

Power Pulse

March 2025

A monthly snapshot of the ever-changing power outlook in the UK



“Microgrid providers are finding success with developers and local authorities”

Ben Bowler, Technical Director

Microgrids have attracted a lot of attention in recent years, but developers and landowners can still be sceptical. This is in spite of their potential to help address the UK's energy crisis and build sustainable neighbourhoods of the future.

Thankfully, it looks like we could be reaching a turning point. Microgrid providers have fine-tuned their business models, and are finding success with developers and local authorities by using locally generated energy, heat, and storage.

Others now seek to understand how they can use the approach in their own projects. Key drivers include the urgent shift to sustainable power, the ambitious plans for new homes, and growing confidence among investors.

We've detailed some noteworthy developments in this report. If you're attending UKREiiF, I'll be discussing this on a panel on powering the government's new homes target on the Wednesday.

Spotlight of the month

Ready, needed, go:
Ofgem consults on transmission connections criteria

We've moved a step closer to discovering what the future holds for grid connections reform. [Ofgem's consultation](#), released on 14 February, reveals new criteria for obtaining a position in the transmission connections queue.

Projects must satisfy 'readiness' and 'needed' criteria. All transmission demand projects are deemed as 'needed' but demand projects at distribution level are not within scope.

'Readiness' is as we expected; projects will require land rights and sufficiently progressed planning. 'Needed' means the queue will be aligned with the Clean Power 2030 Action Plan. Projects that support the decarbonisation of the UK's energy system as detailed in the plan can be more confident in their application.

“Projects must satisfy ‘readiness’ and ‘needed’ criteria”

Clean power generators stand to benefit. However, 'parties that are sufficiently ready, but not needed, are likely to be predominantly battery storage projects and some solar projects in specific geographical locations.'

Large-scale demand projects should find that their queue position is brought forward. Ofgem explains, 'Accelerating demand projects should better support economic growth and enable the decarbonisation of the wider UK economy'. It specifically references industrial decarbonisation, electric vehicle production, housing, and data centres.

The queue is expected to more than halve as a result of the reforms. Projects in the queue should get ready to show they meet the criteria, and new applicants should prepare for when applications reopen (see [February issue](#)).



Grid

The National Energy System Operator (NESO) has shared an updated proposal for a Project Commitment Fee that would affect generation project developers. It would only apply to projects that have already progressed through to join the future Gate 2 connections queue, but are yet to submit their planning applications.

If activated, the fee would be payable on termination or reduction in capacity, with the fee increasing over time. As such, it is designed to incentivise developers to regularly assess the viability of their projects.

The proposal has since been deemed ‘urgent’ by Ofgem, with a decision due in Q3 2025. The fee would be implemented in Q1 2026.

Eleanor Wratten, Associate

HOW MUCH IS THE PROPOSED FEE? →



Geothermal

Two stories this month...Exciting news from Eden Geothermal (EG), which supplies heat for the iconic Eden Project Biomes and greenhouses in Cornwall: they’ve partnered with energy technology company Baker Hughes to develop the existing facility further, and to kick-start other geothermal projects around the UK.

Importantly, this includes exploring opportunities to use geothermal for power as well as heat. It could be one of several major turning points this year for geothermal. I’m looking forward to seeing further announcements from this partnership.

Meanwhile, the Scottish government has funded a £50,000 feasibility study by NHS Grampian to explore the possibility of using similar technology to that in Cornwall, to heat public facilities across Aberdeen. This would be Scotland’s first deep geothermal heating plant.

Mark Griffiths, Associate

‘SMALLEST SURFACE FOOTPRINT OF ANY ENERGY SOURCE’
– WATCH EG’S VIDEO →

“It’s a great example of the emerging business models around microgrids”

Solar

Continuing with microgrids, SNRG has won the backing of Folkestone and Hythe District Council to take forward its plans for a large solar scheme to power the future ‘Otterpool Park’ garden town. Stantec Our colleagues areis designing and managing the first phase of infrastructure on this new town.

Comprising rooftop solar and a solar park with battery storage, all connected via a smart grid, approximately half the average annual demand of the 8,500 homes could be generated on-site. SNRG will be responsible for obtaining planning consents, and will fund, own, and operate the solar park and its connection to the smart grid.

It’s a great example of the emerging business models around microgrids, and how they can help deliver the UK’s housebuilding and carbon reduction targets. Landowners and developers are increasingly interested in this, and we are currently advising clients on what it means for them, and the right approach.

