

Gridline

Summer 2011

RENEWABLE HERITAGE

The National Trust
targets energy efficiencies

BURNING ISSUE

Straw stack fires
near power lines

POWERFUL CONNECTIONS

Securing the future of
UK energy supplies



BEST OF BRITISH

The Lincolnshire growers flying the
flag for home-grown asparagus



PLUS: WELSH PROJECT,
NATIONAL GRID'S NEW
LOOK, WIN A DRIVER DAY

National Grid's Land and Development Group

The Land and Development Group is responsible for acquiring all rights and permissions from statutory authorities and landowners needed to install, operate and maintain National Grid's electricity and gas transmission networks. The Group acts as the main interface for landowners who have gas and electricity equipment installed on their land. Your local contacts are listed below.

Electricity and gas

- North-west and Scotland
0161 776 0706
- South-east **01268 642 091**
- South-west **01452 316 059**
- East **0113 290 8235**.

Wayleave payments

- For information on wayleave payments, telephone the payments helpline on **0800 389 5113**.

Electricity emergency

- Emergency calls to report pylon damage to National Grid can be made on **0800 404 090**. Note the tower's number – found just below the property plate – to help crews locate it.

Electric and magnetic fields

- For information on electric and magnetic fields, call the EMF information line on **08457 023 270** (local call rate).
Website: www.emfs.info.

Gas emergency

- **0800 111 999**.

Dial before you dig

- Before carrying out any work in the vicinity of gas pipelines, overhead power lines or underground electric cables, you should contact Plant Protection on **0800 688 588** so that searches can be made to determine the exact position of any National Grid assets.

Customer comments

- Write to Land & Development, National Grid House, Warwick Technology Park, Gallows Hill, Warwick, Warwickshire CV34 6DA. Or email us at: ld.customercomments@uk.ngrid.com.



12

Contents

News

- 04** The changing face of National Grid
- 05** City Year makes a difference
- 06** Welsh consultation takes to the road

Features

SPECIAL FOCUS

- 08-11** How two National Grid projects are providing a major boost to the UK's energy security

CASE STUDY

- 12-13** The National Trust has launched a range of renewable energy initiatives at its historic properties

SAFETY

- 14-15** Why stacking straw or hay bales too close to overhead lines can have disastrous consequences

PROFILE

- 16-18** Lincolnshire asparagus growers Nick and Ros Loweth supply some of the top restaurants in the country

Competition page

- 20** Enter competitions to win a driver experience day and a £150 Marks & Spencer giftcard



16



14



08



Turn to page 20 for the results of last issue's photo competition

Competition win nets Joan a new camera

Congratulations to electricity grantor Joan Asquith, of Grove Farm, near Pontefract in West Yorkshire, who is the winner of the £150 Jessops giftcard competition in the last issue.

"My current digital camera has just given up the ghost, so winning this giftcard will enable me to replace it," said Joan, whose family run a 250-acre arable farm growing various crops, including wheat, rapeseed oil and barley.

"This is the second time I've been lucky in a competition," said Joan. "Some time ago I won a flight to Denmark in the Yorkshire Post. It just shows that if you enter competitions you do have a chance of winning something. If you don't enter you can't win."

Get in touch

Please contact Gridline if:

- You have any news that you think would be of interest to other grantors
- You think your business or hobby would make a good article
- You have any suggestions for topics you would like to see covered in Gridline.

Gridline is produced by Summersault Communications, 23-25 Waterloo Place, Warwick Street, Leamington Spa, Warwickshire CV32 5LA.

To contact Gridline, phone 01926 656 325, email gridline@uk.ngrid.com or write to the address above.

Welcome to Gridline

It's my pleasure as the new editor to welcome you to the latest issue of the magazine. I will be doing my best to ensure Gridline remains an informative and interesting read.



Two questions I sometimes get asked are: 'what is a grantor?' and 'what's the purpose of Gridline?'

Well, a grantor is anybody who owns

or occupies land that hosts National Grid transmission towers or pipelines.

The aim of Gridline is primarily to bring together a community that National Grid recognises is playing a vital role in the efficient functioning of the UK's gas and electricity networks.

The magazine celebrates our grantors' interesting and diverse use of land, while also providing important safety information and advice.

Turning to the current issue, our main feature on page 8 focuses on two significant energy infrastructure projects involving National Grid.

The UK faces considerable challenges in the years ahead as energy security and climate change targets start to bite.

The 260km BritNed Interconnector, an electricity subsea cable linking the UK with the Netherlands, and capacity expansion at the Grain Liquefied Natural Gas importation terminal will both play their part in securing

the nation's future energy supply.

On page 12 we look at how the National Trust is introducing renewable energy initiatives at many historic properties – proving that heritage preservation and energy efficiency can happily coexist.

As farmers and contractors throughout the country prepare for harvesting, on page 14 we take a timely look at the importance of locating hay or straw stacks well away from overhead power lines.

Turn to page 16 for our profile of Lincolnshire grantors Nick and Ros Loweth, who argue that, when it comes to asparagus, British is definitely best.

And by eating fresh produce in season, you will also be sourcing your food locally, cutting food miles and supporting farmers in your neighbourhood in the process.

Our competition this issue provides you with an opportunity to win a driver experience day courtesy of Treatme, as well as a chance to be picked out of the hat for an M&S giftcard worth £150.

