Energy Networks Association

Guide to the UK and Ireland energy networks
Every minute of every day ENA’s members ensure that the lights stay on, our homes are warm and that the UK and Ireland keep working.

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Welcome from the Chief Executive

Welcome to ENA’s ‘Guide to the Networks’.

Our energy networks play a vital role in all of our lives, from the moment the alarm goes off and we jump in the shower in the morning, until the moment we switch the lights off at night. The wires and pipes that deliver electricity and gas around the country and into our homes and businesses are a fundamental part of life in a modern, advanced society.

Despite how essential they are to all of us, most people know very little about the energy networks. They work quietly and reliably in the background, and thankfully there is rarely any need to think about them. This Guide is for anyone who wants to learn more about this important sector.

Energy networks are evolving to become the most exciting and innovative part of the energy industry and will be crucial to meeting future challenges. Understanding them will be necessary to understanding how the UK will deliver secure, sustainable and affordable energy in the years ahead.

ENA’s ‘Guide to the Networks’ gives an introduction to our energy infrastructure and sets out key information, issues and challenges facing our industry to show why the energy networks are so essential to our way of life.

David Smith
Chief Executive, Energy Networks Association
About ENA

Energy Networks Association (ENA) is the voice of the networks, representing the gas and electricity transmission and distribution companies in the UK and Ireland. Our members own and operate the vital wires and pipes of the UK’s energy system.

Our aim is to provide a conduit for information sharing and political and technical policy development between the networks and industry stakeholders, including the Government and regulatory bodies. ENA is the respected voice of the industry at the heart of policy making producing a range of standards, commissioning independent research and reports, co-ordinating the sector position on key issues and playing a leading role in the development of smarter networks.

ENA runs a number of key industry events including the annual Low Carbon Networks Innovation (LCNI) conference, the Safety, Health and Environment (SHE) Management conference, and Distributed Generation (DG) Fora in London, Cardiff and Glasgow. ENA also supports the Gas Industry Safety Group (GISG) and the Gas Safety Trust (GST).

As the profile of the networks increases in line with the wider energy sector, ENA will continue to act as a gateway to the industry to ensure a wide understanding and appreciation of the work of our members.

www.energynetworks.org

For information about generation and retail visit: www.energy-uk.org.uk

Transmission & distribution

The energy networks are divided into four categories: electricity transmission, electricity distribution, gas transmission and gas distribution.

Transmission
The transmission networks carry large quantities of gas and electricity across long distances through cables, overhead lines and pipelines. The electricity transmission network carries high voltages of electricity at up to 400kV, which is more than 1,600 times the average domestic supply. Gas is carried at pressures of up to 85 bar; that’s 85 times normal air pressure.

Distribution
If the transmission network is the energy equivalent of a motorway, the distribution network operates like the A and B roads. It takes energy from the wires and pipes of the transmission networks and converts it into lower voltages and pressures so that it can be delivered safely into our homes and businesses.
The networks

- Offshore rig
- Terminal
- Compressor
- Liquid natural gas storage
- Compressor
- Storage underground
- Local distribution zone offtake
- Biogas
- Pressure reduction station
- Governor regulates pressure
- Biogas
- Storage
- Smart meters
- Large industrial
- Large commercial
- Small commercial
- Households
- Smart meters

- Generator
- Voltage boosted to 275,000V or 400,000V for transmission across the country
- Voltage reduced to 132,000V for the local Distribution Network Operators (DNOs)
- 33,000V
- 11,000V
- 400V or 230V
- Offshore generation at distribution level
- Generation at distribution level
ENA members

Fig 1: Electricity distribution

Fig 2: Electricity transmission

Whilst SSE and SP Energy Networks own transmission network assets in Scotland, National Grid operate the transmission network across the whole of Great Britain.
ENA members

Fig 3: Gas distribution

Fig 4: Gas transmission
## The networks in numbers – An incredible feat of UK engineering

