### **THE CASE FOR** WIND ENERGY

Using wind energy to generate electricity avoids greenhouse gas emissions, so there is no contribution to climate change. By displacing fossil fuels, wind energy helps to meet international, national and regional targets that have been set to combat climate change.

However, the benefits of using wind energy are not confined to tackling climate change. Problems associated with conventional electricity generation are also avoided, including poor health related to poor air quality, damage to the natural and built environment caused by acid rain.

In terms of energy security, renewable energies such as wind are inexhaustible, are not subject to fuelprice uncertainty, are not subject to the vagaries of international fuel markets, and have no requirement for fuel transportation, drilling, or mining.

Furthermore, wind farms are easily and quickly decommissioned, leaving no significant adverse legacies for future generations.

### **MEET THE TEAM**

**Gary Scrowther** Construction Site Manager

Tel: 07554 421 084

Email: gary.scrowther@res-ltd.com

Gary Scrowther is the Construction Site Manager for Jack's Lane Wind Farm and will be based on site throughout the construction phase. Gary can be contacted if you have any concerns about activities relating to construction.



Email: samantha.mayes@res-ltd.com Sam is the Community Relations Coordinator for Jack's Lane Wind Farm. Please contact her if you have any questions regarding community benefits or need general information about the company or renewable energy. Sam is also the contact for any press enquiries regarding the project.

Samantha Mayes

Tel: 01923 299 413

Community Relations Coordinator

res

### **ABOUT RES**

RES is one of the world's leading independent renewable energy developers. We have developed and/or built more than 8,000 megawatts of wind capacity worldwide. In the UK, we currently have more than 1,000 megawatts of wind energy projects either constructed, under construction or consented.

We work closely with communities, local authorities and independent experts to ensure that our wind farms are built to the highest standards. We want to be good neighbours and will listen to and address any questions or concerns you might have. Please contact your Construction Site Manager or our Community Relations Coordinator in the first instance (see above).





Office address:

RES Beaufort Court Egg Farm Lane Kings Langley Hertfordshi WD4 81 R

#### www.jackslanewindfarm.co.uk

is a website dedicated to the Jack's Lane Wind Farm development where you can read about the project in more detail and keep abreast of the latest news. Please keep an eye on the site as it will be updated regularly.

### WANT TO KNOW MORE?

We would be happy to cover any issues in more detail in forthcoming newsletters. If you have any suggestions, please let us know.

# JACK'S LANE WIND FARM

Welcome to the first in a series of newsletters from RES designed to keep the local community informed throughout the construction of Jack's Lane Wind Farm.

### THE COUNTDOWN TO GREENER ENERGY BEGINS

Work to construct Jack's Lane Wind Farm – situated north of the A148 between the villages of North Creake, Syderstone and Stanhoe in North West Norfolk – is about to begin. Once completed, the wind farm will generate enough renewable electricity to meet the average annual requirements of more than 10,600 homes\*.

RES was granted consent to build the wind farm in January 2013. Since then, we have been busy finalising the details so that the project can be completed on time and with minimum disruption to the local community. We expect to begin work on site during March 2014 and construction will last for approximately 12–14 months, with turbine deliveries and erection expected to take place in autumn 2014.

The wind farm will begin generating in early 2015, triggering an indexlinked Community Benefit Fund of £30,000 per year for local people to invest in local projects, as well as our innovative Local Electricity Discount Scheme (LEDS) for nearest neighbours.

You can learn more about the construction phase and the community benefits package inside.

\*The homes equivalent has been calculated by taking the predicted annual electricity generation of the site (based on RES studies Jack's Lane Wind Farm has a predicted capacity factor of 34.3%) and dividing this by the annual average electricity consumption figures from the Department of Energy and Climate Change 2012 (4222kWh).



RES has developed more than 1,000MW of wind energy projects in the UK, including The Grange Wind Farm in Lincolnshire, pictured above

Location:

6

Installed capacity: **15MW** 



**March 2014** 

### **Construction Newsletter 1**

### **JACK'S LANE – KEY FACTS**

### **Between North Creake,** Syderstone and Stanhoe

Number of turbines:

Homes equivalent: More than 10,600 houses\*

Community Benefit Fund: £30,000 per annum for 25 years

Local Electricity Discount Scheme: £117/year off electricity bills for nearest neighbours

## **HOW DO YOU BUILD A WIND FARM?**

Building a wind farm is a highly complex process that requires a lot of thought and care. Here are some of the tasks that the RES construction team will be performing over the next 12 - 14 months.

### **ACCESS TO SITE**

Access is one of the key considerations when selecting a potential wind farm site. Jack's Lane Wind Farm has excellent trunk road connections and the most appropriate route to Jack's Lane Wind Farm uses the A148, turning north onto the B1454. After approximately six kilometres the site will be accessed via Burnham Road (C479) which will require some minor road improvement works. For safety reasons, part of Burnham Road and the adjoining highway directed south east will be closed to traffic on week days and evenings for the most part of the construction period. To minimise disruption as far as possible road and footpath diversions have been put in place.

