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Gate 2 and Beyond: Rewiring Britain's Energy Future

Clearing the Backlog, or Rebuilding the System?

REPORT

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Executive summary

Britain stands at a crossroads: clear the gridlock or stall its clean energy ambitions. This report, *Gate 2 and Beyond: Rewiring Britain's Energy Future*, examines Ofgem and NESO's TMO4+ "Gate 2" reform – transforming grid connections from a "first-come" to a "first-ready" system. The overhaul aims to purge thousands of "zombie projects" from the queue and unlock billions in stalled investment.

In November 2025, we surveyed 800 senior infrastructure leaders to capture sentiment around UK grid reform. The results reveal both optimism and unease: 74% believe the reforms could cut delays, yet nearly half fear the gains will favour larger players.

Developers still face steep hurdles – 44% cite unaffordable connection costs, 41% face land-rights hurdles, and 40% are impacted by approval delays.

The financial stakes are high; a 12-month grid delay can inflate project costs by up to 30%, equating to tens of millions in lost value per development.

True reform must extend beyond policy – aligning investment, infrastructure, and supply chains. The report calls for a "fair reform manifesto" built on transparency, redress, innovation, and consistent national standards. Without this, Britain risks replacing one bottleneck with another.

Ultimately, Gate 2 must turn the grid from barrier to catalyst – powering homes, transport, industry, and digital infrastructure in tandem. Its success will be measured not by how many projects it removes, but by whether it rebuilds confidence in Britain's ability to deliver a net zero, electrified economy.

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Methodology

The research, which was conducted by Censuswide, saw a sample of 800 UK-based senior decision makers, involved in the investment, build and connection of new UK infrastructure, surveyed to capture their sentiment and likely reactions to Gate-2 reforms.

200 executives were sampled (those with director-level or above responsibility) from each of the following stakeholder groups; investors and lenders focused new UK infrastructure, Independent Connection Providers (ICPs), renewables developers, and property developers.

The average weighted annual revenue of the companies our respondents represent is around £158 million.

The data was collected between 20.10.2025 and 30.10.2025.

Censuswide abides by and employs members of the Market Research Society and follows the MRS code of conduct and ESOMAR principles. Censuswide is also a member of the British Polling Council.

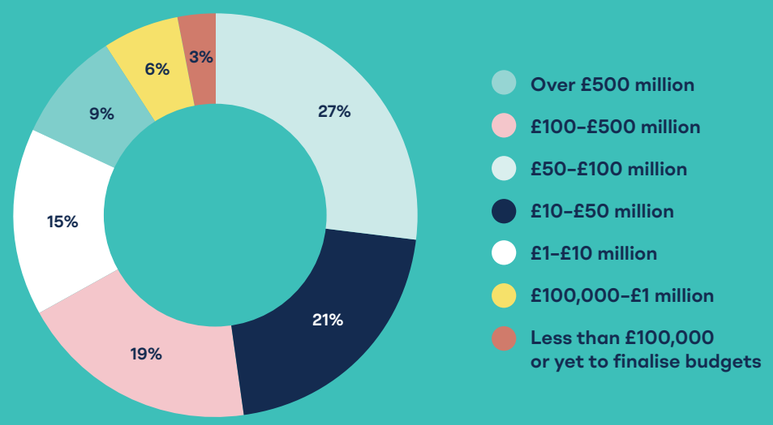
In November 2025, Aurora hosted a roundtable bringing together a small group of senior decision makers from the UK's energy infrastructure sector from renewables developers to investors and lenders. The event was held under Chatham House Rules, but some of their opinions have been included in this report as anonymised quotes.

Billions are poised for UK infrastructure: The industry speaks

Our survey captures the true voice of the UK infrastructure sector – and the message is clear: 98% of senior decision-makers already have capital committed to projects that will require a grid connection by 2026.

This isn't theoretical – it's real money on the table.

Here's how investment plans stack up for 2026:



Our survey findings reveal a remarkable level of capital readiness among senior decision-makers in UK energy infrastructure. These figures underscore both the scale of ambition and the urgency of delivery within the sector.

Taken together, these figures reveal an industry ready to build at scale – with billions already earmarked for grid-connected infrastructure that will shape the UK's energy future.

> **"We're not short of capital or projects – we're short of a system that can join the dots."**

01: Reviving the UK energy market: A turning point for reform

Something deeply unsettling has haunted the UK's net zero ambitions: zombie projects – grid connections claimed by developers who can't or won't deliver, effectively paralysing progress for everyone else.

When Ofgem announced[1] its plan in 2023 to tackle the issue, it exposed a dirty underbelly few in the public eye had been exposed to before. Yet beyond the drama lies a moment of existential reckoning: the reform may well determine whether the UK's net zero goals, new housing targets, and AI-ambitions remain aspirational or become reality.

Under the legacy first-come, first-served regime, over 5,000 projects[2] sat in the connection queue, equating to up to 700 GW, according to NESO (the National Energy System Operator which was formed at the end of 2024).

These aren't all real projects. Many are speculative placeholders – the result of an outdated system that rewarded ambition over action. Developers could secure connection slots years ahead of actual readiness, leaving credible projects stranded behind paperwork.

The result? A national pipeline swollen with false promise.

A *"zombie grid"* in which vital energy and infrastructure projects – from offshore wind farms to new homes – languish in limbo.

Now, the reform aims to clear the backlog heralding a new future for UK grid connections as early as 2026.

Under TMO4+, developers will be ranked and connected based on deliverability – not filing order. Those without planning, land rights, and credible financing will lose their place.

It's a bold move which promises improvement, but it's also a gamble. The industry must now learn whether it can separate real ambition from empty placeholders without sacrificing innovation or fairness.

> **"If we don't give a clear, credible post-Gate 2 roadmap, we'll clean the queue and still lose the race for investment."**

[1] https://www.ofgem.gov.uk/press-release/ofgem-announces-tough-new-policy-clear-zombie-projects-and-cut-waiting-time-energy-grid-connection
[2] https://www.neso.energy/clean-energy-projects-be-prioritised-grid-connections-reform-evidence-window-opens

02: Reform mechanics: From "First Come" to "First Ready and Needed"

The essence of Ofgem's TMO4+ reform is simple yet profound: priority will no longer be granted to whoever arrived first, but to whoever is actually ready.

