



Renewable Energy: The facts.

Hydro-electric power

What is hydro-electric power?

Hydro-electricity is generated by turbines which use the power of water as it falls. Technology has moved on a great deal since the days of water-wheels, and machinery such as the Pelton turbine makes water-power a viable proposition in hilly areas. Systems can be grid-connected, or power a battery-bank. If you are not connected to the National Grid, the potential cost of connection may make the decision for you.

Can I use hydro power?

First you need a river, stream or reservoir, and a large catchment area. The output you can expect will depend not only on the size of your turbine, but also on the 'head' (the fall from the water-source to your turbine) and the flow-rate of the water. You will need a way of getting the water from the source to the turbine, the turbine itself, and a discharge back into the watercourse.

Do I need permission to use hydro-power?

Yes, you must have a license from the Environment Agency, and you may need planning permission for the turbine house and the works.

Can I get a grant?

Yes. The Low Carbon Buildings Programme (LCBP) currently offers grants for domestic installations. The LCBP free phone help-line is 0800 915 0990, and the web-site www.lowcarbonbuildings.org

For non-domestic installations contact Phase 2 of the Low Carbon Buildings Programme: 08704 23 23 13 or email info@lcbpphase2.org.uk

Local schemes offering further discounts may also exist. Contact your local Energy Efficiency Advice Centre on 0800 512012.

For further advice on this and other renewable energy technologies contact SYEC on 0114 2584574 or nick.parsons@syec.co.uk