SOLAR THERMAL & SOLAR PHOTOVOLTAIC (PV) SYSTEMS



SAVE ENERGY • SAVE MONEY • SAVE THE PLANET



Absolute Solar is part of the Absolute Group, a family owned and run business, which has been established since 1991. Absolute Solar started installing solar systems in 2010 and provides both solar thermal (hot water systems) and solar photovoltaic (PV). As an independent company we carry a wide range of leading brands providing customers with the widest choice of systems, which means whatever you need we can design and install the optimum solution to your needs.

Absolute Solar established in 2010, has a reputation in providing excellent customer service from start to finish. All of our installations come with a full insurance backed guarantee through the Customer Protection Association.



Absolute Solar's Renewable Energy Solutions

This brochure is designed to help you make the right choice in installing a solar power system. If you need any further information please do ask our renewable energy consultant while they are with you or contact us on **0800 954 6134**.

The key factors in installing a system are first to consider which type of system, hot water or electricity you are looking for? Our renewable energy consultant should be able to advise on the optimum energy solution you need and assess the amount of south facing roof space (or secure ground space) available and design the appropriate system suitable to your needs.

What is Solar Photovoltaic (PV)?

Solar electricity systems capture the sun's energy using photovoltaic (PV) cells. The cells convert the sunlight into electricity, which can be used to run household appliances and lighting.

HOW DO PHOTOVOLTAIC (PV) CELLS WORK?

PV cells are panels you can attach to your roof or walls. Each cell is made from one or two layers of semiconducting material, usually silicon. When light shines on the cell it creates an electric field across the layers. The stronger the sunshine, the more electricity is produced. This electricity is then transferred to the house where it is plugged into the house's electrical supply, supporting or replacing external electricity.

PV cells come in a variety of shapes and colours, from grey "solar tiles" that look like roof tiles, to panels and transparent cells that you can use on conservatories and glass.

The strength of a PV cell is measured in kilowatt peak (kWp) – that's the amount of energy the cell generates in full sunlight.

Get the most out of your rooftop now!

SUNPOWER SET NEW WORLD RECORD FOR EFFICIENCY ABOVE 20%!

SunPower have recently launched the E20 series of solar panels, the industry's first commercially available solar panels to achieve total area efficiencies of 20% or more! The new 96-cell

E20 solar panels are available in 333-watt and 327-watt models for rooftop installations.

SUNPOWER Authorised Partner

THE BENEFITS OF SOLAR ELECTRICITY

Cut your carbon footprint: solar electricity is a green, renewable energy and doesn't release any harmful carbon dioxide or other pollutants. A typical home PV system could save around 1200 kg of carbon dioxide per year – that's around 30 tonnes over its lifetime.

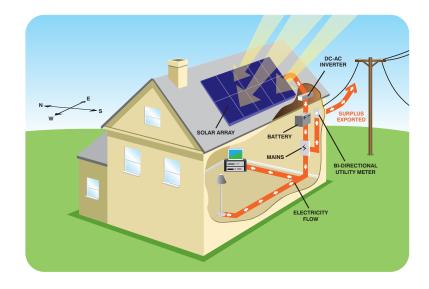
Cut your electricity bills: sunlight is free, so once you've paid for the initial installation your electricity costs will be greatly reduced. A typical home PV system can produce around 40% of the electricity a household uses in a year.

Sell electricity back to the Grid: if your system is producing more electricity than you need, or when you can't use it, someone else can use it – and you could make a bit of money. See the Feedin Tariff page for more information.

Store electricity for a cloudy day:

if your home isn't connected to the national grid, you can store excess electricity in batteries to use when you need it.

Planning Permission not required: usually does not require planning permission to attach to existing building.



Solar Panels

A cost effective package for domestic installations

Quick to specify, simple to install. Absolute Solar will design and install a system to suit your specific individual requirements, in one complete package.

Each pre-designed system comes complete with all of the on-roof and electrical components. We also offer a wide range of mounting systems for pitched roofs, compatible with all types of roof tiles and slates.



What is the Feed-in Tariff?

