

EIP053

How can we maximise use of demographic data?

Problem Statement Details

Networks have embarked on digitisation strategies to share asset data to aid the UK energy transition. How can we additionally use demographic data to support the creation of programmes of works? Can this data assist in the planning of projects which improve the experience of the customer and communities?

The data is the enabler, the innovation here is how we use the data to drive decision-making.

Key Stakeholders

Gas and Electricity Networks, domestic customers/particular those in vulnerable situations, small and medium businesses, housing associations and private landlords, local authorities/resilience forums, local health organisations.

Target Market

GDNs and DNOs should be considering the demographics of an area as part of the planning of projects, such that they can ensure initial communications are tailored to the area and support measures planned are available. During incidents, identification of the demographics of the area including businesses, schools and healthcare facilities would help the response and safeguarding of the population. As we move towards a hydrogen roll out and some parts of the gas network potentially being disconnected, it is important we understand the demographics of who will be adopters, who will need support and those at risk of being left behind.

Networks have additional funding from Ofgem, so data-driven targeting of projects to the most in-need areas is important.

Enablers and Constraints

Enabler: GIS systems can be loaded with demographic data, and with updated dataset sets from the 2021 census becoming available, the timing is right to identify and utilise the applicable datasets.

Data should be freely available as a principal and overlaid with asset data to allow spatial analysis.

Scalability and Target Implementation Date

Whilst networks all have some data in different formats and with different means of access, a consistent set of data, use-cases and outputs would aid networks, and demonstrate to customers/consumer groups a joined-up approach to current and future challenges.

Innovation Strategy Target Areas

Innovation Theme	Target Area	Primary or Secondary
Data and Digitalisation	<p>The shift to data-driven, digitally-enabled networks is critical as we move towards Net Zero.</p> <p>We need your help to drive standardisation, interoperability, security and digital skills whilst accelerating our transformation to data-driven networks by the mid-2030s.</p>	
Flexibility and Market Evolution	<p>Energy networks must quickly and efficiently respond to the rapidly evolving needs of the energy system transition. We need your support to eliminate barriers to new market entrants, deploy novel commercial and network management solutions whilst ensuring fair participation and eliminating regulatory barriers within the RIIO-2 price control periods.</p>	
Net zero and the energy system transition	<p>In order to meet the UK net zero targets of 2050 we must start converting our networks to deliver low carbon fuels today. We want to work with you to develop the role of our gas networks into the future by investigating, trialling, implementing and delivering safe, low carbon alternatives to natural gas such as Hydrogen.</p> <p>Net Zero requires connection of more low and zero carbon sources of energy generation, storage and demand to both the transmission and distribution networks. We need your innovative methods for effective network management and accessing flexibility to improve visibility, forecasting and modelling of low carbon technologies.</p>	
Optimised assets and practices	<p>Innovation has a key role to play in ensuring our networks continue to remain reliable, safe, secure and resilient to our changing climate. We are constantly looking to improve and welcome support to identify methods to prevent interruptions, ensure resilience, reduce climate impact and future-proof our networks.</p>	
Supporting Consumers in Vulnerable Situations	<p>Equality and fairness are the foundations of a just transition to Net Zero. We hope you can provide insight into the transient and situational nature of vulnerability and how we can overcome the impact the energy system has on consumers, building strong relationships for the future.</p>	Primary
Whole Energy System Transition	<p>The energy system must consider the full range of opportunities, risks and interdependencies that exist across the energy networks to integrate and optimise them in a way that best serves the consumer. We are looking for ways to improve visibility of the networks and transitional options, co-ordinate approaches and collaborate across the UK.</p>	Secondary