



# norfolk solar

## why solar?

### pollution

The world's climate is changing. Experts predict that global warming will lead to extreme and severe weather patterns unless steps are taken to reduce our reliance on fossil fuels. Carbon dioxide is one of the most significant 'greenhouse gases' created by burning fossil fuels for energy. Following the World Climate Change Summits in Rio and Kyoto the UK government is committed to reducing carbon dioxide emissions in the coming years. However, the UK's demand for energy is predicted to rise creating more greenhouse gases from conventional energy production.

### renewable energy

Part of the solution to the increasing demand for energy lies in the government's promise to generate 10% of its electricity needs from renewable energy. Renewable energy technologies include wind power, wave and tidal power, hydro power, wood and biomass fuels that are 'carbon neutral' and solar energy collectors. Solar energy is easily the most abundant of these energies on earth and is non-polluting.

Electricity can be generated by photo-voltaic solar collectors although the cost of this technology is not yet within the budget of the general public. Solar water heating is perhaps the most affordable active solar technology for domestic use. Many people still believe that solar energy in the UK will not work. In fact, parts of the UK receive the equivalent of 60% of the annual solar energy that falls at the equator! In the absence of direct sunlight solar collectors will absorb useful energy from diffuse sunlight - such as the daylight on a cloudy day.

### solar water heating

Solar water heating offers regular cost savings on fuel bills and compares favourably with other home improvements. There are several key factors that influence the time it takes to recover the cost of your initial investment.

The amount of money saved depends on:

- the size and design of the solar heating system
- the pattern of hot water use
- the type of heating fuel 'displaced' by solar

A typical system:

- provides up to 65% of annual hot water requirements
- has a working life in excess of 20 years
- is free from the regular price increases of electricity, gas, oil, etc.