<table>
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<tr>
<th>ENA members serve over 30 million electricity customers and 22.5 million gas customers.</th>
<th>Every year 4,200km of gas mains are replaced, the equivalent of Britain’s entire motorway network.</th>
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<tr>
<td>The electricity network in Great Britain is over 1 million km long and could circle the equator 25 times.</td>
<td>Around 60,000 new gas consumers are connected to the gas network each year in Great Britain.</td>
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<tr>
<td>Gas is carried along 272,000km of pipes, which could go around the world six times.</td>
<td>Over 300,000 connections to the electricity distribution network were completed in 2013/14.</td>
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<tr>
<td>The electricity network in Northern Ireland is nearly 48,000km long and serves 840,000 customers.</td>
<td>Over £40 billion could be invested in our gas and electricity networks by 2021.</td>
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<td>There will be approximately £100 million invested in the electricity network in Northern Ireland in 2015.</td>
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Regulation and performance

A fully competitive market for networks is not practical given the nature of the service and the scale of infrastructure and investment required. In place of a market, the energy networks in Great Britain have operated under a framework of comparative economic regulation since they were privatised in 1990. Regulation has set tough limits on what network companies are allowed to spend and charge their customers and established key performance targets. This approach has proven to be highly successful with network costs now 17% lower than they were at the time of privatisation, whilst the performance of our networks has improved dramatically. Our networks are amongst the cheapest in Europe and the most reliable in the world.

For an average cost of 81p a day, customers enjoy one of the most reliable energy networks in the world.¹

Cost of the GB networks – Average duel fuel energy bill
(Source: Ofgem Supply Market Indicator 2015)

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
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<td>Wholesale costs</td>
<td>43%</td>
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<tr>
<td>Network costs</td>
<td>23%</td>
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<tr>
<td>Environmental and social obligation costs</td>
<td>7%</td>
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<tr>
<td>Supplier operating costs</td>
<td>14%</td>
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<tr>
<td>VAT</td>
<td>5%</td>
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<tr>
<td>Pre-tax margin</td>
<td>9%</td>
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¹ Ofgem Supply Market Indicator (2015)
RIIO
In 2010 Ofgem began a process to develop a new framework for regulating networks, which was designed to keep costs down whilst allowing network companies to invest in the innovation necessary to meet the challenges of the UK’s low carbon transition.

RIIO (Revenue = Incentives + Innovation + Outputs) is an incentive based framework that sets clear outputs which network companies must meet for their customers. Importantly, RIIO encourages investment in commercial and technical innovation through core incentives and new funding streams. This innovation will be crucial to the UK’s energy future.

As of April 2015 the RIIO framework will be in place across all four network sectors. It has already been recognised as a world leading regulatory framework, with other countries looking to the UK for lessons in how to regulate energy networks.

Regulation in Northern Ireland and the Republic of Ireland

Whilst Ofgem is responsible for the regulation of energy networks in Great Britain, there is a separate system of regulation in place in Northern Ireland where the Utility Regulator oversees the gas, electricity, water and sewerage sectors in the interests of consumers.

Investment
Over the coming years the UK energy networks require an unprecedented level of investment to maintain and replace ageing infrastructure, to meet the demands of a growing population and to connect new sources of low carbon energy to the grid.

The Department of Energy and Climate Change (DECC) estimates that between 2014 and 2020 up to £34 billion of investment could be required in electricity networks, and a further £7 billion in gas networks.\(^2\)

To meet this investment challenge the networks require a long term commitment of investment based on a reasonable rate of return. By minimising risk, operating efficiently and having a stable political and regulatory environment, the UK is able to draw finance into the country for vital infrastructure at a low cost for customers.

The success of the UK’s regulatory framework will ensure that this record level of investment is delivered with costs to consumers remaining flat into the next decade.
Employment and skills

ENA members directly employ over 28,000 people, making a significant economic contribution across all regions of the UK.

