

Overcoming Barriers to the Clean Energy Transition in Northern Ireland

Belfast Panel Discussion | Key Insights for Policy and Delivery

Queen's University Belfast | 25th March 2026

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Headline message

The Belfast discussion pointed to a simple but uncomfortable conclusion: Northern Ireland's main problem is no longer a lack of targets. It is a lack of delivery.

Across the event, panellists repeatedly returned to fragmented governance, planning and grid delay, weak public participation, and poor alignment between transition policy and everyday concerns such as cost of living, housing, local benefit and control over energy. Those themes closely mirror the concerns raised in the 2025 Northern Ireland Audit Office report and help explain why the gap to 2030 remains so wide.^{2,3}

At a glance

- The October 2025 Northern Ireland Audit Office's review of the Energy Strategy for Northern Ireland, *Path to Net Zero Energy* (2021) provided the immediate policy context and rationale for this event. It found that progress towards the Energy Strategy's three headline 2030 targets had fallen substantially behind the required pace of progress and raised wider questions about delivery discipline, oversight and value for money.^{1,5}
- The event discussion suggested that the most persistent barriers sit across four linked areas: governance and accountability, planning and grid delivery, participation and community ownership, and weak alignment between transition policy and everyday concerns such as heat, housing, affordability and local benefit.
- The challenge is not only technical or financial. Panellists repeatedly connected decarbonisation to housing retrofit, cost-of-living pressures, land use, biodiversity, local economic change, resource distribution and energy justice.
- The discussion did not produce a single agreed route forward. It did, however, converge on the need for clearer delivery discipline, faster infrastructure reform, stronger local benefit, and a broader definition of transition success than carbon metrics alone.

1. Why this discussion mattered

This Key Insights document draws together the main messages from the Belfast panel discussion *Overcoming Barriers to the Clean Energy Transition in Northern Ireland: Re-thinking Policy, Planning, and Participation*, held at Queen's University Belfast on 25th March 2026. The event was organised

around two linked questions: what is obstructing progress on Northern Ireland’s clean energy transition, and what practical steps could still narrow the gap to 2030.¹

The Northern Ireland Audit Office’s October 2025 report on the Energy Strategy for Northern Ireland, *Path to Net Zero Energy* (2021) provided the immediate policy context and rationale for the event. The report examined progress towards the Strategy’s three headline 2030 targets: (i) delivering energy savings of 25% from buildings and industry; (ii) meeting at least 80% of electricity consumption from renewable sources, updated from the original 70% following the Climate Change Act (Northern Ireland) 2022; and (iii) doubling the low-carbon and renewable energy economy to more than £2 billion in annual turnover, with an additional ambition to reduce energy-related emissions by 56% by 2030 relative to 1990 levels. It revealed “significant shortfalls” in relation to these key targets: only 90 GWh of the 8,000 GWh energy-savings target (i.e. 1% progress) had been reported by March 2025; renewable electricity consumption target stood at 45%, approximately 35% short of the 80% target to be achieved by 2030; and the size of the low-carbon and renewable energy economy stood at £1.58 billion, short of the £2 billion ambition. It concluded by stating that given the lack of clarity over the impact of the 74 actions to support/implement the Energy Strategy on the achievement of the key targets, the expenditure of over £107 million on the Energy Strategy since 2020 “cannot be confirmed to be an efficient use of resources and represent good value for money”.^{1,5}

Official statistics published in March 2026 later updated the renewable electricity position to 47% of gross final electricity consumption in the year ending December 2025, up from 44% in the previous year. Even so, the distance left to travel to close the gap remains substantial. The wider point that framed the discussion was left intact: Northern Ireland remains off track, and the institutional, infrastructural and political conditions for faster delivery are still not in place at the scale required.²

2. What the Belfast panel discussion suggests

Delivery is being held back by fragmented governance and weak accountability.

Panellists across the first session described siloed working, risk-averse institutions and the absence of a clearly accountable body driving implementation. David Rooney pointed to a civil service culture in which uncertainty is too readily used to defer action. Brian Smyth stressed the lack of joined-up thinking and political will, while Stephanie Dunlop argued that fragmented governance continues to slow delivery.* This diagnosis closely tracks the Audit Office’s concern that the Energy Strategy Action Plans were not sufficiently outcome-focused and were not clearly aligned with the three core targets.¹

Planning and grid constraints are no longer side issues.

