

Much of the energy from the sun arrives on earth in the form of Infrared radiation.

Infrared heating panels have been used as a primary heating source in Europe for many years and have been proved to be a cost effective way of heating your home and they also bring many other wellbeing benefits. They work by heating objects rather than air so you feel warm regardless of the air temperature.



Infrared radiation is a completely safe invisible form of energy that only heats the surfaces of solid objects such as walls, floors, ceilings, even people. Energy is not wasted by having to heat any of the surrounding air in the same way as traditional heating systems. Infrared panel heaters were developed by NASA to heat astronauts when travelling in space. As there is no air in space convection heating does not work. Infrared panels radiate heat to help keep the space station warm in sun zero conditions.



Now you can heat your home & Business more effectively and **reduce your energy bills.**

Infrared Heating

Abbey Renewable Energy Ltd

Why Infrared?

Infrared heating panels are a great solution, have many benefits and can substantially reduce energy costs when compared to central heating systems, storage radiators or other forms of heating that use convection. They are very flexible and can be used to supplement your existing heating system or replace it altogether.

With Infrared panels you can just heat the rooms and spaces you need ensuring you can save a substantial amount of money in the process

The Cost savings

Studies have proved Infrared heating is cheaper than other forms of heating and the chart on the below helps to explain that. Infrared heats objects with a thermal capacity which then slowly release the heat evenly into the room.

Infrared only needs 25 watts to heat a cubic metre of space as opposed to 45 watts for other heating sources.

If you have Solar PV fitted then studies have shown that the cost of heating your home is drastically reduced. Even if you just fit on panel in your lounge you can then turn your heating down to save money and you will not notice the difference in temperature but you will in your ...



Why Infrared?

The Department of energy and climate control (DECC) has recently approved infrared heaters to be included in the green deal which highlights their potential to make a substantial improvement in energy efficiency



These results are an ongoing study conducted by the St Andrews energy network. These running costs are exclusive of any maintenance costs - Infrared panels do not have any maintenance costs.

	INFRARED PANEL	MAINS GAS	OIL FIRED HEATING	LPG	OIL FILLED RADIATOR
Volume of Room	20m3	20m3	20m3	20m3	20m3
Energy Demand per Hour	500W (25w/m3) 100% efficiency	1000W (45W/m3) 80% efficiency	1000W (45W/m3) 80% efficiency	1000W (45W/m3) 80% efficiency	1000W (45W/m3) 100% efficiency
Unit Cost of Energy (per kWh)	£0.150	£0.05	£0.07	£0.09	£0.15
Heating cost per hour	£0.075	£0.06	£0.09	£0.11	£0.15
cost to heat 11 hours per day	£0.027 (panel draws power for 33% of time)	£0.66	£0.99	£1.21	£1.65
Annual cost (11hrs per day)	£49.60	£118.80	£178.20	£217.80	£297.00

Health Issues from Mould

As we know mould is very bad for our health and can cause asthma and other respiratory diseases. As we strive to make our home more energy efficient the lack of ventilation compounds the problem as the spores continue to multiply. Traditional heating systems create convection currents which distribute these around a room which means they are breathed in by the occupants. The young and the elderly are especially vulnerable to these allergens.

Infrared heaters use the radiant principle to directly heat objects and surfaces the infrared penetrates and warms the affected areas, drying them and preventing condensation and moisture which is the cause of mould growth.

Highly Efficient

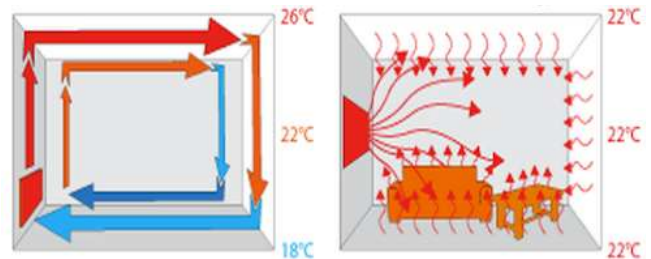
Many people expect heat to rise, but in fact it is warm air that rises because it is lighter than cool air. Warming air creates convection currents which causes your hot air to rise which is replaced by cold air at the bottom of the room. With convection heating, such a radiators much of the heat is lost to the upper space of the room. In properties with high ceilings this difference can be as much as 3 degrees C for each vertical metre. If heat is lost through windows or openings then more energy is needed to reheat incoming air. Infrared heaters emit most of their heat output in radiated heat which heats objects and occupants directly - so no energy is lost. This is why Infrared is more efficient and will save you money and give you a feeling of well being.

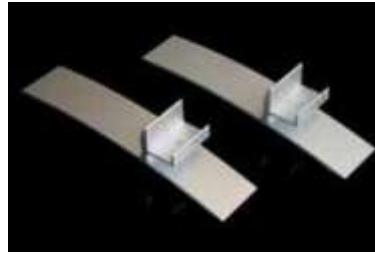
Reasons for Infrared

- Easy to install
- Maintenance free
- Instant heat
- Scaleable
- Unlimited zones
- 100% efficient
- Cures and prevents damp, mould & mildew
- Reduces energy costs
- Lower carbon emissions
- Clean - no fumes or smells
- Ideal for conservatories, sheds, patios and other outdoor areas

Promotes Life

Infrared heaters have been used for many years in hospitals to heat premature babies incubators and in sports injury clinics to speed up the healing process and in hatcheries and stables. Infrared had been shown to improve blood circulation and improve the performance of mitochondrial activity in the body resulting in more energy.





We have an infrared panels for every room and location. Please call and speak to one of our energy consultants who can advise you of the best model for your home or business

Certificates:



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Speak to one of our team now on

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Every effort has been made to ensure that the descriptions and specifications contained in this brochure are correct at the time of going to press.