

Response | Ofgem | DNOs' future role in supporting the rollout of low carbon technologies

2 April 2026

Context

ADE: Demand welcomes the opportunity to respond to Ofgem's consultation on DNOs' future role in supporting the rollout of low carbon technologies.

Our vision, and what ADE: Demand exists to make happen, is no less than a complete re-imagining of the role of demand in our energy system so that:

1. Demand is given equal consideration to generation.
2. Every household, commercial business and industrial site has a commercially viable path to decarbonisation.
3. It is recognised that energy users and their assets have a day job – they shouldn't have to work around the energy system, the energy system should work around them.
4. Millions of users with automated energy provision can play a major part in keeping the lights on.

ADE: Demand Response

Q1. Should DNOs play a role in co-ordinating and supporting a cost-effective energy transition through improved planning and supporting/directing targeted delivery? How can they help make the transition more efficient and affordable for everyone, and do they have a role in supporting lower income households?

We agree that DNOs should play an active role in coordinating and supporting a cost-effective energy transition through planning and supporting targeted delivery. Due to their regional presence and possession of relevant data, DNOs are well placed to ensure a more strategised, area-based rollout of LCTs.

However, any expanded role must be accompanied by greater accountability. Historically, DNOs have not supported LCTs and have been slow to publicise constraints issues in their networks. Robust reporting requirements, measurable targets, and meaningful punishments must be built into RIIO to ensure DNOs deliver consumer and system benefit.

Q2. Do you agree with the overall rationale and scope of 'Enhanced Co-ordination'?

We agree with the overall rationale and scope of 'Enhanced Coordination'. Considering that the SOO Licence Obligation already covers collaboration and data sharing, we believe it makes sense to build on the existing regulatory framework. Focusing on stakeholder engagement, data sharing, and supporting local authorities will help deliver a timely and encompassing rollout of LCTs, and provides a platform for later Expanded Role activities.

Q3. What are your views of the effectiveness of the existing Collaboration Plan requirements? Do you think the enhanced Community Collaboration Plans we have described would be helpful to stakeholders and, if so, how best should they be monitored?

We believe that the existing Collaboration Plan requirements are somewhat limited, as they do not require DNOs to identify key stakeholders, nor show how engagement has influenced network planning. We therefore agree with the enhanced Community Collaboration Plans as laid out in the consultation.

We believe that monitoring should be rigorous to ensure adherence to the SOO. Ofgem should require evidence that engagement has changed planning or delivery, and should attach stronger RIIO penalties where DNOs fail to engage effectively or provide meaningful visibility of constraints.

Q4. How useful is the data currently published by DNOs, and is it presented adequately?

We believe that the data currently published by DNOs is useful in principle, but it needs to be more timely and complete to help coordinate LCT rollout.

Q5. What are your views on strengthening the System Visualisation Interface requirement, and would it be valuable for DNOs to collate and publish additional non-network datasets, if so, which datasets would be most beneficial?

We agree with strengthening the System Visualisation Interface, as greater data-sharing will help ensure local planning, stronger network readiness, and more effective collaboration. We support inclusion of additional non-network datasets where these materially support decarbonisation planning.

We believe raw data should be available in accessible formats, but stakeholder-friendly visualisations may also be helpful where they improve decision-making. The priority, however, should remain improving the quality of the underlying data.

Q6. What are your views on the Working with Local Authorities and others proposals we have set out above? What if any, would be the key elements of this? Are you aware of particular entities who would benefit from such advice?

We agree with the above proposals. DNOs should be able to provide technical advice, relevant tools, and visibility of network build options to local authorities and other delivery bodies where this supports area-based decarbonisation.

Q7. How could iDNOs support the proposals in this portion of the consultation? How could either private wire connected properties or license-exempt networks feature in these proposals?

N/A

Q8. We are keen to understand how these proposed Enhanced Co-ordination activities could best integrate with NESO's RESP processes in the near and long term, and how these proposals could complement, or be in tension with, RESP development?

N/A

Q9. Do you think if DNOs adopted the type of Expanded Role described above this would add value and support the rollout of LCTs and EE? Could this model provide an effective and viable

way to deliver network and system benefits? If so, could this be achieved while also prioritising support for lowincome households?