Planning delay, limited grid capacity and slow infrastructure build-out were treated as core constraints rather than secondary frustrations. Diane Emerson emphasised that while Northern Ireland has every resource needed for the energy transition, delivery capability and cross-sector collaboration are essential for delivery. Stephanie Dunlop identified planning and grid delays as major bottlenecks in need of reform for progress, while David Surplus later argued that renewable energy is no longer the

expensive element in itself; the insufficient grid network is what drives cost and delay. Considered together, the discussion suggested that planning reform and network investment need to be treated as transition policy in their own right.³

Participation is being misunderstood.

The discussion repeatedly pushed back against a model in which people are mainly cast as consumers, bill-payers or passive recipients of policy. Tiziana O’Hara argued that Northern Ireland has failed to create the conditions for community energy and shared ownership that are more established elsewhere in the UK. Brian Smyth captured the political edge of the issue when he asked, “What is wrong with us having more control over our own energy?” Audience discussion sharpened the point further by highlighting time poverty, exhaustion and the practical limits of civic participation under present social conditions. The implication was not that the public is uninterested, but that participation is being asked for without institutional supports, local benefit or intelligible routes into decision-making that would make community participation credible or sustainable.⁴

Decarbonisation is colliding with other policy domains.

This was one of the most substantive findings from the event. Housing and retrofit, affordability, land use, biodiversity, jobs, local economic strategy, resource distribution and energy justice all surfaced as overlapping pressures. David Rooney warned of the risk of “energy poverty” and “energy slavery” if the transition is captured by private interests, which sharpened the questions of ownership and distributional justice. The transition was not discussed as a self-contained climate policy exercise. It was discussed as something that is already colliding with wider policy domains and, in some cases, reproducing familiar inequalities through new infrastructures, new costs, and uneven control over benefits. That is especially salient for local councils and government departments trying to reconcile decarbonisation with housing needs, planning pressures, environmental protection, and public participation.

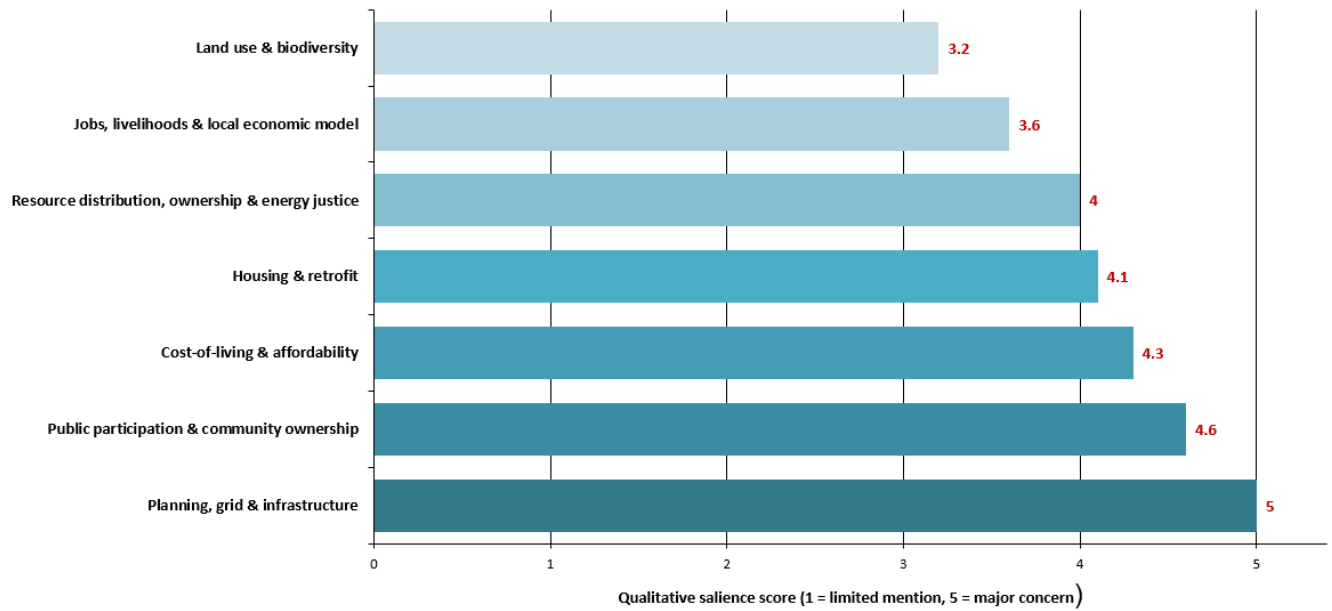
Hard-to-abate sectors will need multiple pathways, not one silver bullet.

