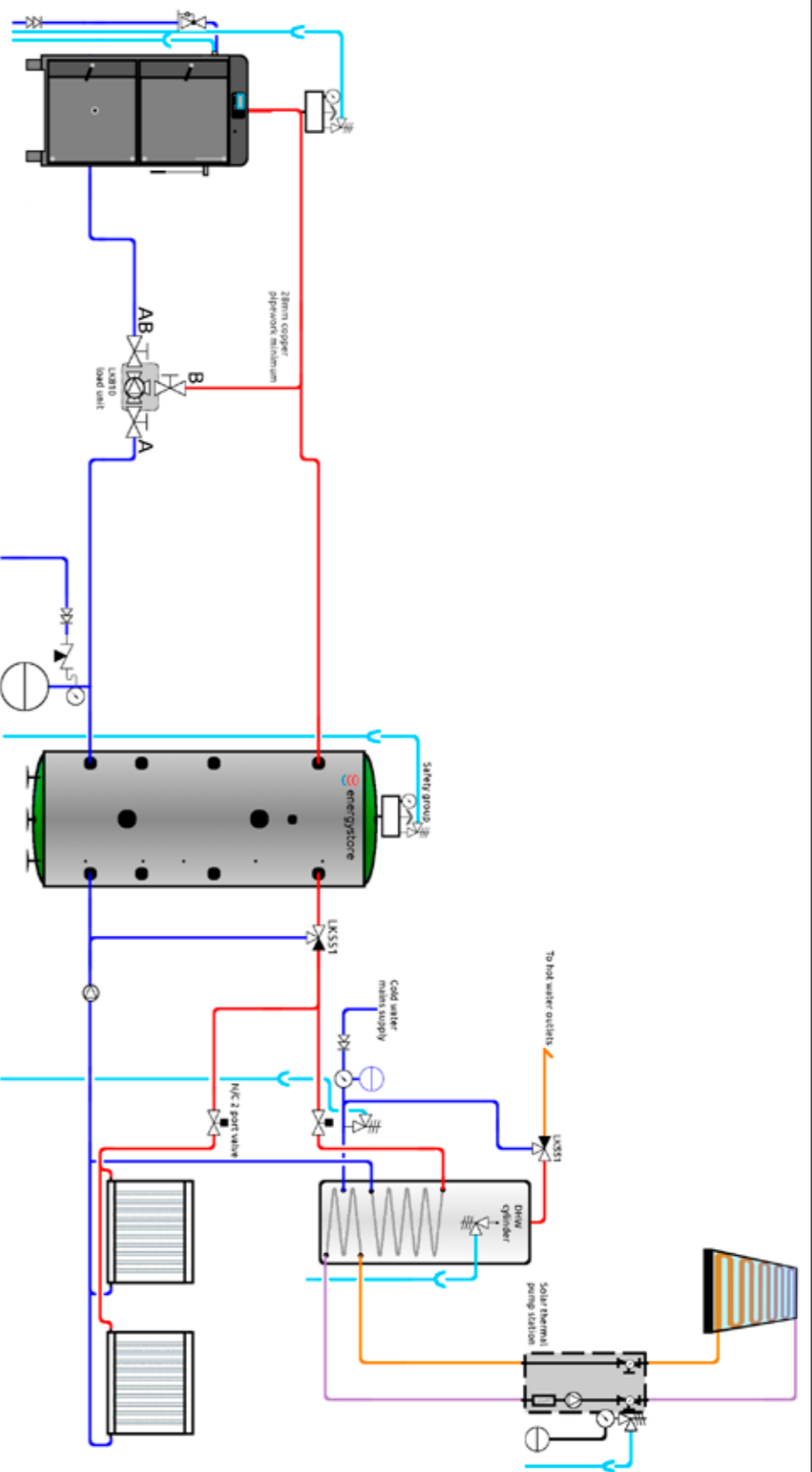
<b>Firepower</b>
TITLE
Wood pellet boiler
Utility boiler
Underfloor heating

Every installation is different so it is vital that the installer verifies that the design is suitable. It may well be necessary for them to make some adjustments to ensure the correct working and safety of the system.



