Energy~ An emerging vision for North East Lincolnshire





Contents

North East Lincolnshire today	04
Energy landscape	07
Opportunities	09
Vision and Ambition	11
Energy solutions	12
Drivers for the move to renewables	14



North East Lincolnshire today

North East Lincolnshire has a huge array of successful businesses within a variety of sectors ranging from ports, chemicals and renewables to food, housing development and the visitor economy.

As well as providing some of the UK's biggest port opportunities and being at the centre of a major concentration of process industries, North East Lincolnshire is also an expanding hub of renewable energy and continues to thrive in food manufacturing, storage and distribution.

However, older industries around the ports of Immingham and Grimsby, and the seaside resort of Cleethorpes, are facing considerable challenges. North East Lincolnshire has long been associated with seafood and the fishing industry, having once been home to one of the world's largest trawler fleets. This industry has seen a significant decline. and the chemicals industry is finding the going tough in the face of stiff global competition.

Consequently, parts of the local region are suffering from economic and social deprivation with pockets of fuel poverty.

The industry is now re-inventing itself as a multi-billion pound food and seafood processing cluster, centred on Grimsby. North East Lincolnshire has two of the best deep water ports in the UK which facilitate considerable import trades. The area also has a burgeoning renewables sector, largely servicing the offshore wind industry.

 Reports indicate that 28% of local energy consumption already comes from renewables, the highest in the UK.

Crucially, the energy sector has the potential to act as a driver of economic growth for the region – creating jobs and enhancing the quality of life of its residents.

Grimsby is in close proximity to existing and planned wind farms off the Lincolnshire coast in the North Sea. This proximity has led to significant interest from operations and maintenance providers, major manufacturers and component suppliers. Several of the largest players in offshore wind, including DONG Energy UK, Centrica, Siemens and E-on, have chosen to base their teams in Grimsby.

These tracts also includes large areas of developable land that can be exploited to support business; while its strategic location connects it to national and global markets, maximising the scope for growth. However, if North East Lincolnshire is to capitalise fully on the growth opportunities, then significant investment in energy and low carbon infrastructure will be required.

"Reports indicate that 28% of local energy consumption already comes from renewables, the highest in the UK."



Energy landscape

Energy growth has been directly linked to prosperity and well-being. People's determination to sustain and improve their quality of life is a major driver of energy demand.

Although the trend in energy costs is generally upwards, there are no indications that rising prices will cause a decline in consumption in the foreseeable future.

This impacts on business competitiveness and the incidence of fuel poverty. North East Lincolnshire has higher than average levels of fuel poverty.

For some residents there are stark choices in how to prioritise competing demands on the household income – whether to heat the home, pay rent or mortgage or have something to eat.

Cold homes create or exacerbate health conditions leading to poor health and a reduction in well-being.

An increase in winter death rates is a contributor to health inequalities especially for children and older people.

Additionally, energy supply is becoming less reliable and less secure. The Department of Energy and Climate Change has indicated that the supply infrastructure for electricity is coming under pressure in the UK.

Coal-fired power stations are being taken offline as the plants become obsolete, leaving the UK heavily reliant on gas imports from continental Europe; while the fracking debate continues, stalling its roll-out. All of this is leading to a potential gap between energy supply and demand.

Meeting the growing demand for energy in a safe, clean and environmentally responsible manner presents a further major challenge.

The Climate Change Act of 2008 places a legally binding target on the UK:

- to reduce its greenhouse gas emissions by at least 80% from 1990 levels by 2050
- with an interim target of cutting emissions by 57% by 2032

The Climate Change Committee has indicated that to achieve the 2032 targets, regions such as North East Lincolnshire will need to consider new technologies, such as district heating and energy storage. To achieve the 2050 target, a fundamental change will be required in the way that heat and power are generated and consumed across the borough.





Opportunities

It is likely that the anticipated population growth in North East Lincolnshire will drive local energy demand higher.

Our community use energy each day to make their lives richer, more productive, safer and healthier.

However, by shifting toward lower-carbon fuels and using energy more efficiently, the region can become less reliant on traditional sources of energy. This will help generate greater energy resilience, and improve business competitiveness, which will put the region in a better position to deliver a stronger economy. By lowering the cost burden on households we can also tackle fuel poverty and ensure greater access to affordable warmth.

The emergence of the renewables sector in the North East Lincolnshire area provides an immediate opportunity to deliver wider economic and social benefits, and to build stronger, more thriving communities.

The Council has a key role in enabling and delivering this energy agenda, and ensuring the benefits are enjoyed locally.

"Our community use energy each day to make their lives richer, more productive safer and healthier" By 2032, North East Lincolnshire will be nationally and internationally recognised as the UK's leading region for low-carbon energy and the UK capital of the renewable energy industry.



Vision and Ambition

- By 2032, North East Lincolnshire will be nationally and internationally recognised as the UK's leading region for low-carbon energy and the UK capital of the renewable energy industry.
- North East Lincolnshire will have developed a range of low-carbon, high-efficiency, renewable solutions to regenerate the region. This will deliver strategic and economic advantage for its businesses and affordable heat and power for its communities.
- The region's energy programme will have enough impetus that by 2050 North East Lincolnshire will not only be able to achieve its 80% carbon reduction target but will also be able to declare itself carbon neutral.