The second panel made clear that hard-to-abate sectors will not be addressed through one route alone. Panellists pointed to the need for private-wire arrangements, e-fuels, industrial symbiosis, reuse policy, energy storage, critical minerals, recycling incentives, and skills development as components of a more system-wide response. David Surplus emphasised the implications of grid constraints for industrial decarbonization, while Jacqueline Gibson focused on deriving value from underutilised resources and waste-matching as solutions for tackling Scope 3 emissions. Peter Nockemann highlighted policy as the most actionable lever to incentivize storage, recycling for CRMs and mineral supply chains, as well as drawing attention to the role of universities in building the skills base needed for the transition. Jacqueline Gibson described herself as being “paid to be a disruptor” when arguing for a more connected approach to materials, waste and industrial systems. The discussion did not settle on a single preferred model, but it did suggest that narrower debates focused only on renewable generation are no longer fit for purpose.

Figure 1. Policy domains where the panel discussion signalled the strongest misalignment

Belfast panel discussion on clean energy transition barriers, 25 March 2026

Panellists’ view of key barriers to timely decarbonisation delivery in NI



Note: This is an interpretive visualisation based on one panel discussion event. Scores reflect qualitative salience across the event notes and panel questions; they are not statistical measurements of impact. ^{1, 2}

3. Response synthesis and overview

Table 1 condenses the six panel questions into their most policy-relevant takeaways. It is designed for quick overview rather than as a verbatim record, and it should be read alongside the fuller discussion above.

Panel question	What the discussion suggests	Most relevant overlapping domains
Q1. Main barriers to meeting energy targets	Fragmented governance and weak accountability; planning and grid bottlenecks; weak participation, need for community ownership and strong public narrative.	Governance; infrastructure; participation; affordability; energy justice

Panel question	What the discussion suggests	Most relevant overlapping domains
Q2. Policy, implementation or participation problem?	A combination of all three, though the strongest emphasis fell on delivery failure and structural barriers to participation rather than public apathy.	Implementation; institutional coordination; cost of living; community engagement
Q3. Which policy domains appear misaligned with decarbonisation?	Housing and retrofit; affordability and distributional justice; land use, biodiversity and planning; jobs and the wider economic model.	Housing; affordability; biodiversity; land use; jobs and livelihoods
Q4. What is needed for hard-to-abate sectors?	Faster grid and infrastructure reform; sector-specific pathways; reuse and circularity; storage, materials and skills; more localised delivery models.	Transport; industry; supply chains; storage; reuse; skills
Q5. What can sectors do now?	Resource local delivery bodies more effectively; improve public communication; scale community energy and shared ownership; reform planning and grid connection; support storage, recycling and reuse.	Local government; community energy; industry; circular economy
Q6. What systemic shifts are needed before 2030?	Move from fragmented governance to coordinated delivery; from consumer-only transition to participatory models; and from narrow target chasing to broader system transformation.	Governance reform; local ownership; affordability; resilience; circularity

Table 1. Condensed analytical synthesis based on the panel questions, event notes and event programme.

4. Wider implications: where the event signalled tension with the SDGs

The United Nations Sustainable Development Goals (SDGs) are the 17 integrated goals adopted by all UN Member States in 2015 as part of the 2030 Agenda for Sustainable Development, with 2030 set as the target year for delivery. They were designed to ensure that progress on climate action is assessed alongside poverty reduction, inequality, sustainable communities, responsible resource use and environmental protection.

As of the March 2026 panel discussion event, the 2030 SDG deadline and the 2030 milestone year for achieving critical interim energy decarbonisation targets in the Energy Strategy for Northern Ireland are both four years away. That coincidence matters. An energy transition mandate can meet decarbonisation benchmarks on paper yet still fail to satisfy broader sustainability criteria if it deepens inequality, leaves housing conditions unimproved, sidelines communities, or shifts environmental pressure onto land, biodiversity and local infrastructure. The Belfast discussion repeatedly suggested that this risk is real. In the absence of a more whole-of-system approach to decarbonising energy consumption, Northern Ireland risks not only missing its 2030 targets, but also moving further off course in relation to its 2050 net zero commitments, while at the same time weakening the conditions for a genuinely sustainable and just transition.⁵