From the evidence submission closing date of 26 August 2025, NESO started to assess connection requests through a new list of readiness criteria – including evidence of land rights, planning approval, financing, and deliverability.

It has introduced a gated process with at least two "Gates" (Gate 1 and Gate 2) through which projects must progress to obtain a firm (non-indicative) connection offer. Known as the Gate 2 process (G2TWQ), it a one-off exercise for existing connection agreements under Ofgem's and NESO's Connections Reform regime.

Readiness criteria must be met for Gate 2, with certain criteria expected to align with national or regional energy planning (such as the Clean Power 2030 Action Plan). Retrospective application of criteria (i.e. existing queued projects must also demonstrate eligibility or risk demotion or removal). They haven't just shifted the goalposts; they have dismantled the entire pitch.

So TMO4+ is not just incremental; it's a structural change in how projects are assessed, prioritised, and kept in the queue.

Projects that stall or fail to meet milestones can be terminated. This is a structural shift from an administrative queue to a strategic filter.

And the government is backing it with serious capital:

£4 billion
in fast-tracked grid investment[3] to accelerate transmission works and supply chain procurement.

£40 billion
per year in private clean power investment[4] targets, under the Clean Power 2030 Action Plan.

The system is now designed to favour projects that move, not merely exist. However while the reform unclogs the pipeline, it doesn't fix the wires and cables.

The UK's transmission and distribution infrastructure – much of it built for the fossil fuel era – remains unfit for the demands of a decentralised, electrified economy. Even shovel ready projects will fail without corresponding investment in substations, transformers, and local reinforcements.

On paper it all sounds like a step in the right direction, but perhaps a confidence gap is emerging.
Our new survey has exposed doubts over Gate-2's effectiveness.

> **"We've created a system where the default answer is 'no' and the only workaround is political lobbying. That's not a market, that's a bottleneck."**

More than a quarter of respondents (26%) say they are unconvinced or neutral about whether NESO's new Gate-2 process will actually reduce grid connection delays – a clear signal that faith in the reform is not universal.

[3] https://www.ofgem.gov.uk/press-release/britain-fast-track-net-zero-early-access-ps4-billion-infrastructure-investment
[4] https://www.gov.uk/government/publications/clean-power-2030-action-plan/clean-power-2030-action-plan-a-new-era-of-clean-electricity-main-report

Despite Gate-2's aim to streamline the system and speed up delivery, these findings highlight a significant confidence gap among developers and investors – suggesting that more than a quarter remain sceptical about whether the process can deliver the change the industry urgently needs.

> **Gate 2 is supposed to clear the queue – the risk is that we just replace the zombies with a different set of zombies.**
>
> **The networks have been in the shadows for years. Now everyone can see the reality: if the system doesn't connect, the economy doesn't grow.**

Many developers and investors may be securing multiple Gate-2 offers to keep their options open, yet still expect to build fewer than half of their approved projects.

> **Only 3% of respondents say they'll build every project they've bid for. Gate 2 is starting to look more like the 2012 Olympics ballot – throw as much jelly at the wall and see what sticks.**

These statistics may suggest that Gate-2 offers are prompting developers to stockpile approvals – but not necessarily progress to build. Most still expect to deliver less than half of their projects.

Only 3%
of respondents said they expect to build and operate all of their planned projects within the next five years, despite securing a grid connection offer.

A further one third (33%) believe they'll move ahead with just over half (51–75%) of their pipelines, while a striking 44% expect to build fewer than half of their planned projects – despite securing a grid connection.

Over half of respondents (57%) expect to lose between 11% and 20% of their projects under the new Gate-2 application rules.

> **The principle of cutting projects that won't progress is absolutely right – but there's going to be a lot of collateral damage.**

Top barriers to delivery according to our respondents:

#1	**High connection or upgrade costs** – The most significant barrier cited is the prohibitive cost of connecting to or upgrading the grid. Many developers view the capital burden as the primary deterrent to progressing with their projects	44%
#2	**Complex land-rights or easement negotiations** – Close behind, land access challenges; including negotiations for rights and easements – are slowing or stalling projects. This underscores the need for streamlined legal and planning frameworks.	41%
#3	**Lengthy utility or DNO approval timelines** – Extended approval processes from utilities and Distribution Network Operators (DNOs) are another major frustration, often pushing project schedules beyond viable windows.	40%
#4	**Uncertain or changing government regulations** – Policy instability continues to undermine investor confidence. Frequent regulatory shifts create uncertainty around timelines and returns, discouraging developers from committing.	36%
#5	**Other developers' projects creating backlogs** – Grid queue congestion – caused by competing projects – remains a major bottleneck for developers and investors despite the reform, with many feeling this will delay connection offers and limit available capacity.	31%
#6	**Supply chain risk** – Equipment shortages, especially for critical components such as transformers and switchgear, are hampering delivery schedules and adding risk premiums to project costs.	25%
#7	**Limited grid capacity / network congestion** – Although somewhat lower-ranked, physical grid constraints are still a notable issue, particularly in regions already nearing capacity limits.	16%
#8	**Skills gap** – A shortage of expert advisory and technical support in renewables and grid connection is limiting project momentum for some developers.	9%
#9	**Lack of project finance** – Funding access appears to be a relatively minor issue compared to logistical and regulatory barriers.	2%

Summary:
A very small proportion of respondents expressed full confidence in retaining their connection offer without issue. In short, cost, complexity, and coordination challenges dominate the list. Financial barriers lead the pack, closely followed by administrative and regulatory hurdles. Together, these findings paint a picture of an industry constrained less by ambition and more by systemic grid and process inefficiencies.

04: The missing link: Supply chains under strain

Even when developers are "ready," the physical hardware to connect them often isn't. Britain's grid build-out now collides with a global shortage of the very components that make electrification possible: transformers, switchgear, cabling, and high-voltage equipment.