Aims:

- To become a renowned centre of excellence so that North East Lincolnshire is at the forefront of the renewables industry in the UK raising its profile, enhancing its reputation and attracting business and investment.
- To protect people's health by reducing waste, reducing pollution and improving air quality.
- To deliver community-based solutions that actively engage residents and provide affordable energy that helps eliminate fuel poverty.

- To give the region a competitive advantage by creating a low-carbon, low-cost, high-efficiency environment.
- To deliver sustainable, low carbon transport solutions across North East Lincolnshire.
- To secure a reliable, sustainable supply of heat and power for the area, ensuring that North East Lincolnshire remains a great place to live, work and visit.
- To become less reliant on traditional sources of energy, and become more self-sufficient, providing greater certainty and security of supply.
- To establish world class education, training and research facilities for the energy and renewables sectors.
- To build a highly-skilled economy based on advanced energy technologies, creating long-term jobs and offering stable employment for local people.
- To enable culture and behavioural change across the community that is measurably reducing carbon emissions.

Energy solutions

To achieve our ambitions we will therefore need to promote and invest in technologies such as:

- District heating
 - o involving geothermal, solar thermal and biomass heating
- Wind turbines
- Ground-source, air-source heat pumps
- Photovoltaics
- Biomass
- Anaerobic digestion

- Energy from waste
- Low-carbon transport
 - o electric, compressed natural gas, liquefied petroleum gas, hydrogen fuel cell
- Air quality and emissions control
- Battery storage of power



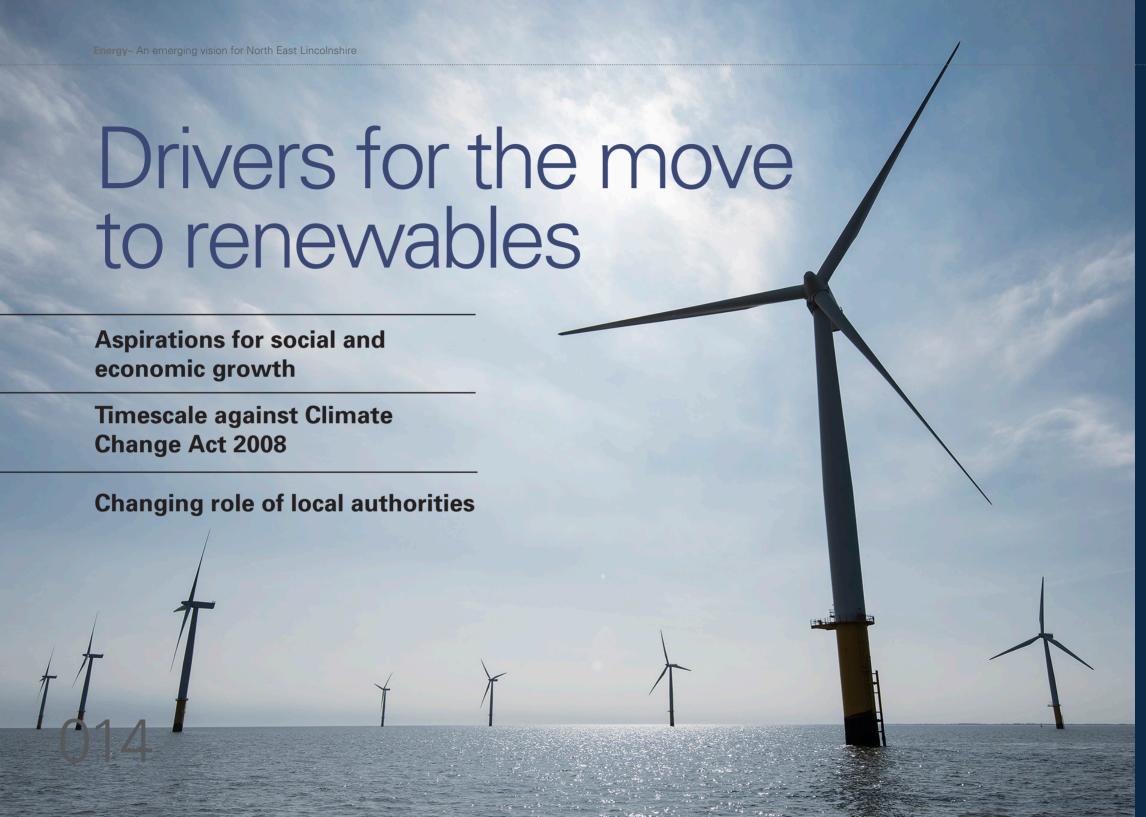












Stronger economy, stronger communities

Delivering a low carbon future for North East Lincolnshire

We are making progress

Since the vision was published in June 2016 we have made progress on a range of initiatives and are delivering on a number of actions. For more information go to www.nelincs.gov.uk/RenewNEL OR contact

Tony Neul

Strategic Commissioning Lead – Energy & Environment

North East Lincolnshire Council • Municipal Offices • Grimsby E: tony.neul@nelincs.gov.uk • T: (01472) 323989

Helen Norris

Commissioning and Relationship Manager

North East Lincolnshire Council • Municipal Offices • Grimsby

E: helen.norris@nelincs.gov.uk ● T: (01472) 326968