DECC estimate that the development of smart grids will employ 9,000 people in highly skilled jobs over the coming decades, and contribute £5 billion to the economy in exports as the UK takes a leading role in the smart grid field.³

The continued need for a gas transportation system will support 4,500 jobs a year to 2021 in gas transmission alone.⁴ Ofgem has permitted gas distribution companies to spend more than £6.4 billion on capital investment in their networks which could support around 10,000 jobs a year to 2021.⁵

However, our networks are facing a skills gap that has the potential to be the biggest barrier to innovation and smart grid development over the coming years. With an ageing workforce we are going to see a huge amount of experience leaving the industry over the next decade, with a peak year of retirement in 2024. In electricity networks alone we will need to employ over 15,000 people by the end of the first RIIO price controls, which represents 74% of current workforce levels.⁶ We expect 4,277 Full Time Equivalents to retire from the gas networks between 2011 and 2025. Nearly 1,000 of these are expected to be amongst those working at highly qualified, experienced manager levels.⁷

This demonstrates the scale of the challenge we face.

³ DECC (2015)
⁴ DECC (2015)
⁷ Energy and Utility Skills Workforce Planning Model
Networks and the low carbon future

Our networks will be vital facilitators of the UK’s transition to a low carbon energy future. Not only will they need to connect new sources of renewable and low carbon generation, they will also need to adapt to meet the considerable challenges of decarbonisation. The electrification of heat and transport will see a significant increase in demand on the electricity network, which will also have to cope with greater seasonal peaks in winter and unpredictable fluctuations in output from renewable sources like wind and solar power. Our gas networks will need to evolve to accommodate the growth of ‘green gas’ such as biomethane.

In order for the UK to ensure secure and affordable energy in a low carbon future, it will require a radical transformation in our networks and the development of the smart grid.

The future of smarter networks

When we talk about a smart grid we are generally talking about a network that uses advances in communications technology, automation and data monitoring to operate in a more sophisticated and efficient way. It will mean a move away from a passive network carrying energy in one direction, towards a more intelligent grid communicating between all parts of the system from generators through to the appliances in people’s homes. An example would be a network that can respond to a drop in solar energy supply on a cloudy day by temporarily turning off a customer’s fridge, with their agreement.

Smart investment in a smart network

Any investment in smart grid innovation and technology must be accommodated by the regulatory and financial framework that companies operate under. The RIIO framework does this through core innovation incentives and also through new funding streams, which are already supporting a range of exciting projects.

The £500 million Low Carbon Network Fund (LCNF) was introduced by Ofgem in 2010. It gave electricity distribution networks the opportunity to innovate and try out new technologies and ways of working without risk. Vital understanding about performance, network design and consumer behaviour was gained, and companies competed for up to £64 million of additional funding for a number of flagship projects.

Under the new RIIO framework Ofgem has expanded the stimulus available to provide a financial catalyst for innovation across electricity and gas distribution and transmission networks through the Network Innovation Allowance (NIA) and Network Innovation Competitions (NIC).

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ENA and smart networks
With new funding streams in place and many projects already underway, the effective sharing of learning from these innovation projects will be essential if this investment is to deliver value for money. For that reason, ENA has taken a leading role in bringing together experience in the UK and around the world so that all consumers are able to enjoy the benefits of the work being carried out.

**LCNI Conference**
ENA hosts the annual Low Carbon Networks Innovation (LCNI) conference, which brings together network operators, manufacturers and other stakeholders to share learning from the projects funded through the Ofgem innovation stimulus mechanisms.

The event draws delegates from around the world and has become established as the UK energy industry’s principal innovation conference.

www.lcniconference.org

**Smarter Networks Portal and UK Smart Grid Portal**
ENA manages two online resources which act as a repository for the latest information in the development of smart networks. The Smarter Networks Portal provides a comprehensive account of all smart grid projects funded through the LCNF and RIIO funding streams. The UK Smart Grid Portal has been established to provide a hub for smart grid learning and information for industry, Government and other key stakeholders from around the world.

www.smarternetworks.org
www.uksmartgrid.org

**Smarter Networks Film Series**
The Smarter Networks Film Series conveys the value and breadth of innovation currently being undertaken under the LCNF, NIA and NIC. The series captures the diversity of network innovation and those who are dedicated to making these projects possible.