In some instances, lead times[5] for transformers have been increasing for the last two years – from around 50 weeks in 2021, to 120 weeks on average in 2024, driven by soaring global demand, raw-material inflation, and capacity limits among a handful of specialist manufacturers.

Distribution-level switchgear and cables face similar pressures. This scarcity has quietly become one of the biggest bottlenecks in delivering new infrastructure – from grid substations to EV charging depots.

Our research has found that equipment shortages could threaten project delivery in 2026. An overwhelming 80% of respondents voiced serious concern that supply chain delays could push project timelines off track, jeopardising their ability to connect on schedule. In contrast, a mere 5% said they were not at all concerned, underscoring just how universal these anxieties have become across the sector.

A quarter quote supply chain risk – particularly shortages of critical equipment including transformers and switchgear – as the key reason they may abandon or delay project, despite having a connection offer. This is above all other challenges, such as high connection or upgrade costs, or regulatory uncertainty.

> **"Right now, reform is putting even more pressure on the supply chain because we can't invest. Supply chain issues have become more acute because we don't have the certainty to place orders."**

The impact is circular: reforms like TMO4+ can accelerate approvals, but without equipment already in the pipeline, projects still risk stalling downstream. Developers that clear Gate 2 may find themselves waiting years for a transformer slot, undermining investor confidence and delivery schedules. By securing connection design approval up front from a DNO, developers gain the confidence to order long-lead items as soon as the Gate 2 process awards them an offer, rather than waiting for the offer before beginning detailed design; a delay that can otherwise compound bottlenecks and erode the benefits of reform.

Compounding the problem, procurement volatility has driven steep cost inflation. Some network operators report that hardware prices have increased[6] by as much as 40–60 % since 2022, forcing repeated revisions to connection budgets.

Smaller developers are especially exposed, lacking the purchasing power or forward contracts that larger utilities can secure, particularly when they aren't working with an IDNO who can fast-track equipment delivery timescales through verified, pre-approved suppliers lists.

The policy challenge is to treat the supply chain as strategic infrastructure in its own right – to bring developers, manufacturing, logistics, and finance into the same conversation as regulation.

In short, the UK's grid reform won't succeed through regulation alone. The ability to source, build, and deliver the kit is now just as decisive as policy readiness.

[5] https://www.woodmac.com/news/opinion/supply-shortages-and-an-inflexible-market-give-rise-to-high-power-transformer-lead-times/#:~:text=Transformer%20replacement%20programmes%20underway%20at,capacity%20to%20meet%20growing%20demand.

[6] https://www.ofcom.org.uk/siteassets/resources/documents/research-and-data/multi-sector/pricing/2024/pricing-trends-for-communications-services-in-the-uk-2024.pdf?v=387092#:~:text=Since%202020%2C%20most%20of%20the%20UK's%20largest,applied%20to%20affected%20customers%20in%20March/April%202021.

05: Zombie projects: An existential threat to progress

At first glance, the reform looks purely administrative – a bureaucratic response to a paperwork backlog. But it's much more existential.

Zombie projects represent a fundamental misallocation of national capacity. If 700 GW or more of projects are stranded or scrapped, that's not just wasted effort – it's proof that the market's promise has outpaced the grid's ability to deliver. This points to a deeper fragility.

Our survey suggests developers are bracing for major project losses under Gate-2; over 99% of UK developers or investors in new infrastructure in 2025/2026 believe they'll lose projects currently queued for grid connections under the new Gate-2 rules which could be a near-unanimous signal that confidence in the system is faltering. It could also be that developers are submitting a higher volume of applications than they realistically expect to develop in order to obtain grid connections, which could lead to the risk of another backlog.

Almost half (45%) expect they'll be able to build and operate less than half of their planned projects going through the Gate-2 process – a stark indicator of how deep the uncertainty runs.

When asked why, the leading concern was sky-high connection and upgrade costs (44%), followed closely by complex land-rights and easement negotiations (42%). Meanwhile, over a third (36%) blamed unclear or shifting government regulations, adding another layer of instability.

Perhaps most tellingly, nearly one in three respondents (31%) pointed to other developers' projects causing backlogs – suggesting widespread doubt that Gate-2 will deliver on its promise to streamline the grid connection process, and remove the 'zombies' from the queue.

Even if all projects in the queue were viable, Britain's grid couldn't physically connect them; the infrastructure itself is the bottleneck.

As the National Preparedness Commission warned, the UK's "aging grid architecture" is a critical vulnerability in achieving the nation's 2050 goals. The reform, then, is as much about credibility as capacity. It signals to markets that the UK will reward realism, not speculation - and to developers that success will now be measured in milestones met, not grid slots held.

Yet the credibility doesn't yet seem to have been built. You could term it as optimism meets unease in the race to reform the grid. Industry sentiment around the Gate-2 grid connection process is largely upbeat – but not without its caveats.

A strong 74% of our survey respondents say they are confident that NESO's new Gate-2 process will help reduce connection delays, signalling real hope that long-standing grid bottlenecks may finally start to ease.

That optimism extends to investment outlooks too: 68% view the Gate-2 and TMO4+ reforms as a positive opportunity from an investment perspective – evidence that developers and financiers alike see potential for greater efficiency and predictability in the system.

Yet beneath this optimism lies a note of caution. Nearly half (46%) believe the reform will primarily benefit larger players, suggesting concerns about market imbalance and access for smaller developers with less experience, less third-party support and financial backing to comply with the now complex list of requirements set out under the new reform.

And while many welcome the changes, 22% see Gate-2 as a risk – citing fears that it could limit viable projects, erode investor confidence, or introduce new implementation hurdles. Even among supporters, confidence isn't universal: 10% remain neutral, and 17% are not convinced Gate-2 will actually deliver on its promises. The takeaway? The industry is hopeful – but not yet united. Gate-2 is seen as a step forward, but trust in its execution will determine whether that optimism endures.

