



The future of energy

Bridgend Future Modelling

We need to find out what a future energy network that could address the energy trilemma would look like, so our customers can receive affordable, secure and sustainable energy – particularly heat, long into the future.

Using Bridgend, a typical town in south Wales, we have completed a series of case studies to model future energy demand, the potential ways to meet that demand and the ability of the residents to pay for the changes. The results have been shared with policymakers to help them and us invest wisely in a low carbon future.

Research showed that the current gas infrastructure could potentially save billions of pounds in investment in the electricity network or other technologies and also make sure that customers energy needs are met in winter when demand is at its highest.

We found that current home energy policies are weighted towards carbon reduction and do not equally consider sustainability and affordability.



**YOUR GAS EMERGENCY
AND PIPELINE SERVICE**



Key Benefits

- The research has been shared with policymakers to help them and us invest wisely in a low carbon future.
- The Study found that electric heat pumps increase emissions and costs to customers compared continuing use of the gas network.
- Research shows that renewable gas like biomethane requires lower investment than other renewables and can help to keep cost to the customer down – while working to meet carbon targets.

Next Steps

- Continue to develop evidence and carry out research on the future of energy.
- More research to understand investment needed for seasonal storage.
- More research on the impact of widespread CHP roll out.
- Continue to develop case studies and demonstrators of other projects like biomethane and other distributed sources of gas, hydrogen and power to gas.

