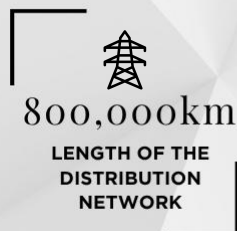


Property and the distribution network

Energy – UK – October 2026



KEY STATS



Network development impacts property

The development of Britain's electricity distribution network is evolving. More capital is being invested in these networks, with £5.8 billion spent operating and developing the network in 2025, a 22% increase in annual expenditure since 2015. As much of this investment is ultimately financed by property, rising network costs have a direct impact on the sector, influencing operational costs, access to power, site selection and asset values across the market.

Property is the primary financier of the network, contributing directly via use of system charges (DUoS) which are a per-unit fee applied to electricity consumption tariffs. DUoS charges, paid by every building connected to the distribution network, continue to rise in step with network spending and are becoming an increasingly material cost for tenants, owners and investors alike.

Why are DUoS costs rising?

Rising network spending is not the only factor pushing DUoS costs higher. Research from Savills Earth shows the distribution network is growing in length, connecting new customers at the network's edges, while distributing less electricity through the system overall. From 2015 to 2025, the network grew by 3% (23,000 km) while the amount of energy it distributed fell by 11% (33,000 GWh).

Since DUoS is charged per-unit of electricity consumed, spreading the rising network costs across a shrinking volume of electricity pushes the per-unit charge up

further still. The combined effect results in more spending recovered from fewer units, meaning DUoS is rising faster than network investment alone would suggest, and is becoming a growing share of a building's operational costs.

Despite this rising spending, the power access problem persists. New connections or added capacity still come with high costs and long delivery times because key infrastructure, including cables, wires and substations, is often already operating at capacity. Every application for power now risks triggering costly reinforcement work, with a high proportion of that cost passed straight to the applicant, adding further pressure to already rising operational budgets. The scale of this problem has even recently drawn a direct government response, with Prime Minister Andy Burnham announcing Great British Grid, a new publicly owned company intended to encourage competition and deliver connections faster.

While the market awaits further detail on Great British Grid, Ofgem is already working to address this growing challenge for property. From 2028, distribution network owners will pre-plan and pre-commit capital to address known bottlenecks ahead of demand, rather than reacting only once constraints appear. For property, understanding how Distribution Network Operators (DNOs) apply this in practice will be key to future development decisions, shaping both operational costs and access to power across the market.

What is the distribution network?

Britain's distribution network spans over 800,000 km, enough to circle the equator more than 20 times. It accounts for over 97% of the electricity network, with transmission infrastructure comprising the remaining 3%. As decarbonisation progresses, the distribution network is being asked to do more.

Historically, electricity flowed from large power stations on the transmission network to homes and businesses on the distribution network. Using a road analogy: transmission is the high voltage motorway moving electricity nationally, while distribution is the local road network carrying it the final few miles.

The shift to renewables is changing this design. Rather than relying on a small number of large power stations, generation now comes from a combination of many large renewable generation schemes spread across the nation. This puts distribution networks at the centre of both connecting new generation and delivering electricity to consumers.

Key term

DUoS charges: Per-unit fees property pays distribution networks for delivering electricity to buildings.

Costs will grow unevenly

In Britain, there are eight distribution network areas, each run by a DNO responsible for building out its own network. As a result, the cost of operating and expanding the network varies by region, creating different costs for property across the country.

Comparing the change in DUoS costs across the eight different DNO areas between 2020/21 and 2027/28 illustrates how property's operational costs can vary based on location. Analysis by Savills Earth shows DUoS costs are projected to

rise by an average of 12% for houses, 25% for offices and 11% for industrial premises on average nationally. By 2027/28, this would equate to average annual costs of £277 per year for a household, £16,000 for an office and £128,000 for an industrial building.

