

Energy for Growth

Executive Summary



What is the Energy for Growth strategy?

The Energy for Growth Strategy has been developed by the North East Local Enterprise Partnership (LEP), as part of government's Business, Energy and Industrial Strategy (BEIS) local energy programme. Through this programme all LEPs in the country have been tasked with developing an energy strategy for their area that will identify regional strengths, challenges, and opportunities, and that align to national energy policy. The strategies will raise awareness of the regional energy offer, introduce strong partnerships to support and to gain buy-in for collaborative implementation, and to help shape a pipeline of strategic projects to further strengthen the sector.

How does this work with the North East Strategic Economic Plan?

The North East Strategic Economic Plan has been in place since 2014 and details how we will achieve our aim of adding 100,000 more and better jobs to the regional economy by 2024. The Plan identifies energy as an area of strategic importance for the regional economy, with significant strengths and growth opportunities.

The Energy for Growth strategy defines strategic energy themes where the region can contribute towards national policy goals at scale, while driving regional competitiveness, productivity and employment, and in turn, contribute to the ambition of creating more and better jobs for the region.

Our energy offer

The North East has a unique range of assets, capabilities and opportunities.



Ideas: We are home to a comprehensive set of energy innovation and demonstration, including The Offshore Test Centre in Blyth, Tyne Subsea which includes hyperbaric test facilities, the National Centre for Energy Systems Integration which is led by Newcastle and Durham Universities, Durham Energy Institute, The joint Northern Gas Networks/Northern Powergrid Integrel Test Facility in Gateshead, the Energy Systems Catapult Centre in Newcastle. These offer a powerful test-bed for business and research. As the UK transitions to clean growth, responds to new consumer demands, and emerging energy challenges, these assets can play a crucial role in de-risking and commercialising new technologies.



People: Our energy sector is supported by an extensive research and education base. This keeps the region at the forefront of the energy agenda, with leading-edge knowledge constantly being created and shared. The North East is also contributing to defining and providing the pipeline of skills required for the energy sector in the future, and for the transition to clean growth, by working with universities, colleges and private sector training providers.



Infrastructure: We benefit from excellent national and international transport connectivity. Together with availability of land, this supports businesses in the energy sector to be highly competitive. The region is home to a globally significant offshore energy and subsea technology cluster, supported by a comprehensive infrastructure offer around the three major ports in the region. Local gas and electricity distribution network operators are innovating in the region, and provide regular information on network capacity and investment plans, to help inform new developments for the future energy system.



Business environment: The energy sector is central to the North East's economy, with an innovative community of businesses creating wealth, skills, and jobs across the sector. Particular opportunities to drive economic growth and deliver more and better jobs include continuing growth and diversification of an already globally important offshore energy and subsea cluster, developing a range of local and regional energy programmes and projects and strengthening the collaboration between our innovation assets.



Place: The North East is the most northerly Local Enterprise Partnership area in England, located between Scotland, Cumbria, Tees Valley, North Yorkshire and the North Sea. We are an important contributor to the energy agenda across wider geographies, including across the Northern Powerhouse, the Borderlands project, the North East, Yorkshire and Humber energy hub, and through national Sector Deals and Grand Challenges. The wider North has a well-established energy heritage and it is now playing a world-leading role in agendas such as offshore energy, renewables, and development of hydrogen technologies.

The Energy for Growth vision

To drive growth in the North East while delivering on national energy objectives.

How will we achieve this vision?

We will work with partners to develop activity around strategic themes, focusing on activity which positively impacts regional economic growth, productivity, and the creation of more and better jobs.

Activity related to energy can do this in a number of ways:



We have set out 13 strategic energy themes for the North East, which can deliver these positive regional impacts, while mapping strongly to national policy.

We will now work with partners to develop a pipeline of projects around these strategic themes, to achieve the Energy for Growth vision.

The 13 strategic energy themes

1

Offshore energy and subsea technology

The North East's offshore energy and subsea technology cluster is nationally and globally recognised. The region stands to benefit from both new and existing global market opportunities in oil and gas and offshore wind, and is identified as a key cluster for delivery of the offshore wind sector deal. Supporting employment, competitiveness and productivity in this sector is a strategic energy opportunity for the North East.

2

Infrastructure intelligence

Energy infrastructure is critical to enable economic and business growth, and to support communities through the transition to clean growth. As new demands are placed on this infrastructure, a clear and coordinated sharing of intelligence between end-users and network operators is essential. This will create a live evidence base for informed decision making and mutual benefit.

3

Fuel poverty

Fuel poverty is a prominent energy concern for the North East. With rates consistently higher than the national average it is a critical region for focus on achieving national objectives. The North East is therefore best-placed to explore and deliver new policy, investment, technology or partnership approaches to addressing fuel poverty. Addressing fuel poverty will deliver social, environmental and economic benefits for the region.

4

Domestic energy

Due to our higher proportion of energy use in the domestic sector compared to the UK overall, we are an important region in meeting national domestic energy goals, in terms of delivering domestic energy improvements at scale, and in exploring new domestic fuels, particularly for decarbonising heat.

5

Off-grid domestic energy

We have a high concentration of communities both off the gas network and a significant distance from a network connection. There are also properties in the region off the electricity grid. This can lead to use of carbon intensive and expensive energy sources, and exacerbate fuel poverty. Exploring business models, technologies and policy approaches for off-grid domestic energy is an important regional energy theme and an opportunity for innovation.