The Government's Feed-in Tariff, also known as the 'Clean Energy Cash back' scheme, means that homeowners who install solar electric systems on their houses will be paid a substantial premium for all of the electricity they generate from their system. So installing solar NOW is a fantastic investment, as well as as offsetting against rising electricity prices and a way to reduce your carbon footprint.

Claim your FREE Solar PV System!

THE BENEFIT TO YOU:



Average annual electricity bill: £429**

Average annual electricity bill: £108*

To qualify for your free solar PV panels your property must be facing within 30° of south and the total roof area have a minimum of 15m².

* Figure based upon an estimated 75% usage of sloar PV system. ** Energy Saving Trust (EST) - 13p per kWh. Usual Terms & Conditions apply and subject to survey.

EPC REQUIREMENTS

From 1st April 2012 all householders wanting to receive Feed-in Tariffs(FiTS) for solar PV installations will have to ensure that their houses are properly insulated first and that this is reflected on their Energy Performance Certificates (EPC's) with a minimum level D.

Cavity wall and loft insulated with every solar install if required, subject to the property being suitable.

Solar PV in action...

RATBY DEVELOPMENT PROVIDES SOLAR GREENER HOMES

Absolute Solar were selected to install solar photovoltaic panels on all 36 environmental homes in the first phase development in Ratby, Leicester being built by Cawrey Ltd.

These affordable homes have some of the highest green credentials in design and build features available in the UK. The unique design optimises their solar efficiency using triple glazed windows, superb insulation levels throughout and each house will come with the latest monocrystalline solar photovoltaic panels fitted by Absolute Solar.

The houses will benefit from six 190 watt panels each providing 1.14 kW/hr on each property, enough FREE electricity to provide a significant proportion of each houses' electricity needs. The solar panels are designed into the innovative 'fin' which provides cooling space inside each property as well the platform for the solar panels.

The solar panels will generate electricity for consumption by each house and surplus electricity will be able to be sold to utility companies, owners will also benefit from Feed In Tariffs (FITS which will pay 36.1pence per unit generated for the next 25 years.





Artists impressions of the New Development at Ratby, Leicester

What is Solar Thermal?

A solar hot water heating system works alongside your conventional water heater to provide hot water and will make significant savings on your water heating bills, effectively reducing your carbon footprint.

HOW DOES SOLAR THERMAL WORK?

A solar system uses solar collectors (panels or tubes) to collect this energy. This is then used to heat a fluid. A pump then circulates this fluid and transfers the heat into your hot water cylinder. The system will even work in cloudy and low light conditions as the UK receives more than enough solar radiation to make solar hot water systems extremely viable.

SAVING MONEY ON YOUR ENERGY BILLS

- Reduce your energy bills and protect the environment with solar water heating individually designed to suit your home and lifestyle.
- Even in today's market place the payback period is between 8 and 12 years (with Renewable Heat Incentive only) but with energy prices expected to continue rising this timescale will reduce.
- With energy prices spiralling, the cost of heating your water is becoming more
 expensive but a solar hot water heating system can provide your hot water free.
 In addition it provides a guaranteed energy supply when other sources are now
 at the mercy of other countries.
- Solar heating will make a significant difference in providing your house's water requirements, even allowing for such applications as swimming pools!





QUICK AND EASY TO INSTALL

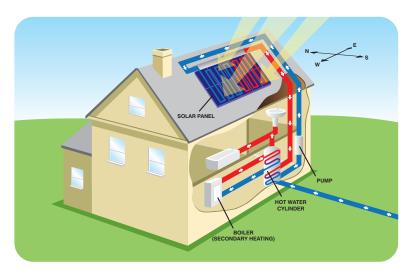
Solar hot water systems can be installed to provide piping hot water in nearly any house, extension or heated swimming pool.

The sun's radiation that is used by the solar hot water systems is available even where there is no direct sunlight even on overcast days.

Installation is quick, clean and hassle-free. All of our installers are fully-trained in all aspects of installation which can normally be completed in 48 hours.

Planning laws now look favourably on householders who wish to install solar panels.





A choice of styles...