The Smarter Networks Film Series is available on the Energy Networks Association YouTube channel.
Smart meters

Smart meters are an integral part of achieving a smarter network. They will bring more intelligence to the grid and allow network operators to plan more efficient investment in infrastructure. The network benefits from smart meters are also where the greatest long term cost savings come from as well as significant customer service benefits too.\(^9\)

While the network companies are not rolling out the meters themselves they are critical to the success of the programme. Close working between the suppliers and the networks will be crucial to deliver the smart meter roll-out efficiently, as addressing network issues in a co-ordinated way will ensure the best experience for customers.

ENA and its members are working closely with suppliers, Government, Ofgem, the Data Communications Company (DCC) and others to ensure key stakeholders have the expertise of the networks sector and fully understand its part in the smart meter roll-out.

As part of ENA’s work to support the GB smart metering roll-out a series of reports have been produced, which are available on the ENA website.

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\(^{10}\) Department of Energy and Climate Change, “Smart Meter Roll-out for the domestic and small and medium non-domestic sectors” (2014)
Distributed Generation

In recent years Government policy and the low carbon transition has seen an increase in the number of electricity generators wanting to connect wind farms, combined heat and power, hydroelectric energy and other smaller technologies to the distribution network.

ENA, on behalf of its members, organises the DG Fora. These events give DG customers and network operators an opportunity to discuss any issues or concerns with a view to improving co-operation and overcoming any challenges identified. In 2014 over 330 delegates attended three events held during September in London, Cardiff and Glasgow with presentations from DNO CEOs, DGs and other key stakeholders.

Distributed Generation and connections to the network

The growth in DG has seen an increased focus on the connections process, and raised questions around competition, cost and time taken to connect to the network. ENA members recognise the importance of a well functioning connections process to the UK economy and have included proposals in RIIO business plans to ensure the interests of connecting customers and current users of the network are balanced.

Competition in connections

Some of the work required to build a new connection to the distribution network must be carried out by DNOs in order to maintain the integrity of the network for all customers. However, there are elements of connections work which can be carried out by Independent Connections Providers (ICPs).

There is already a high level of competition in gas connections and there has been significant progress in addressing barriers to competition in electricity connections in recent years, with a substantial increase in the market share of ICPs. Network operators will work with Ofgem and policymakers to address remaining barriers to deliver a well functioning market in connections.

Electric vehicles

The UK has witnessed a rapid growth in the sale of electric vehicles (EV) since 2010. In that year only 111 EV cars were sold whilst figures for 2014 show that over 6,000 were sold between January and August alone.11

EVs present a number of challenges for electricity networks, such as simultaneous recharging of cars at peak times and the level of unpredictable demand. ENA has established the Low Carbon Technologies Working Group to represent network operators’ interests in several areas, including the development of UK standards for electric vehicles, charging connections and charging infrastructure.
Interconnectors

Interconnectors between the UK and European partners will make an important contribution to energy security in the low carbon economy.

There are currently four electricity interconnectors linking Great Britain to France, the Netherlands, Northern Ireland and the Republic of Ireland. These interconnectors provide over 4GW of capacity. There are currently three gas interconnectors which connect to Belgium, the Netherlands and the Republic of Ireland.

ENA supports the doubling of UK electricity interconnector capacity to 8-9GW. Not only would this put us closer to the European benchmark of 10% of capacity from interconnectors, it could also save UK consumers up to £1 billion a year.12

Cyber security

ENA members recognise that there could be an increased risk associated with the transition to a smarter electricity system, including network components and systems as well as smart meters. The grid will become more vulnerable as it grows smarter.

Collaboration and best practice is one of the best ways of defending against attacks, potential or actual.

