

Building a greener house

Energy generation

Mini wind-turbine

Generates electricity which contributes to the main supply

Photo-voltaic cells

Exploits solar energy to generate electricity which can be stored in batteries

Roof-mounted solar panels

Exploits solar energy to heat water which is then fed to the hot-water tank

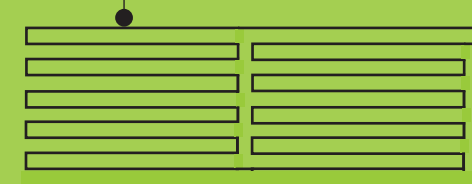
Micro CHP* system

An electricity generator from which exhaust heat (normally wasted) is passed back into the house via heat exchanger

Ground source heat pump

A system of pipes absorbs latent heat from the ground and transfers it to the home's heating and hot water systems

* combined heat and power



Water conservation

Rainwater harvesting

Rainwater flows from the gutters, is filtered and stored in a tank to be used for toilets and laundry



Key

- Electricity to house mains system
- Heat to air in house
- Heat to water system in house

Energy conservation

Ventilation with heat recovery

Fans positioned high in the house extract stale air from inside while drawing in fresh air from outside. A heat exchanger transfers the warmth from the stale air to the fresh air.

Insulation

Insulated walls and roofs and double glazing lower the rate of heat loss from the house.

Under-floor heating

Provides efficient heating from ground level up

Correct plant choice

Plants most appropriate to local environmental conditions will reduce the need for watering

T: 08700 340 170

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