

Parish Councillor – Energy briefing sheet updated Jun 09

1. How to combat fuel poverty

- Households needing to spend 10% or more of their income on fuel to achieve adequate heating are considered fuel poor.
- Risks include: cardiovascular, respiratory, and gastrointestinal illnesses.
- The causes are: low income, under occupancy, expensive fuel, and poor insulation.
- In 2006 11.5% of households in England were in fuel poverty.
- Grants are available for insulation and heating.



2. How to save energy in the home

- Households can save up to £300 on fuel bills each year.
- The priorities for saving energy at home are:
 - a) Insulation**
 - 1) Cavity wall insulation takes just half a day, saves up to £145 per year and can pay for itself in under three years.
 - 2) Loft insulation should be topped up to 270mm.
 - 3) Grants and discounts help with the cost.
 - b) Control the heating**
 - 1) Turning down the thermostat by 1°C saves around £60 annually on heating bills.
 - 2) Thermostatic radiator valves help to control temperature in individual rooms.
 - 3) With night storage heaters – reduce the output to minimum at night, and set the input according to the weather forecast.
 - c) Lights and appliances**
 - 1) Install energy saving bulbs – each will save around £10 per year compared to a standard bulb.
 - 2) Don't overfill the kettle – save £18 per year.
 - 3) Turn off appliances that are not in use – leaving on standby costs around £5 per appliance per year.

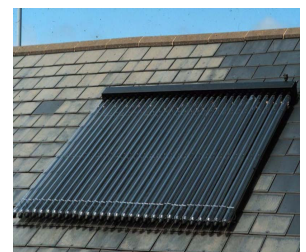


To receive an energy efficiency factsheet, further advice or to find out about grants and discounts for insulation call Dorset Energy Advice Centre on 0800 975 0166

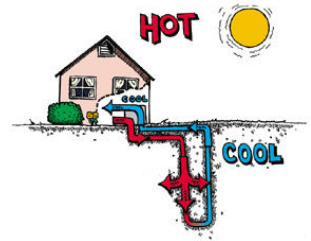
3. How to generate renewable energy

Renewable energy is energy derived from a non-fossil fuel or renewable source such as the wind or sun.

- **Renewable heat**
 - a) Solar hot water – 50% to 70% of your hot water needs can be generated using solar panels. The panels need between three and four square metres of roof space. The cost is between £2,500 and £5,000. A government grant of £400 is available.
 - b) Wood fuel –boilers burning wood pellets, chips or logs and automated pellet stoves are good heating solutions for properties with no mains gas. They are particularly appropriate in large detached properties. Wood fuel should be sourced from locally managed woodland. Boilers cost between £5,000 and £14,000, automated wood pellet stoves cost around £2,000-£4,000 and wood fuel is cheaper than oil or electricity. Grants of



£1500 or 30% (whichever is the lower) and £600 or 20% (whichever is the lower), are available for wood fuel boilers, and automated wood pellet stoves respectively.



- c) Heat pumps – heat pumps extract heat from the ground, water or air and concentrate it to a temperature adequate to heat a home. They use 1kW of electricity to generate 3kW to 4kW of heat and are appropriate for well insulated homes. They cost from £6,000 to around £12,000 depending on the type of pump. Grants are available of £1200 or 30%, and £900 or 30% whichever is the lower for ground source and air source pumps respectively.

- o **Renewable electricity**

- a) Small scale wind – wind turbines extract energy from the wind, they range in size from roof mounted 1kW turbines to mast mounted 6kW turbines that can supply several households, costing between £1,500 and £20,000 with a grant of £1,000 per kW to a maximum of £2,500 or 30% whichever is lower.
- b) Solar photovoltaic – solar photovoltaic panels generate electricity when light shines on them. Covering the whole of the south side of a roof will usually supply around half a household's electricity for the year. The cost is around £8,000 per kWp with grant of £2,000 per kW to a maximum of £2,500 or 30% whichever is lower.
- c) Microhydro – microhydro generates electricity from moving water, the water flows through a small turbine converting the energy in the water into electricity. These systems cost from £3,000 per kW installed and attract a grant of £1,000 per kW installed up to a maximum of £2,500 or 30% whichever is lower.



- o For factsheets with further details, information on installers and grant funding or further advice on any of these technologies call the Dorset Energy Advice Centre on 0800 975 0166.



4. Community Energy Projects – a few ideas for community led projects

- o **To reduce fuel poverty**

- a) Who is at risk in your parish, how can you help minimise their risk?

- o **To save energy at home**

- a) Publicise the free energy advice number 0800 975 0166
- b) Work with Dorset Energy Advice Centre to offer free energy saving bulbs to householders.
- c) Encourage householders to insulate their homes, this will reduce their fuel bills and the carbon emissions from the parish.
- d) Use the Dorset Climate Change Coalition community carbon footprint reduction tool at www.dorsetclimate.org.uk
- e) Work with another parish to see who can be the most carbon friendly.

- o **To increase take up of renewable energy**

- a) Consider whether community energy generation is appropriate in your parish, community projects generally attract larger grants and in some cases are 100% funded. Feed-in tariffs expected in 2010 will make these projects financially attractive.
- b) For advice or assistance on any project ideas contact Emily Bullock at Dorset Energy Advice Centre on Emily@deac.co.uk or 0800 975 0166. www.deac.co.uk