> **"I think Gate 2 disproportionately favours the big players – they're the only ones with deep enough pockets to roll the dice."**

Ultimately, the reform will not be judged by how many zombie projects it clears, but by whether developers, investors, and communities trust the system that replaces them.

06: A manifesto for fair, effective reform

To succeed, Ofgem's reform must rest on six principles:

Pillar	Why it matters
1. Transparency	Publish criteria, metrics, and scoring to prevent perceptions of favouritism.
2. Fair Transition	Offer grace periods to legitimate legacy projects that invested heavily but fell short on timing.
3. Redress	Establish an independent energy ombudsman for appeals and complaints.
4. Investment Parity	Regulation must move in lockstep with network reinforcement – £4 billion is a start, not a solution.
5. Innovation Space	Ringfence capacity for small-scale, distributed or experimental projects.
6. Feedback Loops	Track and publish reform outcomes – success rates, appeals, and regional imbalances – and iterate continuously.

> **"We're trying to drag a very old-fashioned structure into the 21st century. The problem is the 21st century arrived more than 20 years ago."**

07: Beyond renewables: The built environment pinch

For many years, the connection debate has been dominated by wind, solar, and storage. But Britain's grid backlog is not just an energy problem – it's a housing, transport, and productivity one.

Homes, offices, and community buildings are the *'new energy-enabled real estate'* – but there are barriers preventing their transformation at scale. A local authority leader told Utility Week[7] in 2024, *"We've got planning permission for homes – but no permission for electricity."*

Across Britain, new homes and community infrastructure are being delayed by many years due to grid bottlenecks. In Oxfordshire and Cambridgeshire for example, housing estates approved[8] as far back as 2020 still await connection dates extending to 2028.

The irony couldn't be sharper; the UK government wants 300,000 new homes[9] a year, each fitted with EV chargers, heat pumps, and efficient systems – but those very features magnify demand on the grid.

Under the old system, residential projects sat behind speculative renewables in the connection queue. Under TMO4+, developers must show site readiness – planning, land rights, and design – to secure capacity.

For housebuilders, the grid is now a design constraint, not an afterthought.

Smaller developers will feel this hardest. Many lack the capital to fund new substations or reinforcement works. In some instances, developers can choose to work with IDNOs who can offer asset value payments. This is generated revenue from the Distribution Use of System (DUoS) charges, which are paid by the consumer through the energy supplier, and the IDNO uses some of this projected future revenue to offer a payment to developers to help subsidise the cost of building the new network and asset.

For many developers this payment can transform their project, helping them to build to plan faster.

[7] https://utilityweek.co.uk/connections-fee-backed-to-clear-logjam/#:~:text=As%20part%20of%20the%20process,secured%20and%20planning%20permission%20submitted.

[8] https://www.cambridge-news.co.uk/news/local-news/1500-more-homes-new-park-30093376

[9] https://www.bbc.co.uk/news/uk-politics-63445365#:~:text=Housing%20Secretary%20Michael%20Gove%20has,much%20is%20spent%20on%20benefits?

The impact of Asset Value Payments or Asset Adoption Values (AVPs or AAVs)	
1. Reduced upfront capital cost:	The developer will receive a payment (or rebate) from the IDNO, therefore their net cost of building the network or contributing to the network is lower.
2. Improved cash-flow /financial viability	Instead of bearing the full cost of the network and then relying on sale or occupancy to recover it, the AVP shifts some value back to the developer earlier. This helps improve project returns, reduce risk, and potentially speed up payback.
3. Better project economics and competitive edge	Especially in a challenging market (rising construction costs, network upgrade bottlenecks, etc), the ability to reduce long-term network costs is a differentiator. For some developments the AVP has made the difference between viable and marginal.
4. Incentivises using an IDNO route	Because the IDNO model can bring agility, competitive pricing and the AVP mechanism, some developers prefer this route over the traditional DNO route. That can lead to faster delivery, more flexibility in design, etc.

Without grid-ready zones for housing, the risk is that affordable housing becomes unaffordable to build.

Almost half of respondents (44%) in our survey said high connection or upgrade costs would be the main reason that they might not build a project or would surrender their connection offer.

The opportunity, however, is clear: if spatial and grid planning align, housing could become a driver of the energy transition, not collateral damage from it.

08: Offices and campuses: Flexibility as the new currency

The electrification of heating, cooling, computing, and mobility is transforming commercial buildings into quasi-industrial energy users.

Large campuses, commercial districts, or business parks, now compete for megawatts, not just tenants.

Under TMO4+, buildings that integrate on-site flexibility – rooftop solar, thermal storage, battery systems, EV and smart charging – can reduce their grid burden and improve their connection prospects. When new developments face delays in connecting to the grid, behind-the-meter (BTM) generation – such as rooftop solar combined with battery storage – can provide an effective interim solution.

BTM systems enable essential power resilience and self-sufficiency, allowing construction or early occupancy phases to proceed while the main grid connection is pending. This approach helps hedge the gap between power unavailability and full grid energisation, ensuring continuity of supply and smoother project timelines.

For IDNOs, incorporating BTM generation within adoptable networks requires careful consideration of export and import limits, protection settings, and stability management. Reverse power flows, local balancing, and accurate metering all need to be addressed to ensure safe and compliant network operation. By planning for BTM integration early, the IDNO can adopt assets that are both technically sound and adaptable to future grid connections.

Forward-thinking developers are already adapting. Some are integrating hybrid "office-energy" models[10] that use smart load management and embedded generation to flatten demand peaks. These aren't experimental anymore – they're the new competitive edge.

The policy challenge is consistency.

Without clear national standards, flexibility could be penalised rather than rewarded, particularly if DNO interpretations vary.

Ofgem must ensure that smart buildings are fast-tracked, not sidelined, in connection processes.

[10] https://vexoint.com/net-zero-reduce-emissions-enhance-flexibility/

09: EV charging: The invisible victim of the queue

The UK's electric vehicle rollout – a cornerstone of the net-zero agenda – is facing the same gridlock. The goal[11] is 300,000 public charge points installed by 2030, yet at the current pace, installations are running at only half[12] the rate needed to meet it.