Dawn McCarroll
Editor, Gridline

For more information
Tel: 01926 656 325
email: gridline@uk.ngrid.com
www.nationalgrid.com

Newsline

The latest news from **National Grid** and its nationwide grantor network



ESSENTIAL ROLE: The new look emphasises National Grid's role in maintaining energy networks

Meeting the UK's energy needs

National Grid's new 'public face' reflects its key role in providing future energy solutions

OVER THE COMING WEEKS AND months a new consistent visual branding will be evident wherever National Grid or its alliance partners are operating. It will be visible, for example, on site hoardings, vehicle liveries, street works signage, project pamphlets and community consultation material.

"As a company, in the past we have not always maximised opportunities to communicate to the public at large the key role we play at the heart of the UK's energy infrastructure, delivering safe, reliable and convenient energy at the flick of a switch," said Donald Johnson, who is head of corporate brand strategy and identity at National Grid.

"The new look aims to raise our public profile in the United Kingdom. It's about reminding people that the work we do is behind a way of life that every energy consumer has become accustomed to, expects and relies upon."

The thick and thin lines of the new branding are derived from the cables and pipes that deliver the transmission and distribution networks from source to end-user. While familiar items such as kettles and light bulbs highlight the fact that their use would not be possible without the networks.

The new branding will also be used by the external face of the alliance partnerships, which work alongside National Grid, making it clear who is responsible for the

work and who is accountable to the local communities living with National Grid's works.

"Applying this look across all our consumer-facing materials will help the public develop a strong sense of National Grid's essential role in connecting them to the energy that enables their way of life, now and into the future," said Donald.

“ The work we do is behind a way of life that every energy consumer has become accustomed to ”

News in brief

SEE NATIONAL GRID AT THE COUNTY SHOWS

National Grid will be hosting a marquee at seven more county shows this summer, offering hospitality to invited grantors affected by major projects.

- ROYAL CORNWALL
9-11 June
- CHESHIRE
21-22 June
- LINCOLNSHIRE
22-23 June
- ROYAL HIGHLAND
23-26 June
- ROYAL NORFOLK
29-30 June
- GREAT YORKSHIRE
12-14 July
- ROYAL WELSH
18-21 July



**SHINING
LIGHTS:** City
Year's Team
National Grid

Leading by example

A GROUNDBREAKING project in London to inspire primary schoolchildren to excel in their studies and make the right life choices is being backed by National Grid.

The project, led by the City Year London organisation, places young people, aged between 18 and 25, in schools for a year, where they act as role models and mentors, supporting students, assisting teachers and managing structured after-school activities.

National Grid has committed

to a three-year sponsorship of Team National Grid at Whitmore Primary School in Hackney, where pupils are in the 3-11 age range.

City Year has a successful track record in the United States, where it can point to measurable gains in literacy, numeracy and attendance from children involved in its programmes.

National Grid has been working for a number of years on energy security projects in Hackney and this is continuing

with the London Tunnels project.

“National Grid has a strong relationship with City Year in the US and we are delighted to be sponsoring our own City Year London team – a group of youngsters devoting a year of their life to inspire others, combining local community impact and future leadership,” said Gareth Burden, London Tunnels project team manager.

Visit www.fullofpurpose.org.uk/news/view/city_year_london to see a video about the project.



SEEING THE LIGHT

Students at William Bradford Community College in Hinckley have plugged into solar power with the help of a £6,000 donation from National Grid and contractor Enterprise.

The installation of photovoltaic roof panels is helping the college to cut its electricity bills, reduce its carbon footprint, and achieve Green Flag status as an Eco-School.



One minute interview

David Knowles, lands officer north-west and Scotland

Background: I joined National Grid in July 2010, after working as a trainee surveyor at a firm of

chartered surveyors, mostly working on behalf of United Utilities.

Current focus: Overhead line refurbishments near Macclesfield substation, Cheshire, and in North Wales.

What do you like about your job? The mix between office and field-based work, meeting different people and the day-to-day challenges.

Dream job: F1 racing driver. Travelling the

world driving fast cars can't be too bad!

Family matters: I live in Mobberley, near Knutsford, Cheshire, with my girlfriend Gemma.

Leisure interests: I play football for Toft Tornados in Knutsford and support Manchester United and Doncaster Rovers.

If you won the lottery what would you buy?

A Ferrari. I've wanted one ever since I spent a week at a Ferrari garage as work experience at school.

If you could be anywhere in the world: Skiing in the Canadian Rocky Mountains.

Pet hate: Bad drivers.

Last holiday: Cape Town, South Africa.



FEEDBACK: David Vernon (right) has been out and about in Powys and Shropshire with the mobile exhibition vehicle

Going the extra mile to consult

A NEW MOBILE EXHIBITION VEHICLE has been out and about in Powys and Shropshire. National Grid hit the road as part of its public consultation for the proposed connection for new wind farm developments that are planned in mid-Wales.

Project newsletters were delivered to 85,000 local residents and over 45 drop-in exhibitions will have been held in church and village halls across the region by the time the first phase of consultation has concluded.

“The aim was to provide the public with as many opportunities as possible to find out about the project and to give feedback,” explained David Vernon, consents officer with the north-west and Scotland regional team. “By using a purpose-built vehicle, we were able to hold a further eight events and ensure even more people could take part in the consultation.”

WIND FARMS

The Welsh Assembly Government has identified mid-Wales as an important area



ADVICE: Lands officer James Dean was part of the team providing information

for renewable energy and a number of wind farms are being considered in the region. These new wind farms could deliver low-carbon energy to 450,000 homes in England and Wales.

However, there is currently no existing infrastructure in the area to transmit the potential 800-900MW of power to National Grid’s transmission network.

ENERGY CHALLENGE

The UK faces a major energy challenge to meet emission reduction targets and install new lower carbon generation before ageing power stations go out of commission.