This route will be used for all construction traffic, including the turbine components. Turbine deliveries are classed as abnormal loads and our next newsletter will contain details of when and where these deliveries will take place.

To minimise disruption to other road users during construction and turbine delivery, a Traffic Management Plan has been developed and agreed in advance with the Highways Agency, Norfolk County Council, King's Lynn and West Norfolk Borough Council and the police.

### **MAKING TRACKS**

One of the first things we do on site is to prepare the access tracks which will allow the turbines to be delivered, erected and serviced. Wherever possible we use existing tracks, which brings a number of environmental benefits by:

- reducing disturbance to existing flora and fauna;
- reducing the amount of aggregates required – and thereby;
- reducing the number of vehicle deliveries.

### **FIRM FOUNDATIONS**

The six turbines at Jack's Lane Wind Farm will stand on concrete gravity foundations which are likely to be up to 20 metres in diameter and two metres in depth. Work on the foundations will start in summer 2014. These foundations give the turbines a firm base on which to stand. Once the turbines arrive on site they are bolted onto these foundations. The majority of the top of the concrete foundation lies up to one metre below the normal ground surface and is back filled with soil.

Work on site will be Monday to Friday between 7.00am and 6.00pm and between 7.00am and 1.00pm on Saturdays when required. The timing of any work carried out will be planned so as to keep disruption to a minimum.

### **GOING UP**

The wind turbines are delivered in parts and assembled on site using a number of cranes. The components for Jack's Lane Wind Farm, which include the blades, towers and nacelles, are expected to arrive in October 2014. The nacelles are the box-like structures at the top of the tower, which house the gear box and generator that enables the movement of the blades to be converted into renewable electricity.

In addition to the access tracks and the six turbines, there will be a number of supporting structures put up on the site. Some, like the construction compound will be temporary. Others, like the substation which will take the electricity

from the turbines and transfer it to the national grid, will be permanent.

It will take approximately 12 – 14 months to complete Jack's Lane Wind Farm. Once it is operational, the wind farm will provide an annual Community Benefit Fund of £30,000 per year for local people to invest in local good causes (see below) and a discount on electricity bills for more than 350 of the nearest properties to the site.

The wind farm has an operational life of 25 years.

### **ENVIRONMENTAL BENEFITS**

We will work closely with ornithologists and ecologists to produce a Habitat Management Programme which will be implemented with the cooperation of those who use the land. For example, any hedges removed during construction in order to access the wind farm site will be replanted. There will also be extensive new planting to complement the existing hedgerow resource resulting in benefits for protected species including bats and birds and improved habitat connectivity within and through the site.

If you have any queries regarding the construction of Jack's Lane Wind Farm, please contact the project team using the details overleaf. Find more information and progress updates at: www.jackslanewindfarm.co.uk



Lifting a turbine blade into place at The Grange Wind Farm, Lincolnshire

### **IOB OPPORTUNITIES**

RES will employ local companies directly and indirectly during the construction and operation of Jack's Lane Wind Farm where there are services and supplies available to match our requirements. Among the opportunities are:

- Construction materials suppliers concrete, aggregates, building materials, etc
- Construction contractors civil engineering, electrical and building contractors, etc
- Plant hire contractors excavation, earthworks, craneage
- Labour hire companies engineers, plant operatives, labourers, etc

We operate to stringent environment, safety and quality standards and these form an important part of the contractor selection procedures for the project. If you are interested in supplying any of the above services, please email: Gary Scrowther, Construction Site Manager, gary.scrowther@res-ltd.com.

### INDICATIVE CONSTRUCTION MILESTONES

March 2014 Site preparation work starts
May 2014 Work on turbine foundations begins
August 2014 Electrical works
October 2014 Turbines delivered to site
March-April 2015 Electricity generation

### **COMMUNITY BENEFITS**

Jack's Lane Wind Farm will provide an annual community benefits package equivalent to £5,000 per MW of installed capacity. This includes RES' innovative Local Electricity Discount Scheme (LEDS which at Jack's Lane Wind Farm will offer an annual discount of £117 off the electricity bills of more than 350 properties within 2,400 metres of the turbines.

The scheme applies to residential, commercial and community buildings (including schools, places of worship and village halls) and eligible properties will be contacted directly with details of how to register their interest in the scheme.

For the wider community, the wind farm will provide a Community Benefit Fund of £30,000 per year, index linked, for the local community to invest in projects that are important to them. The Fund is intended to be managed by a local body, and a panel of local people will make the final decisions on where the money is spent. Details of how organisations can apply for funding will be made available when the wind farm nears completion.

LEDS and the Community Benefit Fund will become available once Jack's Lane Wind Farm is fully operational.