EIP057

How can we convert without interrupting supply?

Problem Statement Details

During the process of conversion, we will interrupt the customer on a number of occasions. How do we convert without interrupting, working to maintain continuity off supply for customers in vulnerable situations? This will also reduce the need of alternative heating and cooking appliances thereby reduced costs for the Gas Network and the customer.

Key Stakeholders

All our customers especially those in vulnerable situations, gas network operators.

Target Market

Gas Network

Enablers and Constraints

Enablers - We know who our customers in vulnerable situations are; we have a conversion plan.
Constraints - Interruptions currently take at least four hours and this may be on two occasions. Solutions are needed by 2026 when we will start to see the first hydrogen village and blend networks.

Scalability and Target Implementation Date

If an appropriate solution is found this can be scaled to use across all gas networks and not just for customers in vulnerable situations, not just hydrogen roll out but across many of our existing workstreams. 2026 target implementation date.

Innovation Strategy Target Areas

Innovation Theme	Target Area	Primary or Secondary
Data and Digitalisation	The shift to data-driven, digitally-enabled networks is critical as we move towards Net Zero. We need your help to drive standardisation, interoperability, security and digital skills whilst accelerating our transformation to data-driven networks by the mid 2030s.	
Flexibility and Market Evolution	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.	
Net zero and the energy system transition	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.	Secondary
	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.	
Optimised assets and practices	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.	
Supporting Consumers in Vulnerable Situations	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.	Primary
Whole Energy System Transition	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.	Secondary