Ofgem's 2024 review[13] labelled the 'EV connection process *"complex, inconsistent, and opaque."* However, under TMO4+, a 'first-ready, first-connected' principle should finally allow large charging schemes – motorway services, fleet depots, local councils – to leapfrog speculative projects.

That said, distribution remains wildly uneven according to a 2024 National Audit Office report:

44%[14]
of charge points are in London and the South East.

26.1
public charging devices per 100,000 people in Scotland.

Just 15%[15]
serve rural England.

And there is geographical disparity. Scotland bucks the trend[16] with 26.1 public charging devices per 100,000 people, compared to the national average of 18.5.

What is clear is that without deliberate allocation for underserved areas across the UK, the EV transition risks reinforcing regional inequality – an urban success story that bypasses the areas that need it most.

If EV charging is to underpin clean transport, it must be treated as critical national infrastructure, not just a commercial convenience.

[11] https://www.gov.uk/government/news/tenfold-expansion-in-chargepoints-by-2030-as-government-drives-ev-revolution#:~:text=convenient%2C%20affordable%2and%20reliable%20charging,find%20nearby%20chargepoints%20via%20apps.
[12] https://www.evinfrastructurenews.com/emobility/uk-needs-to-double-speed-of-ev-charger-installation-cornwall-insight-analysts-find
[13] https://www.ofgem.gov.uk/sites/default/files/2024-11/Connections_End_to_End_Review_consultation.pdf
[14] https://www.rac.co.uk/drive/news/electric-vehicles-news/spending-watchdog-highlights-north-south-divide-for-ev-chargepoint-rollout/
[15] https://www.independent.co.uk/climate-change/news/government-national-audit-office-london-england-nao-b2663690.html
[16] https://www.zap-map.com/news/scottish-public-ev-charge-point-target-reached-two-years-early#:~:text=As%20a%20direct%20result%2C%20per,EV%20charging%20requirements%20public%20charging.

10: Driving change: Powering the fleet revolution

The UK's electrified bus fleets remain the standout success in transport decarbonisation. In 2024, around 1,570 new battery or fuel-cell buses hit the roads; a 35% jump on 2023 – putting the UK among Europe's top zero-emission bus markets.

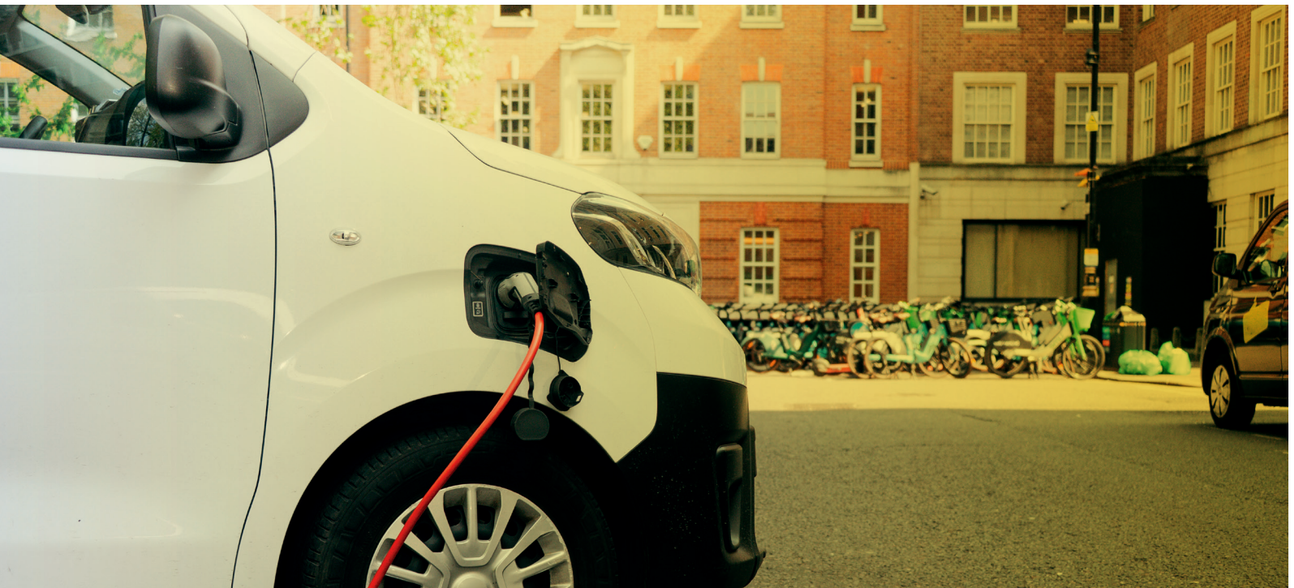
In England, 7.4% of local buses are now fully electric, up from 4.2% last year, with Coventry and London leading the transition; London's nearly 2,000 electric buses are on course for full conversion by 2030–34.

Whilst Scotland is setting the regional pace through its £41.7 million ScotZEB 2 fund, which is supporting 252 new zero-emission buses and expanding national charging infrastructure for public transport and HGVs.

Beyond buses, however, momentum falters. Electrifying vans and haulage remains a harder climb, limited by cost, range, payload, and patchy charging access. Even so, progress is visible: the UK's electric commercial vehicle fleet rose 31% in 2024 to 90,000 vehicles, largely driven by van uptake. Operators still flag "edge case" range anxiety, payload trade-offs, and charging downtime as the main brakes on wider rollout.

For heavy goods vehicles, electrification is still embryonic. Only 217 zero-emission trucks were registered in 2024 – down 7% year-on-year – reflecting steep technical and infrastructure hurdles: heavy batteries, grid capacity, and the absence of a national heavy-duty charging network. Yet ambition is rising; Amazon's recent order of 140 electric trucks signals growing confidence and aligns with government zero-emission HGV programmes.

The real accelerator now lies in the grid. The Ofgem/NESO TMO4+ and Gate 2 reforms promise faster, more transparent connections; critical for depots, charging hubs, and freight corridors. Projects that meet Gate 2 readiness and strategic-fit criteria should secure confirmed connection dates by 2026, unlocking investment certainty. Combined with stronger incentives, depot-electrification grants, and ZEV mandates, this streamlined grid architecture could finally push fleet electrification from pioneering projects to mainstream reality.



