

Capacity to Customers

Change the way you use electricity – and save money



Electricity North West

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We keep the lights shining for 5 million people at home and at work.

North West's electricity distribution network.

Electricity North West owns, operates and maintains the

We deliver electricity from the National Grid to more than 2.5 million homes and businesses across the North West.

The bulk of electricity enters our network from the National Grid at grid supply points. It then travels through our network to substations where the voltage is transformed and delivered to you to be used in your day to day life.

We are one of the biggest employers in the North West. Our people look after a network of nearly 13,000 kilometres of overhead lines, 44,000 kilometres of underground cables and thousands of transformers, substations and switchgear.



The challenges of a low carbon future

Part of our role as network operator is to plan for the future. We invest money from your bill back into the region's electricity network.

Over the next 25 years the population of the North West is expected to grow by 10%. We also face the challenge of making the transition to a low carbon future. To meet government carbon reduction targets we need to reduce our dependence on fossil fuels like gas and petrol and change to renewable sources.

As a country the demand for electricity is forecast to double by 2050. In the North West we would need to invest nearly £9 billion to expand the network and cope with the extra demand as early as 2025.

This would be a massively disruptive programme of work to install more overhead power lines and underground cables – which would mean much higher bills for customers in the future.



One of the biggest challenges we will face in a low carbon future is powering thousands of electric cars for the region's commuters. Electric cars need re-charging regularly – an 80-mile drive uses about the same amount of electricity that a small house uses in one day.

One of the changes you may need to make to your business is to install charging points for your company vehicles, and for electric cars belonging to your employees and customers.



The C2C project

Electricity North West is already planning up to 2050. We are looking at how we can change the way we use our network to meet future demand for your business and for our homes as we start to use more and more electricity.

Our regulator Ofgem recognises that innovative solutions are needed to meet the predicted huge increase in electricity usage, and that the expensive and disruptive option of expanding the network with more pylons and cables is something we need to avoid.

This is why they are supporting our innovative Capacity to Customers project through their Low Carbon Network Fund.

Capacity to Customers – or C₂C – could form the blue-print for the UK's future electricity network. By changing the way we use our existing network to increase its capacity, we could deliver the extra power we need in the future without expanding the network.



How does it work?

The existing electricity network is designed to keep the lights on when things go wrong by keeping some of our capacity for emergency use. This allows us to re-route power around faults. So most of the time, we only use half of our total capacity with half reserved for emergencies.

By reconfiguring the network and working smarter, we can release this extra emergency capacity for everyday use.

If we compare an electricity circuit to a motorway, opening up the hard shoulder would mean we have two extra lanes allowing more traffic to use the motorway. Instead of an expensive and disruptive programme of work to expand the network, we could use our emergency 'hard shoulder' and meet the electricity demands of the future.















Take part in C2C

We need to trial C₂C in the North West and we are looking for businesses like yours to take part. By taking part in the trial – and changing to a C₂C contract – you could obtain real financial benefits.

As a C₂C customer your power supply will be as reliable as usual. The difference is that we will change the process for restoring your electricity supply in the unlikely event of a power cut.

Power cuts or faults are very infrequent. You may experience one once every three years. When this happens on your current contract, your power is usually restored within one hour. On a C₂C contract we would continue to ensure that the power supply for your **essential** uses is restored as soon as possible. But the restoration of your **non-essential** power would be delayed for a pre-arranged period of time – for example, two hours instead of one.

> And that's where you could save money.

You could also avoid some of the costs for a new connection to the network by signing up to this type of flexible contract. The more flexible you can be, the greater the savings for your business.

Case study

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Business: supermarket

Essential uses: fridge/freezer; lighting; checkout tills **Non-essential uses:** air-conditioning; other uses. As part of their C₂C contract the supermarket owner agrees their essential and non-essential services with Electricity North West. The supermarket receives the same reliable supply as usual. Following a power interruption our engineers fix the fault and power for the supermarket's essential uses is restored within one hour. This ensures that the supermarket is back in business as soon as possible. Under the terms of the C₂C contract, power for non-essential uses (air conditioning etc) is restored approximately two hours later. The supermarket owner receives a payment from Electricity North West in return.

What happens next

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- In April 2013 we will start trialling C₂C on around 10% of our network.
- You can express an interest in taking part in our trial by completing our online survey. This will help us understand what companies like yours think about C₂C.
- So why not get involved? You could be reducing costs to your business, helping the environment and contributing towards the future of the North West.

Low Carbon Network Fund

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To deliver Britain's ambitious plans for a low carbon energy sector, energy networks must be transformed. They must be smarter, more innovative, more flexible, more responsive to customers' changing needs and more cost effective.

The £500 million Low Carbon Networks Fund (LCN) has been set up by Ofgem, the industry regulator, to provide vital backing for a series of cutting-edge projects aimed at developing crucial knowledge and expertise which can be shared across the electricity industry.

Ofgem has granted Electricity North West £10 million from the LCN Fund to develop its ground-breaking Capacity to Customers (C₂C) initiative.

The benefits of C₂C

- Releases previously untapped network capacity
- Enables you to make savings by changing the way you use electricity
- Helps us move towards a low carbon future
- Prevents huge infrastructure improvement costs being passed on to you, our customers
- Delivers vital benefits to the region and to the whole of the UK

For more information on the LCN Fund please visit: www.ofgem.gov.uk



Contact us

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To find out more please call us on:

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Visit our website: www.enwl.co.uk/c2c

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