

Heating Options For The Home

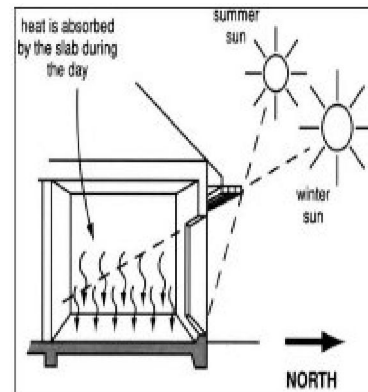
Heating the home can use as much as 50% of household energy so it's important to minimise heat loss and maximise the systems efficiency. Installing appropriate insulation and draft proofing your home will reduce the amount of energy the system needs to use to keep the temperature comfortable.

Types of heating

There are many options available and the right one for you will depend on your location, budget and your home. The key types are noted below.

Passive heating – this is where no active energy (eg: gas or electricity) is required to heat the home. It can be achieved through appropriate design that includes a thermal mass (e.g. concrete slab or tiled floor) which captures heat from the sun during the day and radiates it back into the home during the night.

Alternatively systems like the Smart Breeze can provide some passive heating and can reduce the active heating requirements of a home. Passive heating on its own is generally not enough to keep a home warm in Victoria so a booster system is usually required.



Hydronic heating systems can be either under floor or use panels along the wall. They work by pumping hot water through the system which in turn radiates the heat into the building. They're generally 15% more efficient than other forms of household heating. If run off solar and/or natural gas, it can be very efficient. Do not run these off electric heaters, it will cost a fortune.



Natural gas heating is generally the most efficient and economical fuel for active heating systems. A 5*+ rated gas ducted central heating system is designed to efficiently heat a whole house and can be zoned.

Wall space heaters, floor mounted units and some gas log fires work by heating and circulating warm air around the room. They perform best in well ventilated, draft free rooms with low to medium ceiling heights. Radiant heat gas heaters are not very efficient.

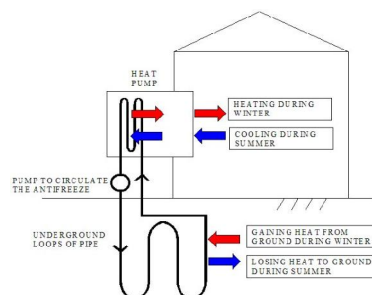


Pellet fires are very efficient as a space heater and run on recycled sawmill residue from sustainably managed forests. They are a great cost effective sustainable option for space heating and are one of the most efficient forms of 'fire' type heating



Wood Fires are an effective method of heating provided you have access to a good supply of timber. Make sure that the timber is well seasoned and if sourced from plantations is a good sustainable option.

Geothermal heating is growing in popularity. It's a type of heat pump system and works by taking heat out of the ground and transferring it into the home in winter. It can also operate in reverse in the summer months to cool the home.



Electric heating is an expensive option. Under floor heating uses an electric cable embedded into the floor slab to provide heating. The slab stores the heat and releases it slowly to provide continuous warmth. This can be very expensive to run.

Electric space heaters contain heating elements (bars) which produce radiant heat when electricity is run through it. They cost on average 50c an hour to run.



Reverse cycle air-conditioning/heating is a common option and works a bit like a heat pump. If you purchase a high efficiency 5*+ energy rated system it can be relatively cost effective to run but be sure to have it zoned if used in the whole home.



General Rules

If you are installing a new central heating system

- Go for the most energy efficient model and choose gas over electricity if you can
- Ensure the system can be zoned so that you only heat the areas you are using
- Be sure to size the system correctly.

The most economical active central heaters are zoned high efficiency (5* + rated) natural gas hydronic systems, or natural gas ducted systems.

The most economical active space heaters are high efficiency (5* + rated) natural gas space heaters, high efficiency reverse-cycle heaters, or pellet fires.

Fan tip – if you have ceiling fans that are reversible use them on the winter setting on low and they will help push the warmer air back down into the room.

For any queries or additional information on this tip sheet please contact Green Moves Australia on (03) 9024 5515 or 1300 898 742

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