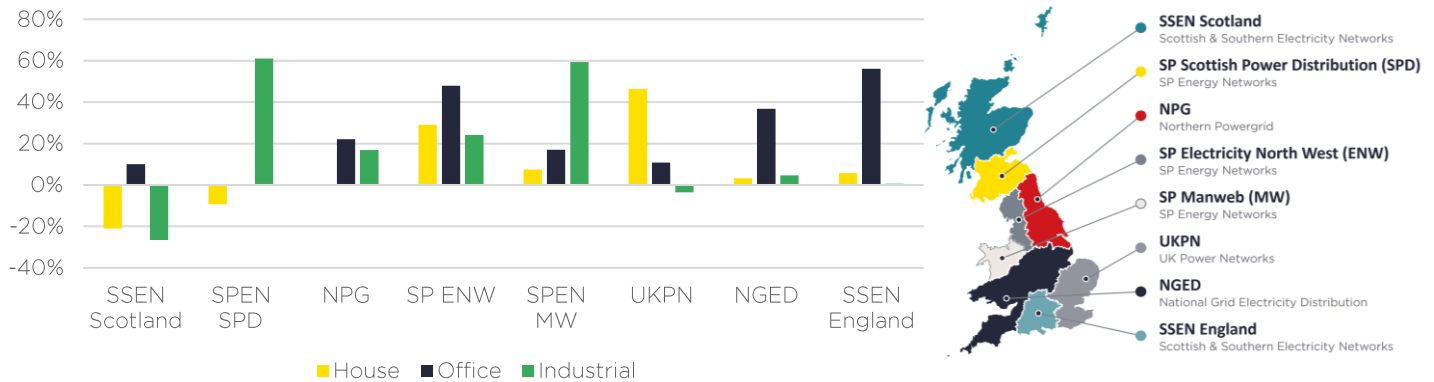
Regional variations are evident, with property in DNO areas such as SP Electricity North West (ENW) and SP Manweb (MW) seeing uplift in DUoS charges, while buildings in SSEN Scotland see a reduction in charges.

The financial impact of DUoS

These changes in DUoS costs from 2020/21 to 2027/28 have a material impact on the operational costs of property.

At the high end of cost increases, an industrial site located in the SP Manweb region will experience an operational cost increase of £93,000 over the period solely due to rising DUoS costs. Alternatively, an industrial site located in SSEN Scotland will have seen a reduction in DUoS costs of £52,000 over the same period, supporting a reduction in site operational costs.

Figure 1: Change in annual DUoS costs from 2020/21 to 2027/28



Source: Distribution Network Operators, Savills Earth

What is spatial energy planning?

Spatial energy planning means using evidence on future demand, generation and network needs to inform decisions about where grid investment should happen first. It is intended to give network operators clearer evidence of where future demand is likely to emerge, so investment can be planned ahead of need rather than only after constraints appear.

Towards pre-planning and pre-funding

Historically, distribution networks have been developed in reaction to connection applications. As a result, networks have been built on a first-come, first-served basis, rather than being strategically planned to meet future demand.

This is due to the price control framework under which DNOs operate. Since DNOs operate regulated regional monopolies over most of the electricity distribution network, Ofgem sets what they can spend and earn, to keep distribution networks stable and cost efficient for consumers. In practice, this has meant that network reinforcement has largely been driven by asset replacement needs or specific connection requests instead of speculative network growth, based on projected future demand.

DNOs are now being mandated to move away from this reactive development model. With electrification accelerating and demand for power rising fast, distribution networks cannot develop quickly enough

if DNOs continue to react to applications one at a time. Ofgem recognises this and is instructing DNOs to build spatial planning into their business plans going forward.

Spatial planning in practice

As part of the price control framework, DNOs submit their business plans to Ofgem at the beginning of each price control period. The next iteration of the price control period, ED3, will run from 2028 to 2033, with DNOs submitting their plans to Ofgem in December 2026.

As DNOs prepare their ED3 business plans for submission to Ofgem, they have been instructed to draw on two key datasets, which provide DNOs with a future view on where major electrification is coming. These datasets, produced by the National Energy System Operator (NESO), are the transitional Regional Energy Strategic Plan (tRESP) and the Strategic Energy Need (SEN). Available to both DNOs and industry, they are vital to allowing property to interpret the data alongside the DNOs

and showing where network pressures will arise and funding may be allocated.

How will DNOs use the tRESP and SEN?

DNOs draw on both datasets to make network development and funding decisions, following methodology set by Ofgem. tRESP's pathways model general demand and generation growth across the network, while SEN captures larger, discrete projects that sit outside those trends. Combined with DNOs' own network models, this data flags where infrastructure bottlenecks are hindering access to power. Once identified, DNOs decide whether to alleviate a bottleneck through flexibility or newly built network infrastructure.

The practical effect is a spread of outcomes across DNOs. Some network areas have demonstrated near term electrification demand that justifies upfront investment, while others face more uncertain levels of electrification, with funding held in reserve and released as demand materialises.

What do the tRESP and SEN tell us?

tRESP Pathways show how demand and generation are expected to grow across all 231 Grid Supply Point (GSP) areas to 2050, and whether that growth is generation-led or demand-led. Savills Earth analysis scores each area against the same national distribution, showing where growth is fastest relative to the rest of the network.