11: Investor confidence: From pipeline theatre to investable geography

Investors don't fear scrutiny – they fear uncertainty. And, for the first time in years, the UK's reform offers a framework that rewards delivery discipline.

> **"We are seeing layer upon layer of uncertainty, and investors are walking away. Uncertainty isn't a risk developers can price anymore. It's becoming terminal."**

Ofgem's £4 billion fast-track and the upcoming £24 billion (2026–31) network package send a simple message to investors and lenders: *Britain is funding the grid, not just talking about it*.

According to new reports[17], investors and corporates are navigating the energy transition with increasing appetite for opportunities across renewables, efficiency, grid infrastructure and low-carbon technologies.

In private-fund terms, Brookfield Asset Management closed its second energy-transition fund[18] with US$20 billion of commitments, targeting clean-energy and transition assets. Whilst a UK start-up, Aegis Energy, secured[19] £100 million of private-equity investment at the beginning of 2025 to build multi-energy charging/refuelling stations for commercial vehicles across England.

Larger corporates are also investing: Octopus announced a plan[20] to invest £2 billion in UK clean-energy projects (including solar, onshore wind) by 2030. Ford UK revealed a new[21] solar farm at its Dunton campus (UK) as part of its "Road to Better" initiative and invested[22] around £148 million to convert its Halewood plant site into an EV component hub.

Another example[23] is Macquarie Group, and their £20 billion investment in UK infrastructure across energy, transport, etc., including a rollout of EV fast-charging points (650 motorway service-area fast chargers) and a large solar farm footprint.

This clarity turns the UK's energy map from pipeline theatre to investable geography – a place where progress is measured in milestones, not megawatts promised. This raises an interesting question: how important is regional geography?

[17] https://kpmg.com/xx/en/our-insights/esg/energy-transition-investment-outlook-2025-and-beyond.html
[18] https://bam.brookfield.com/press-releases/brookfield-raises-20-billion-record-transition-fund
[19] https://www.aegisenergy.uk/news/aegis-energy-secures-100-million-to-build-uks-first-clean-multi-energy-refuelling-hubs-for-commercial-vehicles
[20] https://octopus.energy/press/UK-green-energy-investment/
[21] https://media.ford.com/content/fordmedia/feu/gb/en/news/2025/01/29/Ford-UKs-New-Solar-Farm.html
[22] https://evmagazine.com/news/ford-investing-electric-future-halewood
[23] https://www.macquarie.com/us/en/about/news/2024/macquarie-backs-nationwide-rollout-of-electric-vehicle-charging-infrastructure-as-part-of-20-billion-uk-investment-plans.html

12: The demand-driven grid: Britain's new industrial geography

We often frame the grid problem as one of supply – generation trying to connect. Yet, TMO4+ flips the equation. It's increasingly about where demand belongs.

National Grid forecasts electricity demand to rise[24] by 50% by 2035, driven by EVs, data centres, and electrified industry – often clustered in one urban area. Meanwhile, generation remains unevenly distributed.

Scotland, for example[25], produces an excess of renewable power but lacks local consumers – forcing curtailment and transmission congestion. Zonal planning aims to fix this imbalance: match surplus electrons to scarce demand. And, this could help to:

- **Identify priority areas for reinforcement (e.g. East Coast offshore wind zones, or Scotland's transmission bottlenecks).**
- **Plan shared infrastructure (substations, reinforcements, cable corridors) that multiple projects can connect into.**
- **Forecast future demand and generation to size assets efficiently rather than reactively.**

And, the government's new[26] AI Growth Zones are a case in point.

Culham, a village one mile south of Abingdon in Oxfordshire for instance, is being developed as a "compute-ready" hub with up to 500 MW of capacity. These zones -where grid strength, available land, and industrial strategy intersect – are transforming power availability into regional advantage.

Handled well, this becomes levelling up through load - directing infrastructure, jobs, and data-driven investment to underused regions.

Handled poorly, it risks hard-baking a two-tier energy economy, with strong nodes attracting all growth and weaker ones left behind.

> **"We're telling AI investors there's an 'AI growth plan' and an 'AI security strategy' – and at the same time we can't guarantee the power."**

Our research suggests that AI's energy appetite is set to outpace grid growth.

A clear majority – 62% of senior decision-makers involved in investing in and building energy infrastructure – believe that AI-driven electricity demand will outpace grid upgrades by 2030.

This finding underscores growing concern that the rapid rise of AI, data centres, and digitalisation is moving faster than the grid's capacity to expand.

For many leaders, this represents a looming challenge: how to future-proof infrastructure so the UK can support an energy-intensive digital economy without compromising reliability or sustainability.

> **"We've got land secured in prime locations and world-class clients willing to build data centres – and we're telling them we're 'waiting on a process' to find the power."**

[24] https://www.nationalgrid.com/document/149501/download#:~:text=Grid%20upgrades%20are%20also%20needed,vehicles%20and%20electric%20heating%20systems1.

[25] https://ukerc.ac.uk/news/transmission-network-unavailability-the-quiet-driving-force-behind-rising-curtailment-costs-in-great-britain/#:~:text=Costs%20arise%2due%20to%20each,in%20the%20day%20ahead%20market.

[26] https://www.gov.uk/government/publications/ai-growth-zones/ai-growth-zones-open-for-applications

13: Batteries, storage, and the long-duration game

Once storage allocations have been confirmed through the G2ATW process, a new question arises: does this mark a turning point - or the beginning of a slowdown – for the UK's energy storage market?

Short-duration batteries can struggle to prove readiness under the new regime, but long-duration energy storage (LDES) – systems with 8+ hours of capacity – qualify differently.

That nuance matters.

Ofgem has already recognised LDES as essential infrastructure, proposing a "cap-and-floor" revenue model to spur investment.

