Off Grid Heating Solutions		
Heating System	**Pros**	**Cons**
Underfloor Heating	Minimum effort is needed to keep the running No maintenance required Take up less space compared to radiators Practical for all floor coverings Easy to install	Variable installation costs Time and effort (will only be a one-time issue) Retrofitting can affect floor heights
Biomass Boilers	It uses more natural methods to produce heat, such as logs and wood pellets Cheaper to run Better for the environment Biomass boilers operates at an efficiency of 89-91%, like that of normal boilers	Steep upfront costs but it is only a one-time payment. They need more space than standard boilers. Need to keep fuel stored nearby
Air Source Heat Pumps	Cheap to run Energy-efficient up to 300-500%	There is more effort needed to install as it has indoor and outdoor components Need space on external walls for a fan unit to operate Installation price ranges between £9,000 – £15,000
Ground Source Heat Pumps	These can last up to 20 years Operates quietly They need minimum maintenance	Takes up more outdoor space Installation price ranges between £12,000 – £20,000
Solar Heating	This helps to reduce your carbon footprint Cheaper than heat pumps to	It can give unbalanced levels of heating and hot water Work better with

	install; between £3,000-£6,000 70-90% efficient	traditional/biomass boilers, meaning you also need to take time to have these installed
LPG Heating Systems	Scalable heating system Cheaper than oil boilers Can be used for heating and cooking Some tanks can be buried underground	More expensive to run than natural gas or oil Requires regular top-ups and monitoring Storage tank needs space and access Produces poisonous gases
Wood Heating Stoves and Log Burners	Cost-effective fuel Renewable fuel source	Requires frequent maintenance High initial setup costs Storage needs and impacts on local air quality
Coal Burners	Easily available Simple to set up and operate	Non-renewable and highly polluting Requires space for storage Emissions include harmful heavy metals