National Grid is proposing to construct a new high-voltage substation to collect the energy from the wind farms and a new 400kV transmission connection to take the power from the substation and feed it into the national transmission system at a point between Shrewsbury and Wrexham.

Additionally, ScottishPower Energy Networks and SSE Renewables are proposing new 132kV local connections to connect the power generated from the wind farms to National Grid’s new substation.

Public input will be taken into account in the plans taken forward by National Grid.

For more information...

go to www.nationalgrid.com/midwalesconnection

Project watch

A round-up of current and forthcoming projects around the country

1 NORTH LONDON REINFORCEMENT PROJECT

WHEN: Consultation began April 2011

WHY: A series of upgrades are necessary to the overhead line that runs from Waltham Cross substation in Epping Forest to Hackney substation in London. The work will enable new sources of power generation to be connected to meet the growing demand for energy in London.

WHAT: Major investment is needed to upgrade the overhead line and there will be works at Waltham Cross and Brimsdown substations, as well as in the vicinity of Tottenham substation. There are also permitted works on the Tottenham to Hackney overhead line and at Hackney substation. Public feedback in the first stage of consultation will influence National Grid's planning application.

2 EAST THURROCK CONNECTION PROJECT

WHEN: Consultation began October 2010

WHY: National Grid plans to construct a substation and related infrastructure in Thurrock, Essex, in order to connect a proposed new 900MW gas-fired power station – the Gateway Energy Centre – on the north bank of the Thames, near Corringham, in Essex. The objective is to complete the work by 2014.

WHAT: Stage one of the public consultation in October 2010 focused on 13 potential locations for the substation. National Grid has now identified two options for the substation site and associated connections, and is asking for further public comment. A third round of consultation is likely later this year, focusing on the final proposals.

3 NORTH-WEST COAST CONNECTIONS

WHEN: Consultation begins late 2011

WHY: National Grid has been asked to connect a number of low-carbon electricity generation sources in Cumbria and Lancashire. These include offshore wind farms and a new nuclear power station at Sellafield by NuGeneration Ltd (expected to start generation in 2023).

WHAT: With no transmission network in west Cumbria, a number of strategic options for the connections are being considered, including overhead power lines, underground cables and subsea high-voltage direct current cable connections. National Grid is in discussions with local stakeholders, such as the Lake District National Park Authority, and a public consultation starts in late 2011. Potentially affected landowners will be contacted about the selected preferred route corridor in 2012.

4 BRADFORD WEST REFURBISHMENT

WHEN: January to October 2011

WHY: A refurbishment is under way on all 57 towers of the 275kV overhead power line from Bradford West substation to Elland substation in West Yorkshire, as well as another section of 13 towers from Bradford West to just west of Shipley.

WHAT: There are a total of 25 road crossings on the route, as well as a span oversailing the River Calder. One of the towers is situated within a prehistoric enclosed settlement burial ground and a method statement has been agreed with English Heritage to use trackway to protect the entire working area.



Powering the future

Two recent projects by National Grid have significantly enhanced the UK's ability to source sufficient supplies of affordable energy

THE 2020 ENERGY CHALLENGE IN NUMBERS

20GW

of new generation required to replace existing plants

69%

of UK gas demand will be met by imports from abroad

34%

targeted reduction in greenhouse gas emissions

THE TWIN CHALLENGES OF tackling climate change and meeting energy security needs are driving a transformation in the way the UK generates and manages its energy requirements.

To combat climate change, the UK is committed to reducing carbon emissions by 34 per cent by 2020, and sourcing 15 per cent of its energy from renewable sources. At the same time, the government has a duty to secure the energy supplies the nation needs at an affordable cost to consumers and business.

ELECTRICITY

The completion of the 260km BritNed Interconnector subsea electricity link with the Netherlands is just one element in a strategy to bridge a potential 20 per cent energy gap in electricity generation by 2020.

Nearly a third of the UK's existing generation capacity will retire by that date, including older nuclear power stations, as well as oil and coal-fired power stations that do not meet new EU carbon emission regulations.

Sourcing more renewable energy, that diversifies energy supplies and cuts carbon emissions at the same time, is part of the answer, as are new nuclear power stations and energy-efficiency initiatives to reduce overall demand. Carbon Capture and Storage (CCS) 'clean energy' technology, which traps CO₂ emissions at coal-fired power stations and stores them so they can't enter the atmosphere, will also play a part.

GAS

The expanded capacity at National Grid's liquefied natural gas (LNG) importation terminal on the Isle of Grain is another key

energy security enhancement because it helps increase the diversity of gas suppliers and supply routes.

With North Sea reserves in decline, the UK imported more than 50 per cent of its gas in 2010 and that figure could rise to 70 per cent in 2020. At the same time, global demand for gas will increase by 44 per cent by 2035, according to the International Energy Agency.

Faced with the risk of becoming dependent on potentially unreliable gas pipeline imports from volatile areas of the world, in the past few years the UK has added new pipeline links to Norway and the Continent, and an additional LNG terminal at Milford Haven.

The ability to ship in LNG from anywhere in the world is a significant part of the UK's long-term energy strategy.



ENERGY FLOW: The BritNed Interconnector on the Isle of Grain

15%

targeted energy generation from renewable sources

30%

targeted electricity generation from renewable sources

£200bn

investment in UK needed to keep the lights on

A sea change in energy

A £1 billion investment has transformed a brownfield site on the Isle of Grain, about 30km east of London, into one of the world's leading liquefied natural gas (LNG) importation terminals.