Tom Shilton, Director

BLOG: TIME FOR MOMENTUM ON AMBITIOUS
LOCAL PLAN MAKING →





Wind

We're seeing more commercial and industrial estates exploring on-site wind generation, to help reduce long-term energy costs and enhance sustainability.

A successful project depends on understanding the site's wind resource, securing grid capacity, and navigating planning constraints. Many estates already have viable locations, but require a detailed feasibility assessment to determine whether wind speeds are sufficient, how a turbine integrates with existing infrastructure, and whether planning policies support development.

Environmental factors—, including noise, shadow flicker, and impact on local wildlife—, must be addressed early to streamline the consenting process.

With the right technical and environmental due diligence, on-site wind generation can offer a long-term, low-carbon power source, supporting financial and net zero objectives.

Joseph Padbury, Associate Director

INTERESTED IN RENEWABLE ENERGY GENERATION? →

“Zero bills is a strong selling point”

Battery storage

The announcement of a further 113 'zero bills' homes by Octopus and gs8 in Epping, Essex, is a major vote of confidence for microgrids. The fact that they are taking this so seriously should encourage the rest of the housing market to assess how to incorporate local generation and storage.

Zero bills is a strong selling point, but even starting small, e.g., with battery storage or rooftop solar, can help alleviate grid constraints. The technology is there; the remaining challenges are commercial. It should be possible to find market-led solutions, given the benefits to the different parties, their customers, and the planet.

As we look to 2050, 20 percent% of our 2050 housing stock is yet to be built, and Labour's housebuilding targets are well-known. Distributed generation with local storage is an essential part of a cost-effective, sustainable solution.

Ben Bowler, Technical Director

SEE WHAT OCTOPUS HAD TO SAY →

“Trials like this demonstrate how businesses can leverage hydrogen to help decarbonise their operations”

Hydrogen

Your morning bowl of cereal could soon be powered by hydrogen, with Kellogg's kicking off Hydrogen Week UK in February with news of a successful trial replacing natural gas with hydrogen in its toasting oven.

Sam Bistiaux, VP of manufacturing, said the project 'demonstrates the potential of investing in low-carbon fuels to drive decarbonisation. We are excited to be at the pioneering edge of this process, with the technology still in its infancy, and the long-term potential truly transformative.'

While the Climate Change Committee's Seventh Carbon Budget in February concluded that hydrogen is unlikely to have a significant role to play in heating buildings, trials like this demonstrate how businesses can leverage hydrogen to help decarbonise their operations.

Tom Shilton, Director

READ ABOUT THE FIRST-OF-ITS-KIND TRIAL →

Nuclear

The government has drafted an important new policy on siting for new nuclear projects, bringing it in line with modern-day energy requirements and technologies. Notable changes include: the inclusion of small modular reactors (SMRs) and advanced modular reactors alongside GW-scale projects; replacing the list of potential sites with a robust set of criteria to allow for broader deployment; removing the deployment deadline; and the inclusion of all nuclear fission projects within the Nationally Significant Infrastructure Project regime.

This is a major boon for the nuclear industry, and it's important to state that these processes will be no less rigorous, but a lot more expedient. SMR vendors are technology companies, and they have a voracious appetite to plug the gap in the UK's nuclear power provision. This new policy will support their pursuit of ambitious timescales.

Peter Sibley, Director

READ THE EN-7 RESPONSE AND CONSULTATION (CLOSES 3 APRIL) →

eMobility

Local councils should take note of recent research from the Climate Change Committee (CCC), which assessed the tail-end of the transition to electric vehicles (EVs), and how a range of policies might impact EV uptake in this group.

It found that the best outcomes for EV uptake for all user groups—including those that purchase older vehicles—will be achieved by combining support for purchasing EVs with better home charging access.

In our view, improving home charging access is the hardest problem to solve. Most of our 2050 building stock is already in place, and parking in towns is already restricted. Left to market forces, our charging infrastructure may miss a significant component of charging demand, leaving communities underserved.

To us, the report highlights the significant need for early, data-driven strategic appraisal of charging needs in towns and cities, with local government providing leadership, direction, and boundaries to charging infrastructure providers. We are working with city councils to do just that.

Ben Bowler, Technical Director

DOWNLOAD THE RESEARCH, PART OF THE CCC'S SEVENTH CLIMATE BUDGET →

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