ENA and its member companies have established a Cyber Security Forum that is working in this area with other industry bodies to identify and mitigate risk. Through this forum

The future of gas

ENA’s position is developed and communicated to DECC, Ofgem and other key policy makers in order to both influence the national debate and highlight the strategic importance of the energy networks.

As the voice of both gas and electricity networks, ENA has a unique role in analysing the whole energy system without bias towards any energy source.

Meeting the challenge of delivering a low carbon economy will require a holistic approach over the coming decades, which recognises the importance of gas in the energy mix and the value of the UK’s gas infrastructure.

Gas is the fuel of choice for UK consumers meeting the heating demands of almost 85%13 of domestic properties and the cooking needs of around 50%14 of residential and service sector buildings. Whilst the way we heat our homes and cook our food will gradually change as we decarbonise, gas is set to remain dominant for some time. It will also play an important role in electricity generation by 2050 as Carbon Capture and Storage (CCS) technology continues to advance.

The UK’s gas network is an extremely valuable asset and a feat of engineering that has helped industry to grow and provided an affordable way to heat our homes over many decades. It will have a role in a balanced low carbon transition delivering the fuel of choice for meeting UK heat demand for decades to come.
Our gas network will also be crucial to managing the increasing demands on our electricity network from decarbonisation. The electrification of heat and transport will significantly increase the load on the electricity network, which will also need to cope with higher peaks in winter.

Without a role for gas in the energy mix the cost of reinforcing the electricity network to meet the challenges of decarbonisation will cost between £16-28 billion by 2050. If gas plays a role in a balanced transition to a low carbon future it will reduce the cost of investment in the electricity distribution network by £8 billion.  

Green gas

The UK’s gas network has a vital transitional role, but can also play a long term role in the low carbon economy by facilitating the delivery of green gas, such as biomethane.

The injection of green gas into UK networks has been growing rapidly in recent years. Biomethane capacity has grown every year since 2011 and more than quadrupled in 2014. It is expected that by 2020 there will be over 100 biomethane sites connected to gas distribution networks in Great Britain, which in turn could meet over 10% of domestic demand.  

With heat demand accounting for a third of UK carbon emissions, the use of carbon neutral biomethane has the potential to make a significant contribution to the UK’s climate change targets. Unlike other low

The future of gas in Ireland

For decades natural gas has played a vital role in Ireland’s energy mix and in Ireland’s social and economic progress. It currently represents 30% of Ireland’s primary energy demand and accounts for 44% of Ireland’s electricity generation.

With modest investment in a number of key areas, natural gas can play an even more significant role in Ireland’s energy and environmental policies and in the country’s economic development. Investment in the areas of gas mains infill, compressed natural gas and biogas will increase the utilisation of the gas network for the benefit of all gas customers.
In particular, biogas will ensure that Ireland has a robust, renewable and sustainable indigenous energy source as part of its overall energy mix well into the future. With the right investment biogas has the potential to satisfy over 30% of Ireland’s gas demand by 2030, reducing the country’s reliance on imported fuels and providing Ireland with a renewable indigenous fuel source.18

**Gas to the West**

In 2015 the Utility Regulator in Northern Ireland awarded licenses to Mutual Energy Limited and SGN to extend the gas network into the west of the country. The Gas to the West project will see £200 million invested in a new pipeline to the west of Northern Ireland, connecting 40,000 new customers to an affordable, secure, more environmentally friendly form of energy.19

**Fuel poverty**

The network operators have an important role to play in combating fuel poverty. Connecting fuel poor households to the gas network offers them an affordable and reliable source of heat that is also more environmentally friendly than oil, which is used in many cases.

Through Ofgem’s Fuel Poor Gas Extension Scheme, ENA members are extending the gas network to fuel poor communities. In 2013/14 gas network companies achieved 14,764 gas connections as part of addressing fuel poverty. The GB target up to 2021 is for over 77,450 new fuel poor connections.20

Meeting the UK’s heat challenge will require a diverse range of approaches, and district heat networks have the potential to make an important contribution to how we heat buildings over the coming years, particularly in dense urban areas.