The site is operated by Grain LNG, a wholly owned subsidiary of National Grid, and is one of four strategically located LNG terminals in the UK. The facility makes a vital contribution to the UK's energy security by helping to offset dwindling North Sea gas reserves. Meanwhile, the increased competition between LNG and piped gas suppliers puts pressure on prices.

LNG provides a link to so-called 'stranded' reserves of gas in distant parts of the world (not served by gas pipelines) and its supply route is less vulnerable to political upheaval than piped gas.

The Grain terminal has been expanded twice since commercial operations there started in July 2005, with the latest phase raising throughput capacity to 14.8 million tonnes a year. That's 20 per cent of the UK's current gas demand.

LNG is natural gas, cooled to around -162°C, where it liquefies and occupies about 600 times less space than at standard temperature and pressure.

Vessels arriving from North Africa, the Middle East and the Caribbean berth at two state-of-the-art jetties that can unload the world's largest Q-Max LNG ships. The LNG is pumped via a 4.5km cryogenic pipeline to the above-ground storage tanks where it is stored at low pressure. Each tank is bigger than the Royal Albert Hall.



GOLIATH: The world's largest Q-Max LNG tankers berth at the site

When customers want the gas delivered, it is pumped from the tanks into vapourisers, where it is heated from a liquid back into a gas at 5°C, before entering the gas pipeline transmission system for delivery to homes and businesses.

National Grid is now assessing the market appetite for more capacity at the Grain importation terminal, which could trigger a further phase of expansion.

£1bn
investment in the Grain LNG site



14.8m
tonnes LNG annual
throughput capacity

300,000
tonnes of CO₂ emissions slashed

Cutting carbon footprint

The importation terminal previously used natural gas as fuel to convert the super-cooled LNG back into gaseous form. Now, however, excess heat from E.ON's nearby 1275MW gas-fired power station is being used – in the form of hot water – to heat the LNG. The Combined Heat and Power scheme at the power station can transfer up to 340MW of heat energy to the LNG vapourisers. Making use of this process saves enough fuel to heat 241,000 homes for a year and reduces carbon emissions by up to 300,000 tonnes a year.



GREEN PROJECT: Excess heat is used in LNG regasification



NEW WAVE OF ENERGY: LNG importation terminals have provided access to sources of gas supply in the Middle East and elsewhere



260km
of subsea cable

1,000MW
BritNed's capacity

Plugging into Europe

Providing about the same capacity as a nuclear power station at a fraction of the cost, the BritNed Interconnector is a 260km long subsea electricity cable between the UK and the Netherlands.

The UK's first interconnector with the Netherlands went live in April. A joint initiative between National Grid and its Dutch equivalent TenneT, the project involved the installation of a 1,000MW high-voltage direct current (HVDC) subsea cable under the North Sea between the Isle of Grain, in Kent, and Maasvlakte, near Rotterdam.

The twin cables, buried beneath the seabed, transmit power in both directions. Power flows are decided by companies that trade on BritNed, and are driven by supply and demand patterns and price differentials between the two power markets.

It is the first electricity connection between the UK and Europe since the IFA link with France 25 years ago and was completed on time and within its €600 million budget.

The twin cable bundle is connected to the transmission grids of the two countries via two giant converter stations, the 'sockets'

that deliver the power. Each station houses six huge 240-tonne transformers that convert direct current (DC) electricity back into alternating current (AC) for onward transfer into the transmission system.

Plugging into a wider European electricity market enables the UK to import its peak energy needs more cheaply, rather than relying on expensive generation plant held in readiness. It also enables the UK to make use of the full potential of renewable energy from wind, by making it easier to import when wind is not available and export when there is a surplus.

The UK government predicts that more new interconnectors could follow, providing up to 10GW of additional electricity flowing under the North Sea, as part of a wider 'super-grid' with other European countries.

For more information...

i visit www.decc.gov.uk/en/content/cms/what_we_do/change_energy/european/european.aspx. More information on BritNed and Grain LNG can be found at www.britned.com and www.nationalgrid.com/uk/grainlng.

Green castle

Dunster Castle is among the properties helping the National Trust to reduce its use of fossil fuels by more than 50 per cent over the next 10 years

THE NATIONAL TRUST'S FIRST application of solar panels to a Grade 1 historic building – Dunster Castle in West Somerset – is proving that heritage conservation and renewable energy can happily coexist.

The Trust is one of the UK's largest landowners and the guardian of Britain's heritage, with over 300 historic houses and gardens in its care, as well as 1,100km of coastline and 627,000 acres of countryside.

It is also one of National Grid's largest grantors, hosting hundreds of kilometres

“We will have more money to spend on the places we look after, the countryside and wildlife”

of transmission gas pipelines, overhead power lines and underground cables.

Dunster Castle, near Minehead, was bequeathed to the Trust in 1976 by the Luttrell family, who had resided there for 600 years. Sitting on the top of a wooded hill, the castle has panoramic views of the Bristol Channel below.

The 24 solar panels, hidden from view within the battlements, supply the daily equivalent of the energy consumed by 1.5 family homes. In sunny weather, they power a significant portion of the castle's daily electricity requirements, and the project saves more than 2,000kg of CO₂ a year.

SETTING AN EXAMPLE

Other measures to turn the property into Britain's 'greenest' castle include installing energy-efficient lighting, insulating part of the roof and reducing water usage.

“The panels are secured to a framework attached to the walls, so they can be easily replaced when new technology emerges,” said property manager Seamus Rogers.

