**LEADING, ADOPTING OR DRIFTING?** 

Where next for the northern energy sector?

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### **60-SECOND SUMMARY**

This report argues that, with the appropriate support and strategic oversight, the north of England could do the following.

- 1. Act as a pathfinder for **unlocking the energy trilemma** for the UK: ensuring security of supply, managing the cost of and access to energy, while decarbonising the energy system in a 'no regrets' way, in the context of the policy and investment uncertainty created by Brexit.
- 2. Generate significant **economic benefits** for the North and the nation more widely, and in doing so narrow the regional productivity gap.
- 3. Successfully demonstrate a new **whole systems approach** to the UK energy sector and pioneer its implementation at a regional level.

Realising these propositions will naturally unlock great potential in the north of England, but will also be of national significance: ensuring energy security and resilient economic prosperity, while meeting the legally binding emissions reductions targets needed to mitigate – and adapt to – the effects of a changing climate.

# A NORTHERN ENERGY STRATEGY

The northern energy sector is well equipped to deliver on these propositions, given its abundance of sites for new power and heat generation, and its ability to maximise these using its economic assets and legacy of skills in energy, energy efficiency and other related fields. The technologies which will deliver a national energy future are presented here as the 'ingredients' of a Northern Energy Strategy. In this report, each of these ingredients is analysed to assess its potential capacity, its relative cost, its ability to create jobs, and its contribution to meeting our carbon reduction obligations. It is argued that the North is particularly well placed, given its geography and geology, to develop those 'ingredients' which will create most social and economic value.

The combination of technologies that ultimately creates the energy mix will rest on the behaviour and decisions of a small number of key actors and institutions, globally, nationally and regionally, and in relation to four key variables.

- 1. Their level of support for decarbonisation.
- 2. Their approach to industrial strategy.
- 3. The extent and nature of coordination.
- 4. The availability of finance and investment.

# POSSIBLE ENERGY FUTURES IN THE NORTH

Together, these ingredients and variables are likely to lead to one of three possible energy futures.

### Future 1: The North as an energy leader

As an 'energy leader', the North would pioneer a new approach to national energy production, innovation and decarbonisation. The region would act on its comparative advantages in the energy sector and both develop and implement new low carbon technologies, such as tidal lagoon power and hydrogen for heat, which in turn will lead to the creation of new industries that export energy, goods and services to the rest of the country and the wider world.

#### Future 2: The North as a technological adopter

As a technological adopter, the north of England would take seriously its need to reduce carbon emissions and decarbonise much of its power and heat generation by 2050. It would generate energy from a range of old and new sources, such as offshore wind, nuclear power and a range of technologies for heating homes, depending to some extent on energy imports. While it may not become a driver of technological development, the North would adopt new technologies as necessary.

### Future 3: The North as an energy drifter

As an 'energy drifter', the North would fail to make use of the opportunities currently available within its energy sector. It would not replace the capacity historically and currently created by fossil fuel plants, and would instead become increasingly dependent upon energy and technology imported from elsewhere.

The Northern Energy Taskforce is committed to developing a strategy to ensure that the north of England becomes a global energy leader. Based on the principles and broad parameters set out in this report, its work programme will now move to develop a strategy and route map to achieve this goal. This strategy, which will be published in autumn 2017, will consider a number of factors.

- The role of national and international policy in setting the framework for energy supply and demand and decarbonisation, and the need to manage the impact of Brexit on policy certainty.
- The added-value potential of northern energy assets and skills, and the role of subnational institutions and devolution in implementing and delivering a northern energy strategy in the context of a national and place-based industrial strategy.
- The ways in which energy projects of different scales are best funded and financed.
- Specific challenges relating to key 'ingredients' and how they will be implemented.

For the full report, including all references, data sources and notes on methodology, see: http://www.ippr.org/publications/leading-adopting-or-drifting-where-next-for-the-northern-energy-sector

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