These networks deliver heat from a variety of sources directly to homes and businesses from a central heat source via hot water pipes. This means that individual buildings do not need to generate their own heat on site.

Whilst heat networks currently provide less than 2% of UK heat, it is an area with significant growth prospects with the technical potential to supply a much larger percentage of heat demand in buildings by 2050.21

The use of low carbon heat networks is most appropriate in high density, urban areas in proximity to a heat source, such as industrial plants that produce waste heat. The Gas Distribution Networks and their partners do currently assist in delivering heat networks, often facilitating the connection to a gas fired Combined Heat and Power (CHP) unit that acts as the heat source and working with landlords and local authorities to deliver heating solutions. ENA’s members can therefore play a key role in moving towards low carbon heating in the most heavily populated areas.

The safety of employees and members of the public around networks is a top priority for the industry. It is an area where we have seen great progress since privatisation, with the industry now far safer than it was in 1990.

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18 Information provided by Gas Networks Ireland


20 Ofgem, “RIIO-GD1 Final Proposals” (2012)

21 Carbon Connect, (2014)
Health and safety

Powering Improvement

The Powering Improvement initiative was launched in 2010, with a 5-year strategy aimed at delivering continued improvement in occupational health and safety performance and establishing the UK electricity industry as a world leader in that field. The strategy has brought together the electricity industry, trade unions and the Health and Safety Executive (HSE) in a collaborative approach, which has made considerable progress towards its goals.

In 2015 a new 5-year Powering Improvement strategy has been launched, to build on the progress made since 2010 and seek to deliver sustained improvement in health and safety performance to 2020.

www.poweringimprovement.org

Public safety

The network operators work hard alongside HSE to ensure the transmission and distribution of electricity and gas is safe for the general public. Throughout the year ENA runs campaigns and promotes key safety messages to coincide with sporting or agricultural seasons to ensure they are fresh in people’s minds.

ENA has established a Public Safety Committee which considers the key public safety priorities across a range of areas, including any emerging issues such as link boxes. These priorities are identified in ENA’s “Our Commitment to Public Safety” document, which is updated annually and can be found on the ENA website.

SHE Conference

ENA hosts an annual Safety, Health and Environment Management Conference, which provides a forum for all stakeholders to network, share best practice and review challenges. It aims to foster co-operation and improve contact between employees, employers, trade unions and regulators.

Gas safety

Carbon Monoxide

Carbon Monoxide (CO) is an odourless, colourless and tasteless gas, which on average results in 200 people being hospitalised and 40 fatalities in the UK each year.

Under Ofgem’s RIIO framework ENA member companies are incentivised to promote CO awareness through the Discretionary Reward Scheme. They employ a range of initiatives to do this including leaflets, short films, sponsoring the activities of key stakeholders and engaging with customers at events in their regions.
**The Gas Industry Safety Group and the Gas Safety Trust**

ENA supports the Gas Industry Safety Group (GISG) that has members from across the gas value chain from beach to burner, which looks at how the industry can mitigate the risks of CO from a technical and policy perspective.

Since its formation in 2000, the GISG has brought together the UK’s gas industry to maintain and improve safety performance.

[www.gisg.org.uk](http://www.gisg.org.uk)

ENA also manages the Gas Safety Trust (GST), the UK’s leading fuel safety charity with the key objectives of further improving fuel safety for the public and industry throughout the UK and reducing the incidents of death and serious injury from CO exposure. As part of this work GST has launched an online CO Portal, which is the central repository for data and information relating to CO in the UK.

[www.gassafetytrust.org](http://www.gassafetytrust.org)  
[www.coportal.org](http://www.coportal.org)

**Metal theft**

When metal is stolen from energy network assets it not only disrupts supply and damages the environment, but it also risks the safety of the public. In recent years incidents of metal theft from parts of the electricity network were occurring 21 times a day on average, resulting in eight deaths and hundreds of injuries.