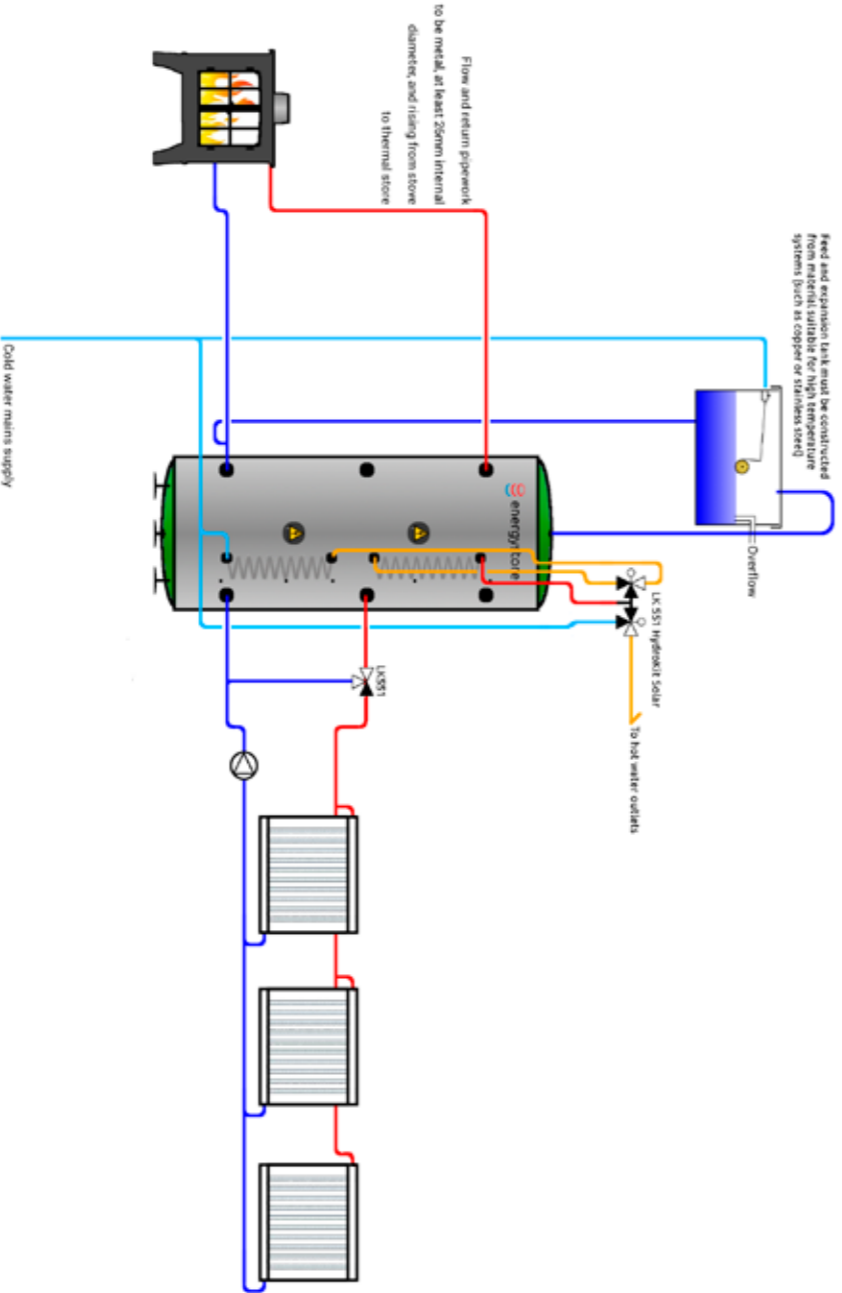
<b>Firepower</b>
TITLE
Wood Boiler stove pressurised
Underfloor heating
with oil backup

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<b>Firepower</b>
TITLE:
Log gasification boiler
Secondary DHW tank with Solar thermal input Radiators



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<b>Firepower</b>
TITLE:
Wood Boiler stove vented
Gravity/thermosyphon High temp header tank Radiators