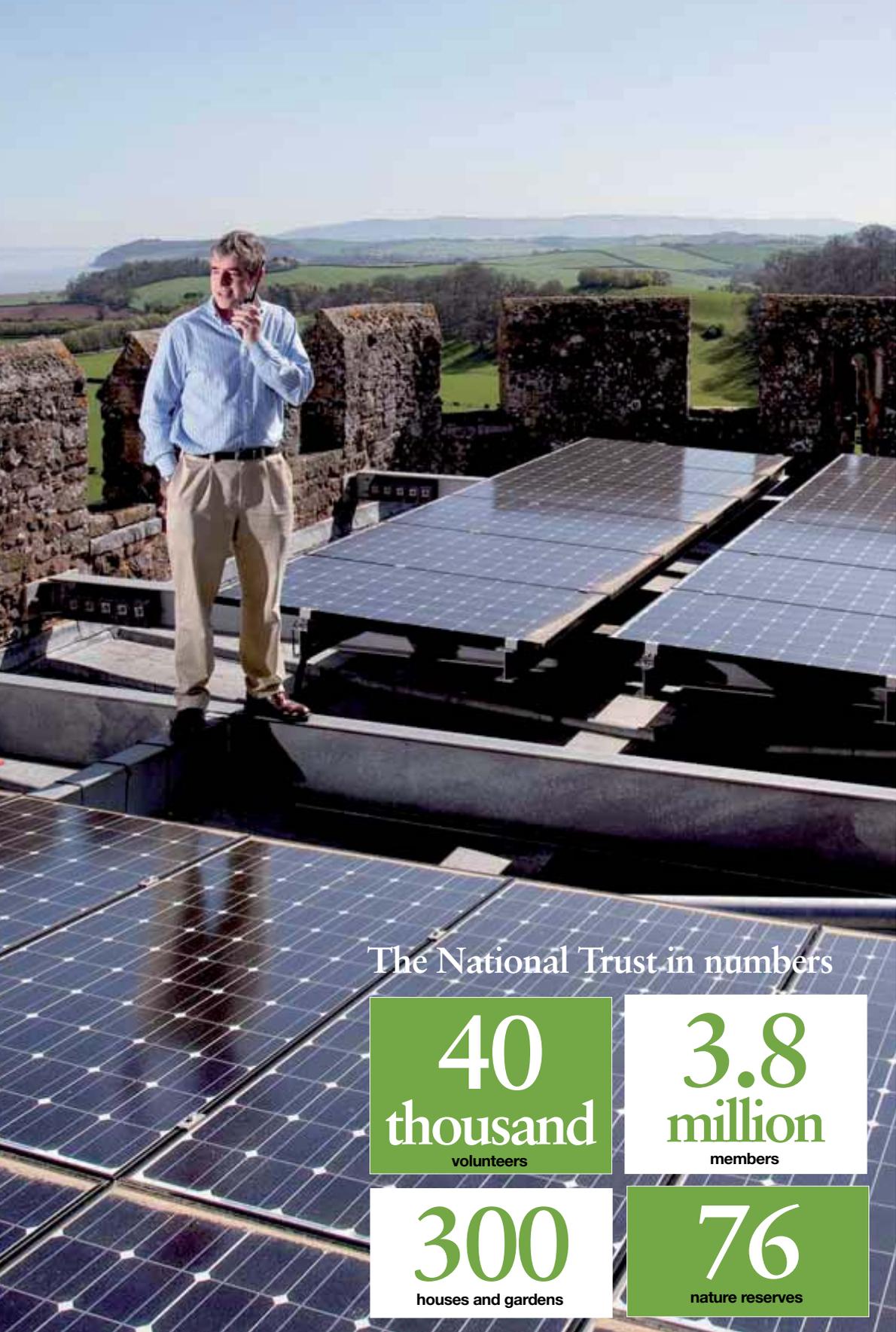
SOLAR ENERGY:

The panels can be easily upgraded as newer technology emerges

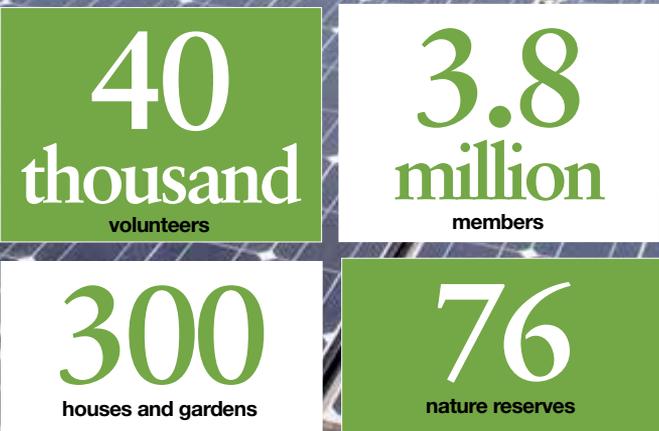


HIDDEN POWER:

Property manager Seamus Rogers and the carefully concealed panels



The National Trust in numbers



“We hope to set a good example for managers of other historic properties, by showing how energy conservation is not just for modern buildings.”

The National Trust has an ambitious plan to generate 50 per cent of its energy use by renewables or low-carbon technologies within 10 years. There are already more than 140 renewable energy

schemes in place at Trust properties, with a total capacity of 2.3MW of heating and over 1MW of electricity.

Meeting the target will involve cutting energy use for electricity and heating by 20 per cent, through energy-saving measures such as improved lighting and insulation, and installing a range of ‘grow your own’ micro and small-scale energy



GRANDEUR: Dunster Castle has magnificent views of the Bristol Channel

schemes, including hydropower, wind turbines, wood fuel stoves and boilers and solar panels. Medium to larger-scale energy schemes will make up the remainder of the target.