Following an increase in metal theft between 2008 and 2011, ENA led a successful campaign to bring about a change in the law, which resulted in the Scrap Metal Dealers Act 2013. Since then there have been signs of improvement in England and Wales, with the Home Office estimating a reduction in metal theft incidents of around one third between 2012/13 and 2013/14.


However, the problem has not gone away and proper enforcement of legislation is required to stamp out the increasing involvement of organised criminal gangs in metal theft. ENA will continue to work with a wide range of stakeholders to combat this crime and protect the public. Legislation in Scotland is also a key part of this effort and ENA has contributed to the Air Weapons and Licensing (Scotland) Bill, which has the potential to deal a lasting blow to criminals north of the border.

**Severe weather resilience**

The UK’s networks are amongst the most resilient in the world. However, the industry works hard to maintain a high level of performance in the face of emerging threats, including those posed by climate change and severe weather.

The storms experienced during winter 2013/14 demonstrated that extreme weather can cause significant damage to the electricity network and disruption to energy supplies. There is an expectation that climate change will result in increased occurrences of severe weather, and the energy networks are preparing accordingly. This includes ongoing work to improve network design, flooding resilience, forecasting, overhead line resilience and vegetation management.
The Committee on Climate Change produced a report in 2014 titled “Managing climate risks to well-being and the economy”, which praised UK electricity distribution and transmission companies for implementing comprehensive strategies to safeguard the resilience of their networks to climate change.

**Single Emergency Number**

The severe storm events over winter 2013/14, and the electricity supply disruptions they caused, highlighted that the general public is confused about what number to call to report an electricity network supply issue and obtain important information or advice.

In response to this problem, ENA is delivering a single national telephone number which customers will be able to call to obtain information and advice during a power cut or to report any electricity network related concerns.

This project aims to deliver a memorable three digit number of 105, which is expected to be available to the public by April 2016.

**Europe**

As the significance of EU energy policy continues to grow, ENA plays an increasingly important role as the ‘eyes and ears’ for our networks in Europe. In order to defend the interests of the UK, we protect against any damaging EU measures, such as those contained within the Ecodesign Directive.

ENA has worked to resist an EU ban on the use of SF6 (Sulphur Hexafluoride) in insulating switchgear in electricity substations. The proposed ban would have put the resilience of the network at risk and potentially cost UK bill payers over £1 billion in replacing otherwise healthy and reliable assets. ENA’s ongoing work in this area demonstrates the importance of active engagement at an EU level in order to defend the interests of UK consumers.

ENA will also continue to contribute to important EU wide policy initiatives. With a new EU Commission bringing forward its energy priorities in 2015, ENA will work hard to ensure the views of its members are heard at the European level on a range of critical issues. The Commission has placed great importance on energy policy and sees smart grids as essential to achieving its key climate change objectives.

ENA leads a comprehensive programme of engagement with lead officials in the Energy Directorate of the EU Commission and Members of the European Parliament, as well as briefing UK Ministers to defend national energy interests through the European Council.

Through our position on the Board of Eurelectric and our vice-presidency of GEODE, ENA will work to ensure the views of its members shape the development of Europe’s energy future.
We’re here to help

If you would like to talk to us about what we do or how energy is delivered to your door, please do not hesitate to contact ENA on +44 (0)20 7706 5100 or info@energynetworks.org.

You can also find out more about ENA by visiting www.energynetworks.org

Members and companies that work with Energy Networks Association

Brookfield Utilities UK
Chubu Electric Power Co. Inc.
Electricity North West Limited*
ESB Networks
Gas Networks Ireland
Guernsey Electricity
Jersey Electricity
Manx Utilities
Mutual Energy
National Grid Group plc
National Grid Electricity Transmission
National Grid Gas Distribution
National Grid Gas Transmission
Network Rail
Northern Gas Networks Limited
Northern Ireland Electricity Limited
Northern Powergrid Holdings Company
Scottish Power Limited
SGN
SSE plc
UK Power Networks
Vector
Wales & West Utilities Limited
Western Power Distribution plc