Strategic Energy Need (SEN) identifies a smaller, targeted set of GSP areas where NESO considers proactive investment justified ahead of confirmed demand, rather than modelling gradual growth as tRESP does. SEN is built around discrete developments, including industrial decarbonisation, data centres, freeports, housing and rail, excluding generation and

storage. Around 60 GSP areas carry a SEN flag, evidenced through direct submissions.

For property, a generation-led area signals new connection opportunities, while a demand-led area signals infrastructure under pressure. A SEN flag signals that a DNO has justification to invest in network capacity ahead of need.

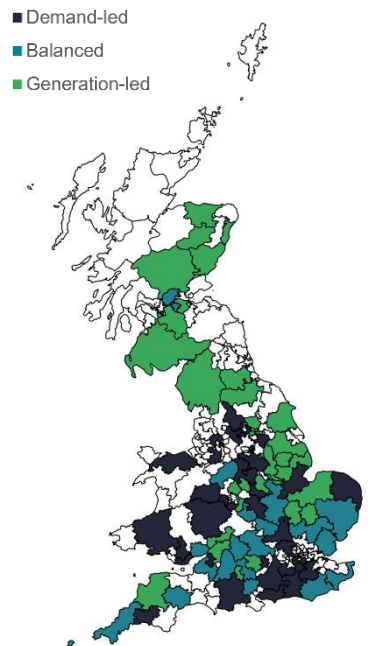
Three networks, three stories

Northern Scotland (SSEN) remains generation-led to 2035. Solar leads, increasing over 20 times to reach 3.6 GW, while onshore wind adds a further 1.3 GW. The Eastern Network Corridor, covering Persley, Tealing, Errochty and Keith, already carries 1.4 GW of generation and is set to reach 7.5 GW. Demand growth is significant. Electric vehicles (EVs) increase from 29,000 to 492,000, the largest low-carbon technology shift in the region. SEN adds further detail, with Beaulys 0.42 GW tied to industrial decarbonisation and Green Freeports on the network's northwest corridor. Given how generation-heavy this growth is, there is little demand-side flexibility available, which signals upfront investment in infrastructure.

The Midlands and West (NGED) tells a different story. Generation still grows strongly, with solar up by more than 11GW and batteries up 7 GW, taking total capacity from 11.8 GW to 32.8 GW, but demand leads overall, with more areas demand-led than generation-led. EVs surge from 386,000 to more than seven million, while domestic heat pumps grow 30 times to 2.8 million. SEN adds 3.9 GW across 14 areas, mostly commercial development and data centres. NGED already spends more annually than any other DNO and, with such significant low-carbon technology growth, flexibility is likely to play a greater role than direct network reinforcement.

North East England (NPG) is the least clear of the three. Generation edges ahead of demand overall, though only slightly,

Figure 2: tRESP

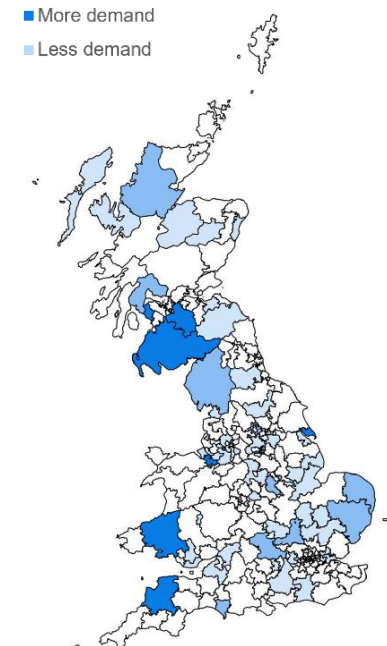


Source: NESO, Savills Earth

with solar up nearly 5 GW and batteries up 4.5 GW, taking total capacity from 6.7 GW to 16 GW. EVs still climb sharply from 166,000 to 2.6 million, and heat pumps grow almost 30 times.

SEN carries real weight: Norton, which serves Sheffield, accounts for 2.55 GW of industrial decarbonisation, Britain's largest single figure. Saltend North and Skelton Grange add a further 1.2 GW, also tied to industrial decarbonisation. With growth this mixed and SEN demand this concentrated, the case for upfront investment versus flexibility remains unsettled.

Figure 3: SEN areas



Source: NESO, Savills Earth

Conclusion

DNOs are being required to apply spatial planning in the development of their business plans. This creates opportunities and risks and is likely to see a divergence in approaches across DNOs. As network charges rise and capacity remains constrained, understanding these spatial plans, and how DNOs use them to guide investment, will be key to meeting electrification demands. For property, that understanding translates into siting, development and investment decisions.



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