The Trust has plans to significantly reduce its reliance on heating oil, by installing wood fuel boilers in properties, using fuel from its own estates, wherever feasible, or from local sustainable sources.

COST CUTTING

Moving away from a reliance on oil and other fossil fuels for heating and electricity is expected to cut carbon emissions by 44 per cent – the equivalent of taking 4,500 cars off the road.

It will also help the organisation save a significant portion of the £6 million it spends annually on light and heating for its buildings. It is anticipated most of the schemes will break even in 10 years.

“By cutting our energy consumption and generating more from renewable sources, we will have more money to spend on the places we look after, the countryside and wildlife, and a more sustainable and resilient operation,” said Fiona Reynolds, the National Trust’s director-general.

For more information...

i on how the National Trust is tackling its energy consumption visit <http://www.nationaltrust.org.uk/main/w-energy-report-2010.pdf>.

In the line of **FIRE**

The potential hazards of stacking materials under or close to overhead power lines were dramatically underlined in October last year

IN THE EARLY HOURS OF 13 October 2010 National Grid was alerted to a serious straw bale fire under a section of the Keadby to Cottam 275kV overhead power line at Misterton, North Lincolnshire. Some 1,800 half-tonne bales of straw in three large stacks were ablaze.

The bales were being stored by an agricultural contractor on a roadside area earmarked for development as industrial units by grantor Simon Howarth. The straw, which had a value of £45,000, had been sold on contract and was awaiting transport to Holland.

Both circuits of the overhead line were switched out, the main access road to the village closed, and a five-mile diversion put in place to protect the public, in case the heat caused the overhead conductors to fall across the road.

After initially damping down the blaze, the fire brigade decided to let the stacks burn themselves out. Only on the third day was it possible to move bales from under the conductors and for National Grid to start recovery operations.

All the bottom phase conductors on a 450-metre section of the line had to be replaced because of heat damage. Six days after starting repairs – 10 days after the fire broke out – the re-conductoring was finally complete and power restored.



Simon Howarth, grantor



“I was alerted to the fire at about 12.30am and arrived at the scene to see the stacks burning fiercely, with the fire brigade and police in attendance.

“On the third day the fire had died down sufficiently for me to move the smouldering bales away from the line using a JCB, under supervision of the fire brigade. I also helped clear miscanthus grass from the approaches to the affected towers to enable repairs.

“The whole episode was an alarming experience and a real eye-opener. In the future I certainly won’t be allowing any structures of this nature anywhere near the overhead power lines.”



ABLAZE: The fire brigade tackles the huge stacks

Andy Horton, watch manager Misterton fire station, Nottinghamshire Fire & Rescue



“Fires like these can be very frustrating because they take a long time to bring under control and tie up resources. We spent 16 hours at this incident,

with about 20 firefighters from two counties involved at its height. Another 8 to 10 hours over the next three days were devoted to dealing with the aftermath.

“Fires near overhead lines present particular risks beyond the usual problems of flames and smoke. Falling lines, or a flash-over from a conductor can damage equipment, or even electrocute or burn a firefighter.

“The dangers, the level of input required and the lack of water supply at remote locations are just some of the reasons why we may let a fire burn itself



REMEMBER
 Never reduce the clearance under overhead lines by dumping or tipping waste material, erecting structures, buildings or haystacks, or creating storage areas under lines.

Mike Rockett, lands officer east



“My role was to liaise with the grantor, the local community and to contact neighbouring landowners to arrange access for the repairs.

“Our advice is that farmers should consider carefully where to site stacks well in advance of any harvesting work. They should also lower loading equipment when passing under overhead power lines.

“It is not possible to guess what a safe clearance is. Conductor sag can be affected by the electrical load on the line and air temperature, for example, so always take advice from National Grid before erecting any structures near a line.

“The heat from the fire even caused damage to nearby concrete barriers, which the Environment Agency maintains to protect residential housing near the River Trent from the risk of flooding.”

out, leaving us to concentrate on protecting adjacent crops or buildings instead.

“Our advice to farmers and other landowners is to build stacks in a visible location to deter anyone from starting a fire deliberately and to increase the chances of an early warning if a fire does start.

“Keep straw and haystacks at a reasonable size to minimise potential loss and the amount of intervention from firefighters. Also, they should position stacks well away from buildings or other structures to reduce the risks of further damage if the stacks do catch alight, and to make it easier and safer for fire crews to manage the situation.”

Tony Holmes, overhead line delivery engineer



“The main danger was that the fire and heat would bring the conductors down over the public highway, which was why a safety cordon was established and the road closed.

“The proximity of a gas pressure reduction valve under the line also meant that we couldn’t deploy protective scaffolding over the highway, so it had to remain closed until repairs were concluded.

“You don’t have to be in contact with an overhead power line to receive an electric shock. In certain circumstances, smoke can also conduct electricity.

“Stacks should be at least 5.3 metres from an overhead line, and preferably much further away. Always consult us if you are uncertain about the safety of a structure near an overhead line.”



STILL BURNING: Tony with the straw bales still ablaze after three days



REPAIRS: The conductors are lowered prior to replacement

For more information...

i on Avoidance of Danger from Overhead Electric Power Lines, download the HSE GS6 guidance booklet free from www.hse.gov.uk/pubns/priced/g6.pdf.