We believe an Expanded Role could be valuable in supporting the rollout of LCTs and provide network and system benefits, so long as strong punishments are built in to ensure DNOs are kept accountable.

Q10. What are your views on us considering these proposals using a network benefit and wider system benefits approach? Do you have relevant information on the likely network, system, consumer or efficiency benefits of such an approach?

N/A

Q11. Do you have any views on the archetypes presented and their implications? Do you have any other approaches we should consider? Do you have any evidence on key components notably:

- **On the technologies and measures that should be supported: Do you have evidence on the relative costs and benefits of different technologies? How could heat pumps and other low-carbon heating technologies be included whilst still offering wider system benefits?**
- **On the identification of suitable properties and consumer engagement: Would DNOs be well placed to proactively identify suitable properties and/or engage with consumers, or are there other actors better place to perform these functions?**
- **On the potential funding approaches and implications: what are your views on the feasibility, or risks from these approaches; do you have evidence from other sources that is relevant to these considerations?**
- **On responsibility for installations: what are the risks and opportunities if DNO's were responsible for installations? What are the options for partnerships and how could different responsibilities offer better outcomes?**
- **On ownership and control of assets: how can necessary level of network or system benefits be achieved without DNO control and ownership? Does this pose other risks and challenges, and how might these be overcome?**

On heat decarbonization and low-carbon heating technologies, recent work undertaken by ADE: Research shows significant system benefits that can be offered by increased deployment of heat networks. We find that the deployment of heat networks leads to net benefits for the wider electricity system across a range of areas, namely:

- A decrease in infrastructure-related CAPEX: across urban and semi-urban areas, it is cheaper to invest in heat networks than it is in individual Air Source Heat Pumps (ASHP)
- A reduced burden on the grid, namely decreases in the need for grid reinforcement, upgrades and maintenance
- A reduction in the installed generation capacity required to produce the electricity needed for electrified heat

Collectively, these equate to an annualised net benefit of £3.5 bn a year that is directly attributable to the ambitious deployment of heat networks with large-scale, flexible thermal storage. By 2050, these cumulative net benefits reach £86.5 bn.

These £3.5 bn a year in cost savings are broken down as follows:

- The net savings from investing in heat networks in urban and semi-urban areas, rather than individual ASHPs, come to £1.1Bn a year.
- We see £1.2Bn a year of generation savings through a reduction in installed generation capacity.
- We see distribution savings (the investment and operation costs for the low-voltage networks that deliver electricity from substations to end consumers) of £0.6 bn a year.
- Collectively, the net benefits for the broader electricity system across generation savings, distribution savings and other savings across the grid and battery storage come to £2.4 bn a year.
- When we include the net savings of £1.1 bn a year from investing in heat networks, rather than individual ASHPs, we get the total annual net benefit of £3.5bn a year.

In addition to heat networks, any Expanded Role should explicitly include heat batteries. Heat batteries offer significant potential to shift the majority of heating-related electricity demand to off-peak periods. Previous innovation projects support this:

- The NIA-funded NeatHeat project (delivered by UKPN, OVO, and Tepeo) found that heat batteries were able to shift 95% of electricity consumed for heating outside peak periods, and over 90% on cold winter days.
- The NIA-funded THISTLES project (led by SP Electricity North West) is exploring how what batteries can reduce network pressures in areas where housing is not well suited to heat pumps.

Heat batteries therefore have a clear role alongside heat pumps and heat networks in delivering heat decarbonisation. In particular, they can avoid the deployment of direct electric heating in properties unsuitable for heat pumps, which would otherwise materially increase peak demand and drive the need for additional network reinforcement, with associated costs passed on to all consumers.

Q12. Do you have views on whether pilots of these approaches would be valuable? And, if so, whether the pilots should potentially include a range options across archetypes, or whether the scope should be narrowed in advance? What should be the main focus of any pilots?

We believe that pilots would be a useful way to assess which Expanded Role activities work best before being introduced in ED3. Due to the impact on consumer bills, we do not support a Focused Interventionist approach; however, we would support pilots of the Laying the Groundwork and Widening Participation archetypes.

As well as testing the benefits of coordination and enabling works, we believe pilots should allow for assessments of funding approaches, accountability mechanisms for DNOs

Q13. How could iDNOs support the proposals in this portion of the consultation?

N/A

FOR MORE INFORMATION, PLEASE CONTACT:

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