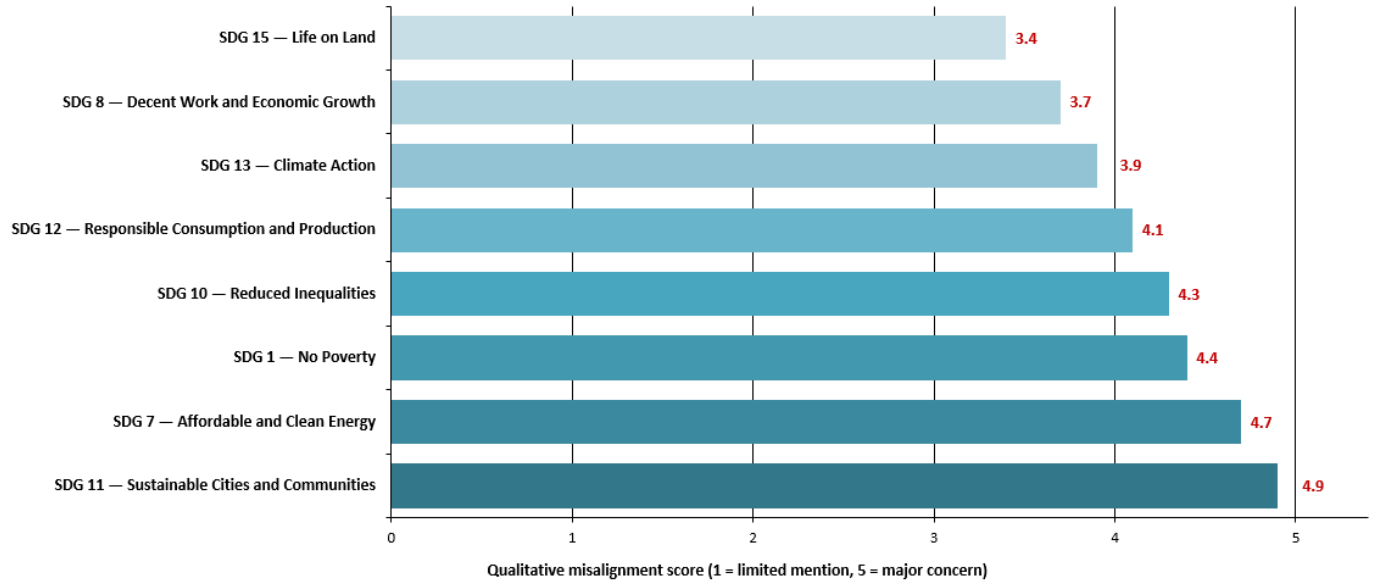
While the event did not overtly focus on the SDGs, the recurring topics arising from the discussions signalled tension between decarbonisation policies and Sustainable Development Goal 1 (No Poverty) and Goal 10 (Reduced Inequalities) through repeated concern about affordability, fuel poverty, ownership and who benefits from the new energy infrastructure. Brian Smyth's emphasis on retrofit, lower bills and energy-efficient social housing, David Rooney's warning about "energy slavery", and Tiziana O'Hara's insistence that communities must be treated as "stakeholders" rather than consumers all pointed in this direction. The discussion also spoke directly to Goal 7 (Affordable and Clean Energy), but in a broader register than renewable electricity shares alone: panellists repeatedly raised the issues of fairness, access, control, reliability and local benefit. Goal 11 (Sustainable Cities and Communities) surfaced through discussions of slow-moving housing retrofit, planning, local participation and neighbourhood-scale delivery. Goal 12 (Responsible Consumption and Production) emerged in the second panel through the need for better industrial symbiosis, reuse policy, monitoring of Scope 3 emissions and the treatment of waste streams as recoverable resources. Goal 15 (Life on Land) appeared in discussions of biodiversity, visual impact and land-use conflict around building renewable energy infrastructure. Goal 6 (Clean Water and Sanitation) while less central was not absent: later discussions of water networks and public-sector assets suggested that water infrastructure too forms part of the wider systems landscape against which the transition needs to be assessed.

Collectively, these themes suggest that decarbonisation in Northern Ireland is unlikely to be socially or environmentally sustainable unless its effects on communities, local infrastructure and the local environment are measured alongside carbon and renewable-electricity metrics. Figure 2 should be read in that spirit. It does not measure SDG performance in Northern Ireland. It simply offers a qualitative map of where the event most strongly signalled possible tension between decarbonisation policy and other social, economic and environmental priorities as mapped under the SDGs.