6

Industrial, commercial and public estate

Industrial and commercial energy is an underlying factor influencing productivity and competitiveness. Our considerable energy consumption in the public estate also presents an opportunity to explore collaborative deployment of interventions at scale, perhaps through new business models or with new technologies.

7

District energy

There is a nationally significant potential pipeline of district energy schemes within the North East. Collaboratively de-risking and commercialising these schemes could increase the likely scale and pace of delivery, and the realisation of wider social, environmental and economic benefits. This is a significant strategic opportunity for the region, and in the national decarbonisation of heat.

8

Mine energy and geothermal heat

We have significant potential for deployment of mine energy and deep geothermal heating schemes. The region can play a national role in commercialising this technology for decarbonisation of heat, by progressing a regional project pipeline. Implementing such schemes could also deliver wider social and economic benefits, potentially in deprived, fuel poor and off-grid communities.

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Community energy

The North East has a relative lack of community energy projects, which could deliver substantial social, economic and environmental benefits. Sharing of best practice or exploration of how schemes can be aggregated, address skills gaps and access finance, could unlock further implementation.

10

Large-scale renewables

We are an important region for the continuing deployment of large scale renewable energy, including onshore wind, solar PV and anaerobic digestion. This is both in terms of coordinating potential for single large scale developments, and large scale rollout of domestic micro generation. We also have an important role in continuing innovation to reduce the costs of such technologies.

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Energy flexibility

The North East could leverage existing experience and expertise to maximise deployment of energy flexibility schemes. We can also play a central role in the development of the UK energy flexibility industry. Collaborative exploration of business models, or aggregation of schemes for favourable terms, could help de-risk and deploy an emerging pipeline of schemes.

12

Low emission transport and advanced propulsion

The North East can combine its energy and automotive capabilities, and play a national role in developing technologies at the intersection of advanced propulsion and energy systems. Deployment of low emission transport infrastructure is vital to serve regional communities, and transitioning commercial fleets presents opportunities for collaborative strategy.

13

Demonstration and innovation

Our comprehensive set of energy demonstration and innovation assets plays a crucial national role in accelerating the transition to clean growth, generating exportable intellectual property, and creating new growth and investment opportunities in the region.

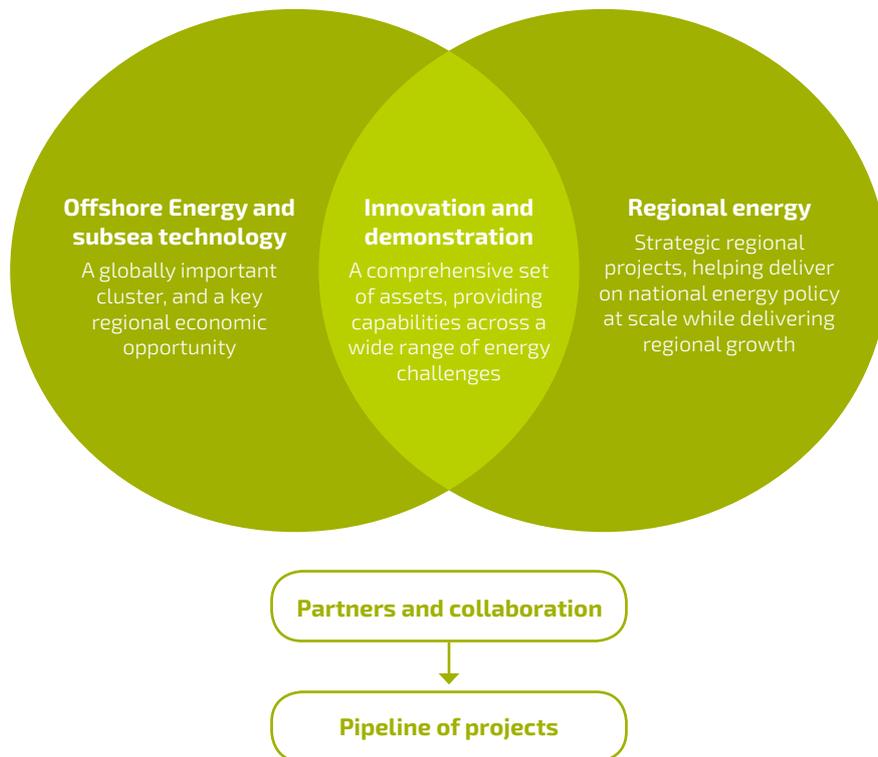
Developing and delivering the strategy

The North East LEP will work with cross-sector partners to develop the themes identified in the Energy for Growth Strategy, and a regional pipeline of projects that will support its delivery and implementation. This will be known as the Energy for Growth programme.

The Energy for Growth programme objectives are to:

- Bring together regional and national energy stakeholders
- Identify and prioritise strategic energy opportunities
- Facilitate delivery support for a strategic energy project pipeline
- Constructively identify challenges and support needs
- Communicate North East energy strengths and activity.

The programme is structured around three workstreams:



The North East LEP will also work with partners to explore sector-wide interventions, and connections to cross-cutting agendas such as digital and data, infrastructure, and skills.

Find out more

You can read the full Energy for Growth strategy on the North East LEP website: northeastlep.co.uk

If you would like to explore opportunities to collaborate, or if you know of an energy project which has potential to deliver national policy and support economic growth, get in touch:



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