



## Top 10 Tips - Renewables

- Renewable energy is a term that can describe energy that is harvested from above the earth's rocky mantle.
- Energy crops such as willow, rapeseed and timber are obvious choices, and they are carbon neutral.
- Always think of reducing your energy as well as changing the type of energy you use. Reducing your dependence on heat through increased insulation will reduce the size and cost of your heating installation. This also applies to the amount of electricity we use, less is best.

Here are some ways we can SAVE energy, CO<sub>2</sub> emissions and MONEY.

No.	Action	Energy
1	<b>Insulation &amp; Controls</b> Always look at reducing your need for heat by increasing the insulation Make sure that the heating system is correctly zoned and controlled	Heating
2	<b>Reduce Electricity Demand –</b> Look at all the appliances and lights that are left on in your building. Turn them off. Always consider reduction as the starting point of your move to renewables.	Electric
3	<b>Get professional advise –</b> It is important to get independent advise on the size and type of renewable installation that best suits you. Many companies have good technical ability and will give good advice. Some unfortunately do not.	Heating & Electric
4	<b>Check the Standard of Product you install –</b> Make sure that the product you want to install is made to a relevant EU standard. Also if you are availing of a grant (SEI – Greener Homes Scheme) make sure the product you are buying is listed on the schemes approved product list.	Heating & Electric
5	<b>Only use Trained Installers</b> Renewables are not very much different to other heating or electrical installations but there are differences. Many trades people have taken the time and expense to increase their skills to include renewables. Check with LCEA or Renewable Energy Skills	Heating & Electricity
6	<b>Remember ventilation is important</b> There is a growing move back to burning solid fuel in the home, particularly wood pellets and logs. This is good as the new technology is much more efficient. But remember that burning fuel also uses the oxygen you need. Provide adequate ventilation to your solid fuel boiler / stove. Install a carbon monoxide sensor to alert you to any risk.	Heating
7	<b>Solar is simple</b> A solar panel on your roof will always enhance the value of your property, and could provide up to 80% of your homes hot water (typically 4 – 5m <sup>2</sup> ). If you want a solar panel to heat your home, you must pay careful attention to the size. A south facing roof on a 40 – 45° pitch is best. Solar PV panels can provide electricity also.	Heating & Electric
8	<b>Pumping Heat</b> The earth has a lot of heat at a low temperature. Heat pumps gather up a lot of this low temperature heat and pump it up into a smaller quantity at a higher temperature. For every 3.5 units of heat you get, the heat pump uses one unit of electricity this is called a Coefficient Of Performance (COP) of 3.5:1	Heat
9	<b>Generating Electricity</b> It is possible to generate your own electricity using wind, water or solar energy. Check with your local authority if you plan to erect a mast or use a water source. Make sure that your electrical installation is safe for you and the line repairman in the event of outage.	Electricity
10	<b>Storing Energy</b> Storing heat in the form of hot water is simple using large (500 – 1,000 litre) water tanks. Get a tank that is correctly sized for your hot water & heating needs. Take special care & advice if your storing electricity in batteries	Heating & Electricity