

**npower
microgeneration
scheme**

**Information
pages**

Microgeneration scheme details

"We will pay you what is known as a 'net tariff' based on the amount of electricity you have exported back on to the electricity network. A net tariff is where we pay you the same unit price for the electricity you export as the follow on unit tariff rate for the electricity you purchase from us"

How the scheme will work

- We will ask you for meter readings every six months from your generation, export and import meters (see below for definitions)
- We will then pay you for all units of electricity that you have exported in the form of a personal cheque.

Generation meter – measures the amount of electricity that your microgeneration unit produces

Export meter – measures the amount of generated electricity that you do not use in your property that goes on to the electricity network

Import meter – measures the amount of electricity that you use from your supplier

Further information

Can you provide me with a list of installers/more information?

npower does not accredit individual installers. However, microgeneration installer lists and grant information can be found through the following programme:

The Low Carbon Buildings Programme
www.lowcarbonbuildings.org.uk/home

How much installed capacity would I need to power my home?

A typical domestic system of 1.5kW in the UK would produce around a third of the annual demand of an average family household (taking the average demand to be approximately 10kWh per day). However, there are other factors to consider in this equation such as technology type, system size, and energy demand of the household. Microgeneration installers will be able to advise you further on these issues.

How do I make a connection to the electricity network once my microgeneration system has been installed?

Connecting to the electricity network will require permission from the Distribution Network Operator. The system installer will make the necessary arrangements for this.

Background to renewable energy

Renewable energy comes from continuously available sources, which do not rely on exhaustive fossil fuels like coal, oil and gas. The main renewable energy sources in the UK are wind (both onshore and offshore), the sun (solar photovoltaics), water (conventional hydro and emerging technologies of tidal stream and wave) and biomass (including energy crops).

What technologies are available?

What is PV?

The photovoltaic process converts sunlight directly into electricity that can be used for normal household consumption. A PV cell consists of two or more thin layers of semi-conducting material, most commonly silicon. When the cell is exposed to light, electrical charges are generated with no emissions and no noise. PV integrated into, or attached to houses and other buildings, can deliver clean, silent electricity at the point of use and has the potential to meet a significant proportion of our electricity needs in the future.

What is micro-wind?

A wind turbine converts wind to electricity. The most common design is for three or five blades mounted on a horizontal axis, which is free to rotate into the wind on a mast. The blades drive a generator either directly or via gearbox (generally for larger machines) to produce electricity. The electricity can be either linked to the grid or charge individual battery arrays. Modern designs tend to be very near silent in operation such that the wind in the leaves on trees can be louder. Turbines can either be roof or pole mounted.

Individual turbines vary in size and power output from a few hundred watts to 2-3 megawatts (as a guide, an electrical kettle uses approximately 1 kilowatt (1,000 watts or 1 unit) to boil 7 litres of water). Uses range from very small turbines supplying energy for battery charging systems (e.g. on boats or in homes), to turbines grouped on wind farms supplying electricity to the grid.

What are micro-hydro turbines?

Water is used by 'hydro turbines' to generate electricity. Water flowing down rivers, for example, turns the turbine round; this movement is used to produce power. Most hydropower is produced in hilly or mountainous areas, or in river valleys. The amount of electricity that can be produced is determined by how much water is available and how fast it flows. Additionally, of all renewable energy technologies, it is the most consistent at providing electricity.

What is solar thermal?

Solar water heating systems gather energy radiated by the sun and convert it into useful heat in the form of hot water. This technology is well developed with a large choice of equipment to suit many applications. Solar water heating systems work alongside your conventional water heater to provide hot water and are therefore excluded from the npower microgeneration scheme as they do not produce electricity.



Microgeneration scheme – questions and answers

Do npower pay at the same rate for units that are not used and exported back onto the local distribution system as the units we import from our npower juice supply?

Yes, npower will pay you the same unit price for the electricity you export as the follow on unit tariff rate for the electricity you purchase from us. The rates charged for imported and exported supply will vary with wholesale electricity prices in the UK and from region to region. In every region of the UK, different charges are levied for using the local 'wires' to supply electricity to peoples' homes. These varying charges are reflected in the ultimate cost of the supplied electricity. These charges are standard across all electricity supply companies in the UK.

Why do we need to provide readings and feedback?

All data collected will prove useful in enabling npower to build customer profiles and explore the use of different technologies. npower's original solar trial was valuable in exploring different ways of co-operation between renewable energy companies, established supply companies such as npower and electricity customers.

Do I need an export meter?

Yes, we ask that all of our customers have an export meter fitted before they join the scheme. Export meters register how much electricity is being fed into the electricity network.

If you have not got an export meter npower can help you arrange to get one installed. Please note your requirement on the application form and in the terms and conditions and we will contact you to arrange this.

What is npower juice?

juice is 100% renewable electricity. juice will not cost you any more than npower's standard electricity product, but as a juice customer you will be guaranteed that for every unit of electricity you use a unit of green electricity is fed into the electricity network. This ensures that an equivalent amount of electricity is generated from renewable sources. The North Hoyle Offshore Wind Farm generates pollution-free, wind-powered electricity which along with other sources of renewable generation supplies the juice product. For further information, up-to-date prices or to make the switch to juice please contact us on **0845 120 2755**.

I've made the switch to juice - what happens next?

Thank you for becoming a juice customer. Now please complete and return the application form to the microgeneration scheme. We shall acknowledge receipt of your application form in writing following which you will be deemed to have started on the scheme.

How will payments be made on the scheme?

Payment will be sent to you within 60 days of receiving your meter readings. The dates to take your meter readings for 2006/7 are:

1st October and 1st April*

Payment will be made in the form of a personal cheque and will not be shown as a deduction on your juice bill. We are currently looking at ways to integrate the payments with your bill and any changes to payment methods will be outlined to you fully in the future.

I don't have a generation meter - is this a problem?

Yes. A generation/variawatt meter should be fitted at the time of installation. If this has not been done, we advise you to contact your installer at the earliest opportunity.

How long is the microgeneration scheme open for application?

This scheme will run to at least April 2007. We are currently developing a formal product due to be launched in April 2007. Customers will be notified as to the introduction of new schemes and products.

Is the scheme open to non-domestic customers?

No. The scheme is only open to domestic customers with a maximum system size of 6kWp (kilo Watt peak). We are continuously looking at new areas of opportunities and are carrying out research into the business market.

In countries such as Germany and Spain generators are rewarded generously for the electricity they generate. Why are we not at similar rates?

Government support and market structure varies considerably from country to country. In countries such as Germany, there is strong government support in the form of subsidies that allow higher prices to be paid for generated electricity. This support is not currently available in the UK market.

Who are we?

RWE npower, part of the RWE group, is a leading integrated UK energy company. Our business comprises energy generation, engineering expertise, power and gas retailing, and metering and data services. We are also market leaders in renewable energy development. Our retail business, npower, is one of the UK's largest energy suppliers, with around 6.2 million customer accounts, serving households and businesses. In August 2001, we launched our non-premium green electricity product, npower juice. For every unit of electricity used by npower juice customers, a unit of electricity is generated from renewable sources.



*Our microgeneration scheme terms and conditions shall apply.