



Lancashire Energy Strategy

Energy Strategy for Lancashire Enterprise Partnership

Executive summary

Lancashire Enterprise Partnership (LEP) has recognised that industry is at the forefront of delivering **clean economic growth** and that Lancashire has a big part to play in the new energy economy.

The country as a whole is experiencing a rapid change in the delivery of energy services through innovative technologies and the opening up of new markets through deregulation. National government have recognised the need for this shift to achieve legally binding carbon reduction targets and have looked to support this further through recent publications such as the Clean Growth Strategy. This could offer significant opportunities for local business and communities to benefit. Lancashire has unique strengths within the energy space and the wider market which would allow it to capture the advantages that this transition will afford, and mitigate risks to existing industries. Strengths such as the large scale renewables sector, nuclear, shale gas and other large energy supply industries are complimented by a flourishing engineering and technology sector supporting small scale renewable installations.

At the same time, Lancashire is an area with ambitious growth plans; it is set to create 50,000 new jobs and 40,000 new homes and £3 billion additional economic activity by 2025. Energy is a vital component in the realisation of these plans in terms of the availability and reliability of supply to be able to support this growth trajectory. Within the energy sector, there are also opportunities to expand high-value supply chains supporting technological innovation.

This energy strategy has been commissioned by the LEP with support from the Department of Business and Industrial Strategy (BEIS). Its objectives are to:

- Highlight opportunities for Lancashire to deliver its growth potential through innovative and low carbon related business opportunities.
- Identify barriers to growth from current energy infrastructure.
- Develop an achievable action plan required to mitigate risks and capture the opportunities for Lancashire that come with change in the national energy system.

The energy strategy will demonstrate that the development in clean technologies and low carbon supply chains is not mutually exclusive with other development streams and can provide a significant contribution to the overall economic aims of the LEP and wider stakeholders. Furthermore it will set out a roadmap for how this could be delivered, who is responsible for ensuring the Lancashire meets its ambitious targets and when can this be achieved.

Assessing the local energy system

The strategy has been built on a review of the existing evidence base of data and documentation on all aspects of the local energy system. This included national datasets of energy consumption across the region by sector, fuel type and location. This data was benchmarked against national averages to be able to identify regional differences and examined to understand the strengths and weaknesses of Lancashire's use of energy today, and the aspects of energy usage in the region that may be a threat or present an opportunity for growth.

Local datasets were also incorporated, the key to this exercise was understanding what had already been achieved. This was particularly important in areas such as energy efficiency and supply, strengthening opportunities in the low carbon supply chain and understanding what was still proving to be a barrier to development. There is a significant repository of data collated which will help to refine and target the strategy further.

Key findings included;

- There is a significant potential for wind power across the county which has resulted the development of both offshore and onshore wind farms to exploit this. There is technically yet more potential to be exploited as even in the area with the most significant wind farm developments (Rossendale which includes Scout Moor at 65MW which is one of the largest installations in England) this only accounts for 22% of what could potentially be installed. However it is noted that the planning has changed. with more barriers to this type of development, therefore it may be focus on the offshore industry may be an easier path to take advantage of this resource.
- There is an established nuclear industry and associated supply chain, and a recently uncovered resource in shale gas. Despite increasing uncertainty about the long term future of the nuclear sites, it key businesses are finding new markets associated with decommissioning, new nuclear and the potential development of modular reactor technology.
- There is a flourishing but underreported technology sector providing high value design and manufacturing skills to the small scale renewable energy industry.
- Carbon emissions are dominated by large industries such as the production of cement. Carbon emissions per capita are generally in line with national averages until these industries are taken into account and then large spikes indicate the magnitude of the carbon impact.
- Generally connections to both the gas and electricity network are currently not providing a barrier to development with good access to both infrastructures. However specific key development sites can lack the infrastructure to be developed quickly, whilst for regions such as the Forest of Bowland, lack of access to the gas grid is increasing instances of fuel poverty as residents are forced to pay higher prices for alternative fuels.

Looking to the future

2030 Vision Statement

Lancashire has **well-developed** industry in the low carbon sector, sustaining secure high skilled jobs and supporting further energy efficiency and decarbonisation improvements in wider homes and businesses

For the LEP and Local Authority partners six key indicators are proposed:



Insulate

Improving energy efficiency of hard to treat properties.



Heat

Delivery of a city centre heat network within a Lancashire urban area.



Jobs

Supporting the creation of jobs in the energy and low carbon sectors.

Low carbon



Carbon emissions reduced in line with UK targets, a **57%** reduction on 1990 levels by 2032.

Active



Double journeys by bike in line with **Lancashire's Cycling and Walking Strategy**.

Productivity



Improve energy productivity by **20%** in commercial and industrial sectors

Forming the vision

The evidence base and the national context for transformational change in the national energy sector was considered alongside in-depth analysis of strengths, weaknesses, opportunities and threats relating to Lancashire's energy system. This work and consultation with stakeholders has informed the development of a vision for energy in Lancashire. In order to achieve this strategy, a number of key priorities were developed:

Key Priority 1: Build the low carbon supply chain in areas of existing strength

Key Priority 2: Supporting businesses to improve energy productivity

Key Priority 3: Accelerating the shift to low carbon transport

Key Priority 4: Developing heat networks

Key Priority 5: Improving domestic energy efficiency

Key Priority 6: Decarbonisation

Delivering the vision

The vision is an aspirational target for 2030 and achieving this will require a number of work streams by a range of stakeholders. This strategy aims to articulate the primary tasks by work stream and assign action owners in order to make it clear who needs to do what by when in order to drive towards the same outcomes. Some of the key actions to be undertaken are set out below.

Action	Timescale	Owner
LEP spread recognition of North West low carbon technology focus	December 2018	Lancashire LEP
Establish high energy users group	December 2018	Steering Group
Update Lancashire transport plan	When up for renewal	Lancashire County Council
Disseminate information to industry on heat network opportunities	December 2018	Lancashire LEP
Develop exemplar energy efficiency retrofit demonstration project(s) to show best practice and normalise new or innovative technology	2019	Lancashire LEP
Creation of dashboard to monitor progress against carbon targets	December 2018	Steering Group
Ensure that best use is made of remaining ERDF budget and Shared Prosperity Fund to deliver on these actions	2020	Steering Group
Seek to harness support of the new North West Energy Hub to support these actions moving forward	2018	Steering Group
Reflect Lancashire's clean growth strengths and aspirations within the Local Industrial Strategy	2019	Lancashire LEP



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