Figure 2. SDGs most clearly in tension with current decarbonisation pathways in Northern Ireland, based on the Belfast panel discussion

Belfast panel discussion on clean energy transition barriers, 25 March 2026

SDG areas most visibly in tension with current decarbonisation pathways



The chart is based on qualitative analysis scoring reflective of areas of relative tensions discussed by panellists across housing, affordability, participation, land-use, etc. This chart is not indicative of statistical measures of SDG performance for NI and should not be treated as such..

Note: This visual identifies the SDGs that current decarbonisation pathways appeared most misaligned with based on the panel discussion. The scores are qualitative analytical judgements drawn from one event and should not be read as quantitative measures of SDG performance for NI.

5. What should happen next

Put delivery discipline at the centre.

The event repeatedly pointed to the need for clearer milestones, stronger oversight and more visible responsibility for implementation. The Audit Office’s criticism of action-plan design should be treated as an immediate delivery issue rather than an administrative footnote.¹

Treat planning and grid reform as urgent transition measures.

If planning remains slow and the network remains constrained, progress will continue to lag across electricity, heat, transport and industry. The Climate Change Committee’s pathway for Northern Ireland points in the same direction: infrastructure, clean electricity, heating and enabling systems need to move together rather than sequentially.³

Bring people in as participants, not just end users.

Community energy, shared ownership, benefit-linked contracts and place-based engagement were among the clearest suggestions from the event. Public support is likely to deepen when local benefit is

visible, routes into participation are credible, and communities can see that transition decisions are not simply being imposed from above.⁴

Reframe the public case for transition.

The discussion suggested that energy security, lower bills, warmer homes, public transport and local control are often more resonant entry points than net zero language alone. POST's 2026 briefing reaches a similar conclusion in more formal terms: communication matters, but so do trust, affordability, timing and the social and political conditions under which people are asked to act.⁴

Back practical, near-term wins while preparing for harder sectors.

Retrofit, demand reduction, reuse policy, storage and better connections may build confidence faster than waiting for one big breakthrough. At the same time, shipping, aviation, industrial heat and critical material supply chains require earlier and more deliberate policy attention if 2030 is to remain meaningful as a milestone rather than a missed opportunity.³

6. Closing reflection

The Belfast panel did not suggest that Northern Ireland lacks options. Rather, it suggested that many of the ingredients for a faster and fairer transition are already visible.

The more difficult question is whether the current delivery system can act on what it already knows — quickly enough, coherently enough, and in ways that people recognise as fair, practical, and worth backing.

Method note

This document draws on the Belfast event programme, panel questions and contemporaneous notes. The charts and synthesis table are qualitative analytical aids rather than statistical measures, and any short quotations should be read as indicative phrasings from those notes rather than transcript-verified quotations.

*All quotations and paraphrases in this document are based on responses given by the following panellists:

David Rooney (Prof., School of Chemistry and Chemical Engineering, Queen's University Belfast), Brian Smyth (Councillor, Climate Emergency Committee, Belfast City Council), Stephanie Dunlop (Corporate Affairs & Policy Manager, SSE Ireland), Jacqueline Gibson (Director NI, International Synergies), Diane Emerson (Director, UKIMEA Climate and Sustainability Leader), Tiziana O'Hara (Convenor, Community Energy NI (CENI)), Peter Nockemann (Prof., School of Chemistry and Chemical Engineering, Queen's University Belfast), and David Surplus (Co-Founder, B9 Energy).

References

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3. Climate Change Committee, *Electric technologies will benefit Northern Ireland*, 19 March 2025, <https://www.theccc.org.uk/2025/03/19/electric-technologies-will-benefit-northern-ireland/>; and Northern Ireland's Fourth Carbon Budget, March 2025, <https://www.theccc.org.uk/publication/northern-irelands-fourth-carbon-budget/>.
4. UK Parliamentary Office of Science and Technology (POST), *Public engagement with the energy transition*, 7 April 2026, <https://post.parliament.uk/research-briefings/post-pn-0764/>.
5. Department for the Economy (Northern Ireland), *Energy Strategy for Northern Ireland: Path to Net Zero Energy*, 16 December 2021, <https://www.economy-ni.gov.uk/publications/energy-strategy-path-net-zero-energy>.