According to RenewableUK[27], UK storage proposals jumped from 7.2 GW in 2023 to 10.5 GW by mid-2024. Whilst The Clean Power 2030 roadmap[28] projects LDES capacity could reach 8 GW by the 2030s, delivering £10 billion in system benefits.

In other words: in a world of intermittent renewables, storage isn't the accessory – it's the anchor.

> **"Gate 2 could give you a solar connection on time and push the batteries into the long grass – and the moment you lose the batteries, the economics fall apart."**

[27] https://www.renewableuk.com/energypulse/reports/uk-energy-storage-pipeline-report-2024/

[28] https://www.gov.uk/government/publications/clean-power-2030-action-plan/clean-power-2030-action-plan-a-new-era-of-clean-electricity-main-report

14: The unexpected: Repurposing stranded projects

One question is intriguing the developers that we spoke to: What if a stranded project doesn't have to perish if it doesn't receive a Gate 2 connections offer – but instead evolves?

Suppose a battery site loses its export rights. Could it pivot to a demand-only node, powering data centres or heavy users instead? Such repurposing could create a secondary market in connection rights – a grid capacity exchange for trading access between projects.

There is another area of risk to consider: If we were to look at two identical projects sitting side-by-side, and one gets a connection while the other doesn't, we can expect the legal challenges to come thick and fast. This opens a new design space – but also a regulatory gap.

Ofgem's rules on what counts as a "material change" are murky. For this system to work, DNOs must adopt pragmatic flexibility, allowing viable pivots without forcing projects to the back of the queue.

Partnerships powering the future: Developers and data centres align

It would appear that the energy transition is creating new alliances. Three in ten respondents say they are actively pursuing partnerships with data centres or other high-demand users to develop co-located generation projects – such as solar farms or battery storage.

A further 39% are considering similar collaborations, underscoring how quickly developers are adapting to a world where energy supply and digital demand are increasingly intertwined.

Remarkably, just 6% said they would not consider such partnerships, suggesting that cross-sector collaboration is becoming a strategic norm rather than an exception.

> **"Battery costs are coming down, and co-location finally makes sense – but timelines are so uncertain that no one wants to take a punt."**

15: The land rights logjam blocking Britain's buildout

For all the focus on planning reform and grid delays, one of the biggest unseen bottlenecks in UK infrastructure delivery lies much closer to the ground – in the complex, slow-moving world of land-rights negotiations.

More than half of developers (67%) said that up to 50% of their projects were delayed in the past year due to unresolved land-rights issues. Only a small minority (6%) managed to escape relatively unscathed, with fewer than a quarter of projects affected.

And the financial toll is mounting. Among those impacted, six in ten estimated losses of up to 15% of annual revenues, while almost a third (30%) said the hit could reach 30% – enough to jeopardise future investment rounds or project viability entirely. Based on the average annual revenue of our survey respondents, that could be a loss of £47 million in one year per organisation.

The cost isn't only financial; it's existential. Two in five developers admitted that complex easement or land-access negotiations have forced them to abandon projects or even surrender their grid connection offers – effectively pulling the plug on otherwise viable developments.

So what's causing the gridlock? The data paints a picture of systemic inefficiency and legal fragmentation:

27%
Point to multiple ownership layers (freeholders, leaseholders, tenants) as the biggest obstacle.

24%
Cite limited legal expertise among landowners or counterparties.

24%
Highlight the lack of standardised documentation, forcing every negotiation to start from scratch.

23%
Blame late or slow engagement from legal teams, which can derail progress even when commercial terms are agreed.

This tangle of legal, procedural, and structural barriers has become one of the least discussed yet most damaging risks to the UK's energy and infrastructure pipeline.

Without a concerted effort to simplify land-rights processes - through standardised agreements, early engagement, and clearer guidance - billions of pounds in potential investment could remain stuck in the mud.

16: Winners, losers, and strategic tipping points

The Winners	
#1	Deep-pocketed developers with proven delivery and compliance strength, particularly those with IDNO support.
#2	Integrated utilities and consortia combining generation, storage, and demand.
#3	Projects in strong grid zones with early-stage maturity.
#4	Long-duration storage and flexibility innovators.
The Losers	
#1	Speculative developers banking on queue placeholders.
#2	SMEs unable to absorb procedural costs, or unfamiliar with the new Gate 2 criteria without experts to guide them.
#3	Projects in weak grid zones – unless linked to reinforcement schemes.

Summary:

The systemic outcome depends on transparency, redress, third party skills, and whether reform genuinely rewards capability over capacity.

17: A strategic shift in developer tactics

To survive and thrive under Gate 2, developers must pivot strategically:

1. Convert, don't cancel plans:
Repurpose stalled sites into storage or demand projects.

2. Bundle verticals:
Combine generation, flexibility, and consumption to score "system value."

3. Play the long game:
Gate 2 doesn't have to be the end of the story – plan for 2035-2045. Our survey suggests, only 3% of developers/investors will take forward 100% of their projects to the build and operate stage within the next five years despite being offered a connection offer. For example, could the developer who holds the conditional offer, initiate a change of ownership or formal assignment of the connection to another entity who is ready and willing to build?

4. Frontload readiness:
Secure land, planning, and capex early. 60% of respondents in our survey found that up to half of their projects faced major delays over the past year due to land-rights negotiations. This same number (60%) estimate that those delays cost their business up to 15% of their annual revenues. That could equate to a £24 million loss based on the average annual revenues of our respondents. This highlights the importance of ensuring land rights and planning permission is secured early on.

5. Shape the rulebook:
Proactive engagement with an IDNO who can work directly with Ofgem and NESO, land owners, and the local DNOs; influence definitions of "readiness."

6. The era of passive queueing is over:
The winners will be active system participants.

> **The real question is whether Gate 2 is an existential shift or just another brutal chapter the industry survives and then thrives on.**

18: Reclaiming momentum: A new window for developers

Gate 2 may eventually create a baseline of certainty – a moment where the entire queue resets, the noise clears, and every project knows exactly where it stands. But certainty is only the starting point. The real opportunity lies in what comes next: how developers use that reset to bring projects forward again.