Technical advances in the design and manufacture of solar panels mean that today's systems are more efficient, maximising the use of the sun's rays. A choice of collectors styles according to your preferences and needs:

FLAT PLATE COLLECTORS



- Robust design
- Long life, 25+ years
- Highly efficient
- Eta-Plus selective coating
- 4mm tempered high transmission glass
- Absorption of direct and diffused solar radiation
- Landscape or portrait configuration

EVACUATED TUBE COLLECTORS

- Different configurations
- 58mm and 70mm diameter
- 10. 20. 30 tube variants
- For different size cylinders
- More efficient than flat plate
- · Faster response to intermittent sun light
- More effective in adverse weather conditions



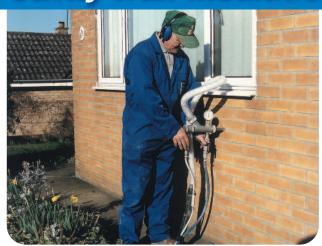
Absolute Solar Limited's accredited surveyors will assess your situation and discuss the configuration best to meet your needs.

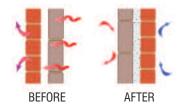
MORE ENERGY SAVING SYSTEMS...

- SAVE £100s ON YOUR HEATING BILLS
- ON AVERAGE A PARTIAL GRANT CONTRIBUTES TO MORE THAN 70% OF THE INSULATION COST
- SAVE THE ENVIRONMENT BY SAVING MONEY AND REDUCE YOUR CARBON FOOTPRINT

25% ROOF 25% ROOF 10% WINDOWS 15% PRAUGHTS

Cavity Wall Insulation





Houses built after 1935 are usually of a cavity wall construction. 35% of the heat in these homes can be lost through the cavity wall, so by filling it up with insulating material we can make a big difference to the warmth inside and to keep down heating bills.

the warmth inside and to keep down heating bills. Polypearl

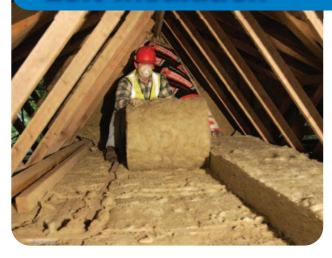
INTRODUCING A REVOLUTIONARY NEW WAY TO IMPROVE YOUR HOME...

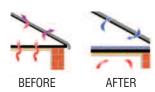
Cavity wall insulation has remained the same for over 30 years, but now...

Our new Polypearl Platinum solution is a grey bonded-bead system that satisfies the latest, exacting standards for energy in the building industry. It's now the minimum Government standard for all new-build homes. The material won't shrink, crack, settle or be unduly affected if you need to remove any of the outer brickwork or replace any windows. Complete with fire retardant and approved for use in even the most extreme conditions, it's the national standard set for all new homes built in Britain today.



Loft Insulation





One of the major ways 25% of heat escapes from your home is through the loft. Luckily it's very simple to prevent this heat loss by laying insulating material. If you currently have 60mm (2.5 inches) or less of insulation in your loft, you may be able to have this topped up to 270mm (11 inches).

MINERAL FIBRE QUILT

Mineral fibre quilt is available in 100mm, 150mm, 200mm, 250mm and 270mm thickness in widths to suit all joist spaces. The material is rolled between the joists and then applied in a second layer across the joists to prevent the 'cold bridge' which is created by the ceiling plaster board and each of the joists. If required, tanks and pipes in the roof space will be lagged. The surveyor will also provide you with any advice on how to be energy efficient in your home.



www.absolutesolar.co.uk

DON'T JUST TAKE OUR WORD FOR IT...





We've had the system in a year and can already see the savings from our old electricity bills. The after-sales service has also been excellent and any enquiries we've made have always been dealt with very courteously.

I've been recommending you to everyone!

MR JONES - BIRMINGHAM

If you'll pardon the pun, I am 'absolutely' delighted to have had my solar panels fitted. Not only am I saving money but I'm also cutting down my carbon footprint, something which is very important to me. Your company performed the installation very professionally, quickly and with minimum fuss. Thank you again.

MRS MARTIN - MARKFIELD, LEICESTER







My sincerest thanks to all your team, and especially the engineers who did such an immaculate job with the installation. It works superbly and what's more, I think the panels look great too!

MR MOORE - LEICESTER

CALL FREEPHONE 0800 954 6134

SOLAR THERMAL & SOLAR PHOTOVOLTAIC (PV) SYSTEMS



Re-energising the built environment

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