TOPTIPS

There's nothing quite like the taste of asparagus in season, according to Lincolnshire asparagus growers Nick and Ros Loweth



EXCELLENCE: Nick says that British asparagus can't be beaten for taste

THE DELICIOUSLY SWEET AND tender taste of British asparagus has rightly won the 'queen of vegetables' a special place in the public's affections.

The excitement as retailers scramble to obtain the first crop is heightened by the fact that the traditional asparagus season lasts just 8 to 12 weeks, from around St George's Day (23 April) to the end of June. Its appearance, for many people, is associated with the promise of warmer summer days ahead.

British asparagus used to be a rare treat, mostly enjoyed in top restaurants, but the vegetable has seen a remarkable rise in popularity.

Twenty-five years ago, just a few farms up and down the country cultivated the crop, but by 2010 UK sales had risen to £21.4 million.

New hardy varieties, the use of underground heating and polytunnels, as well as foreign imports, notably from Peru, have all increased availability.

BRITISH ASPARAGUS

But according to many top chefs, the only time to eat asparagus is when it's in season – and preferably it should be British asparagus in season.

"Freshness is critical. Once you cut the spear from the crown, the sugars start to turn to starch," said Nick Loweth, one of the country's top growers at Abbey Parks Farm, near Boston, Lincolnshire.

"While home-grown asparagus is picked daily during its brief season and is in the shops within 48 hours, imported spears from Peru may be in refrigerated transport for up to a week. And on top of that, our temperate climate and the slower growing conditions create more complex flavours."

Nick and his wife Ros, who are National Grid gas grantors, have supplied some of the country's leading restaurants including J Sheekeys, Quaglino's and The Ivy, as well as prestigious retailers Fortnum & Mason

and The Bluebird Food Store. They are also among Rick Stein's Food Heroes.

NICHE MARKET

The couple purchased the 530-acre farm on prime grade 1 Lincolnshire Fen silt 24 years ago, after farming in Cambridgeshire. Nick is a third-generation farmer and the couple's children, Harry and Sophie, both work in the family business.

Three quarters of the farm's acreage is given over to wheat production. Other crops include potatoes, rape, vining peas, onions and sugar beet, as well as a range of speciality herbs such as rosemary, chives, parsley, coriander, dill, fennel and thyme.

"We started growing an acre of asparagus in 1995 because, basically, we liked eating it and it was a niche market at the time," said Nick. "Each year we devoted more and more land to the crop, but still ended up with more customers than asparagus."

A farm shop and cafe, added in 2002, provide an outlet for selling fruit and vegetables from other local farmers, as well as speciality cheeses, jams, dairy ice cream and fresh ready-made meals using as much home-grown and local produce as possible.

A range of products can also be purchased online, including asparagus crowns, enabling people to have a go at growing the vegetables themselves.

Abbey Parks Farm supplies the trade through a wholesale operation in Nottingham and delivers directly to 200 local outlets in Lincolnshire and Nottinghamshire, including other farm shops, local restaurants, pubs, cafes, schools and residential homes.

These days, the farm's asparagus production has been scaled back from a peak of 35 acres to a more

"The slower growing conditions create more complex flavours"





“We add fertiliser in the spring but... asparagus is not a hungry crop”

manageable 15 acres, still enough to produce up to 30 tonnes of spears a year. Part of the reason why it is the UK's most expensive vegetable is that it ties up the ground and is labour-intensive to harvest.

From seed, asparagus takes three years to reach the stage where it can be harvested. Crowns begin to decline after about 10-12 years and another half an acre is planted each March. “We now only plant one-year-old crowns,” said Nick. “The first year's cutting pays for the establishment costs.”

FERTILE ENVIRONMENT

The soil temperature needs to reach about 10°C for asparagus tips to start growing. Any late frosts will put a brake on growth and can ruin the spears, although it won't harm the crown and new shoots will form again. Abbey Parks Farm also grows a small amount under glass as an early-season offering.

The grade 1 silt soil of the Fens was reclaimed from the sea hundreds of years ago and provides a fertile environment for vegetables and cereals.

The soil on the farm can be up to 15ft deep, and is well drained but moisture retentive. The area has a mild, relatively dry climate with about 22-23 inches of rainfall a year, which also suits asparagus.

“The soil needs a PH of about 7.5 and so we add fertiliser in the spring, but contrary to popular belief, asparagus is not a hungry crop,” said Nick. “It has an enormous root system that goes down about 12ft, and so it drags nutrients from the surrounding area.”

Each season a single crown will produce about 25 spears. The pickers, mainly students and seasonal migrant workers, sit astride electric buggies to gather the crop, moving slowly along the raised beds.

The asparagus shoots are cut to a length of nine inches. In warm weather the tips can grow by more

than two inches in 24 hours and picking is carried out daily. After cutting, the spears are washed and graded with the larger diameter spears fetching higher prices. After harvesting, the plant produces a fern typically six feet high, which rejuvenates the crown.

A versatile vegetable, asparagus can be cooked in a steamer, roasted or barbecued, and is even delicious raw. “Our favourite is to bake the spears, adding a sprinkling of sea salt, olive oil, Parmesan cheese and a dash of balsamic vinegar,” said Nick. “Brilliant.”

A recent online initiative by Abbey Parks Farm is tapping into the growing demand for fresh, locally grown produce, which is fully traceable.

The i-grow concept invites people to rent a ‘virtual reality’ allotment for £1 a week. For a small additional fee they can stipulate the vegetables they want planted in the eight rows allotted to them at Abbey Parks Farm. The harvested produce is delivered to their door, or it can even be traded with other allotment holders through an online forum.