For the first time in over a decade, the industry has a chance to rebuild the connection pipeline around readiness rather than speculation. With clearer criteria, firmer timelines, and a more disciplined queue, developers that can demonstrate credible progress now have the strongest strategic position they've had in years.

Far from being an administrative hurdle, Gate 2 opens a window for delivery-focused projects to move faster, secure supply chain slots earlier, and attract capital with greater confidence.

This is where the next wave of innovation will come from. Whether through smarter land strategies, early design engagement, partnerships with IDNOs, or integrated flexibility solutions, developers now have genuine levers to differentiate themselves, but by how effectively they can build.

In that sense, Gate 2 is not the end of the story. It is the moment developers can seize to shape Gate 3, Gate 4, and whatever follows - turning reform from a constraint into a catalyst for the projects that are truly ready to deliver.

> **Gate 2 may eventually give people some certainty.**

18: Conclusion: From queue to catalyst

Britain's energy transition has never been short on ambition – only on the connective tissue to make it real. The grid is that tissue. For too long it has been stretched, patched, and politicised, leaving thousands of projects and communities in limbo.

The Target Model Option 4+ reform is not a tweak at the margins; it is the most consequential rewiring of the UK's energy system since privatisation. Its success will hinge not on the elegance of the policy but on the discipline – and empathy – of its execution.

The intent is clear: end the era of speculative queue-holding and reward readiness, credibility, and system value. Yet in doing so, the reform must guard against creating a two-tier market where the deep-pocketed accelerate and the innovators suffocate.

Transparency, fairness, and trust will determine whether Gate 2 becomes a catalyst for delivery or another chapter of bureaucratic drift.

The implications extend far beyond renewables. Housing estates that can't switch on, logistics depots that can't electrify fleets, rural EV deserts – all tell the same story of a grid built for yesterday. If the reform works, it won't just unclog megawatts; it will unlock homes, buses, data hubs, and factories that define the next generation of British productivity.

A truly modern grid will treat these not as competing demands, but as complementary pieces of one national system.

Investment signals are finally moving in the right direction – £4 billion fast-tracked now, £24 billion more committed[29] through 2031 – but the real dividend will be confidence: the belief among developers, financiers, and local leaders that the UK's energy future is predictable, navigable, and worth betting on.

Data-led oversight, independent redress, and continuous feedback will be the difference between short-term order and long-term renewal.

The goal is not merely to clear the queue. It is to redefine what readiness means – to prove that net zero isn't a theoretical horizon but a buildable reality. If Ofgem and NESO can pair discipline with transparency, and if industry meets that clarity with delivery, Britain could move from paralysis to progress in a single regulatory cycle.

Because in the end, this reform is about more than electrons or policy frameworks. It is about credibility – proving that a country once known for inventing the grid can, once again, make it work.

[29] https://www.ofgem.gov.uk/press-release/ofgem-approves-initial-ps24-billion-operate-and-maintain-critical-gas-networks-and-upgrade-britains-electricity-supergrid

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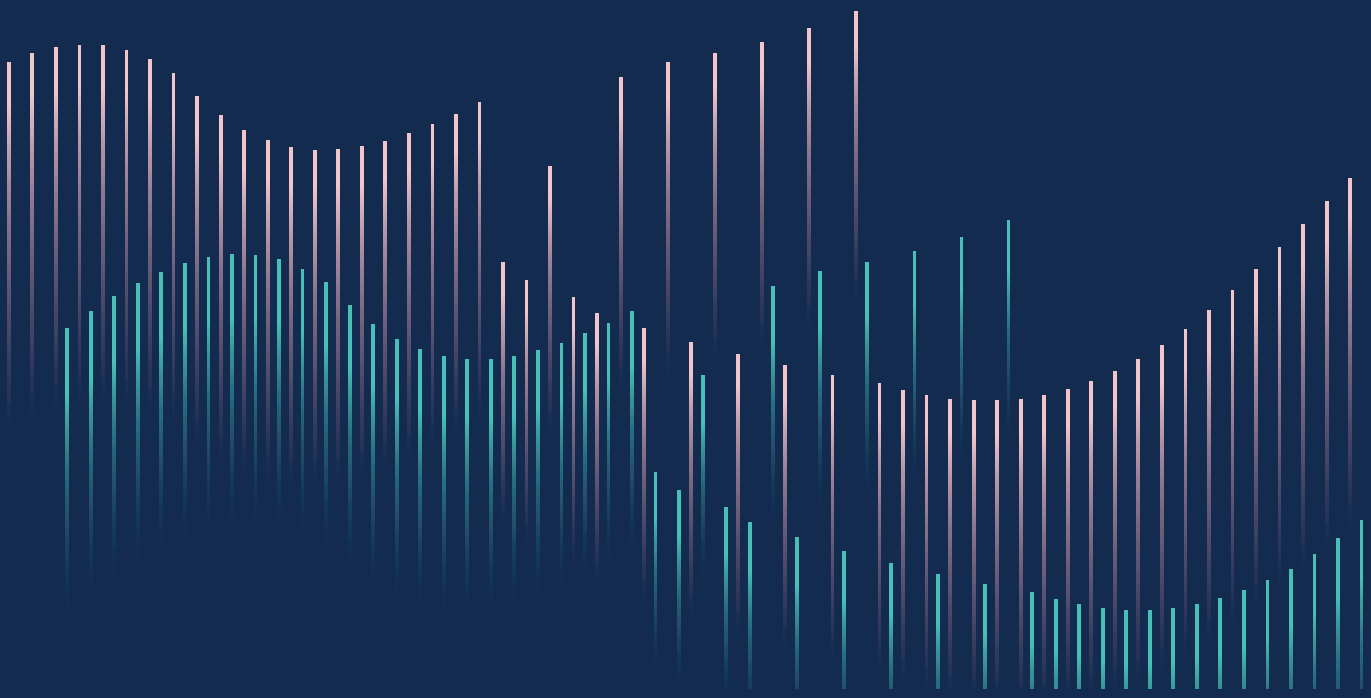

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