Health food

One of nature's super foods, asparagus is high in vitamin C, folic acid and fibre, contains antioxidants, which are believed to protect against cancer, and is low in calories, fat, carbohydrates and salt, as well as being cholesterol free.

Asparagus is a hardy perennial and is related to the lily family of plants (its cousins are onions and garlic).

For more information...

 on Abbey Parks Farm go to www.abbeyparksasparagus.co.uk.

Out & About

The latest news from **National Grid** and its nationwide grantor network



A cut above the rest

Fourteen members of National Grid's south-west lands officer team made short work of an overgrown patch of ground recently, during a community support day in the Cotswolds to create space for additional allotments.

The project was in the village of Kineton, in the picturesque Windrush Valley. The location is close to the route of the Wormington to Sapperton high-pressure gas pipeline, which National Grid completed in late 2010.

"The team used chainsaws to fell a number

of trees, cleared brambles and overgrown bushes," said Paul Swinbourne, lands officer south-west. National Grid will also install new fence posts and a five-bar gate to improve accessibility to the allotments.

"The parish council has very limited resources for such initiatives, so National Grid's support really made a difference and has helped bring residents together in the allotment project," said Zoe Hobbs, chairwoman of Temple Guiting Parish Council.



MAPPING THE FUTURE FOR NATURE

A series of online colour-coded maps are now available from Natural England to help farmers choose the best Entry Level Stewardship scheme. More information at: www.naturalengland.org.uk/ourwork/farming/funding/es/agents/elseptions/.

IN THE SWIM

Four lands officers are in training for this year's Virgin Active London Triathlon on 31 July, to raise money for Special Olympics.

James Deans, Ian McKenna, David Knowles and Michael Dutton will tackle a 1,500m swim, followed by a 40km bike ride and a 10km run.

Green treasures

In 2010 it was National Grid; in 2011 it's the turn of the National Parks movement to celebrate its 75th anniversary.

The Campaign for National Parks was set up by a group of passionate enthusiasts in 1936 to call for greater access to Britain's finest landscapes. It was instrumental in bringing about the Act of Parliament that enabled the Parks in 1949, and is just as active today in safeguarding all 13 members of the National Parks family.

To mark the anniversary, the CNP has adopted the theme Get into the National Parks. Besides

highlighting the vital role National Parks play in conserving wildlife, promoting healthier lifestyles and building sustainable communities, the organisation wants to encourage more people to enjoy the Parks and to be more involved in protecting these precious landscapes in the future.

National Grid is a founder member of the Corporate Forum for National Parks, which brings together companies that are committed to maintaining the value of National Parks for conservation and recreation through the development and application of their policies.



WEDDING SPIKE

A 2,400MW demand surge during the royal wedding was the fourth highest surge ever due to a televised programme. Such surges occur at natural breaks in TV coverage when viewers get out of their seats and switch on lights or boil kettles for a cuppa.

LastWord

Contact details
Tel: 01926 656 325
Email: gridline@uk.ngrid.com
Website: www.nationalgrid.com

Your chance to enter two great competitions

Photo competition



On the straight and narrow

Congratulations to Worcestershire grantor Mark Blakeway, the winner of the last photo competition. The photo shows a GPS-guided tractor 'bed forming' for a new potato crop in March.



Win a Marks & Spencer giftcard

M&S giftcards can be spent at over 600 M&S stores in the UK or online on fashion, food, entertainment, home, accessories, and more.

The lucky winner will receive the giftcard – similar to a credit card in size – which will be preloaded with £150.

Please note, giftcards are valid for 24 months from the last transaction and the balance cannot be converted back into cash. They cannot be accepted for made-to-measure shirts or large appliances.

To be in with a chance of winning an M&S giftcard, simply answer the following question correctly:

Q WHAT PERCENTAGE OF THE UK'S GAS DEMAND IS THE GRAIN LNG TERMINAL CAPABLE OF MEETING?

Send your answer to Gridline M&S Competition, 23-25 Waterloo Place, Warwick Street, Leamington Spa, Warwickshire CV32 5LA. Please note, you must be a grantor to enter. Closing date is 4 August 2011.



Win a supercar drive!

Enter Gridline's competition to win a Treatme driver experience

GRIDLINE HAS TEAMED UP again with Treatme, a leading provider of driver experience days, to give the winner of this issue's photo competition the chance to drive a Lamborghini Gallardo – one of the world's top supercars.

Driving the Gallardo is normally the preserve of Premiership footballers, but with an expert instructor at their side, the winner will be able to sample the power of the V10 engine for themselves at one of eight circuits nationwide.

The theme for this issue's competition is 'light'. Send in your selected photo to Gridline Photo Competition, 23-25 Waterloo Place, Warwick Street, Leamington Spa, Warwickshire CV32 5LA, or email your photo to gridline@uk.ngrid.com. The closing date is 4 August 2011. Only National Grid grantors are eligible to enter.



ITINERARY

- Welcome and registration
- Introduction and safety briefing on the circuit and driving techniques
- A session driving the Lamborghini Gallardo
- High-speed passenger ride
- The instructor will give you a short debrief and complete your driver analysis form after each drive
- Collection of your driving certificate.

Restrictions:

You must hold a full manual driving licence, be less than 6'6" tall and weigh less than 18½ stone.

IMPORTANT NOTICE Gridline printed an incorrect closing date of 28 July for the competitions in the Spring issue, the date should have been 28 April. A winner had to be selected, therefore, in mitigation, all entries received for last issue's competitions after 28 April and up to 28 July will automatically be entered into a draw for £150 of shopping vouchers.