GridCheck Home

Energy Transition Report

Home electrification and energy efficiency

Property
199 Tudor Way, Worcester, Worcester, Worcestershire
WR2 5QY · UPRN 100120671993 · Network operator: National Grid Electricity Distribution

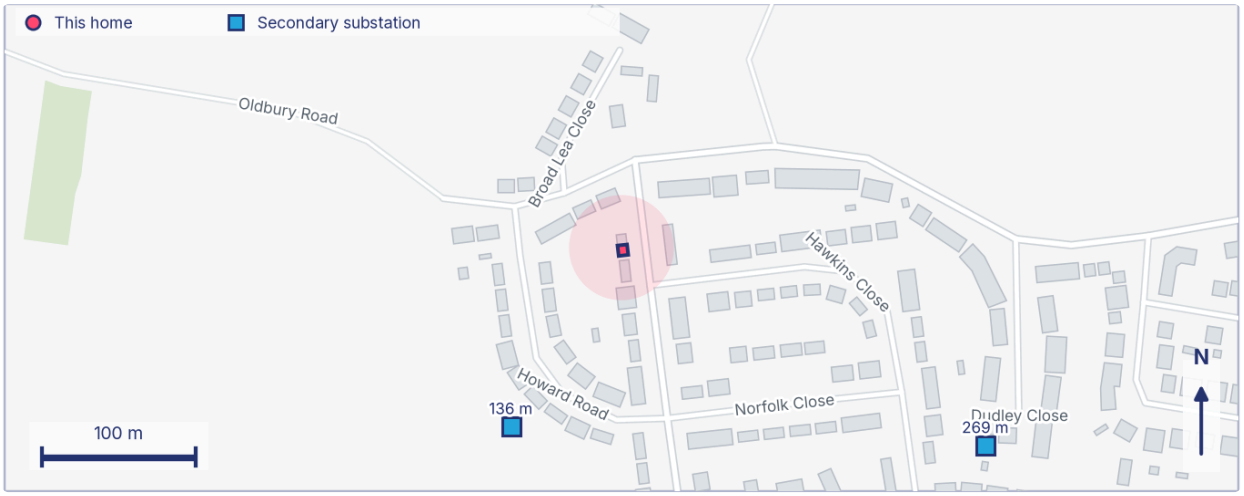
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At a glance

- Local electricity network
  Well placed · 73/100
- Time to connect
  Normal timescales
- Roof for solar panels
  Amber: Solar panels possible, with less output · 5 panels, 2.1 kWp
- Running costs
  Green: Lower than typical · index 74, typical 100
- Energy efficiency
  EPC C, could reach B



Location plan — this home, picked out among the buildings, streets, water and woodland around it, with the nearest secondary substations and their distance from the home. The home is shown as the part of the building that falls inside the registered title holding this address. Contains OS data © Crown copyright and database right 2026 (OS OpenMap Local, Open Government Licence); substation positions from the network operators' published data. HM Land Registry INSPIRE Index Polygons: this information is subject to Crown copyright and database rights 2026 and is reproduced with the permission of HM Land Registry; the polygons (including the associated geometry, namely x, y co-ordinates) are subject to Crown copyright and database rights 2026 Ordnance Survey AC0000851063. Not a title plan, and not evidence of a boundary.

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Overview

Your conveyancer ordered this report as part of your purchase. It looks at the **energy and utility** side of the home: whether the local electricity network can support a heat pump, electric car charging and solar panels, how energy-efficient the home is, and what to check.

Designed to address some of the utility and energy elements of the Law Society practice note Climate change and property (June 2025) and to help answer some of the services questions in sections 11 and 12 of the TA6 Property Information Form (6th edition).

The local network

✓

Well placed

The local electricity network has room for your home to switch to electric heating and car charging.

Time to connect a heat pump, EV charger or battery

Normal timescales | Screening estimate

Applications should follow the network operator's normal timescales. Based on published network data; not yet backed by recorded connection outcomes for this area.

How confident we are in the data: **High** (100/100) · Area readiness score 73/100 — a screening score for the primary substation that supplies this area, not for the home; how it is built is set out under "How we did it".

Your summary

What we looked at	What we found	What it means for you
ELECTRICITY NETWORK **Adding a heat pump, EV charger or battery**	Well placed	Nothing to do.
ELECTRICITY NETWORK **How long a connection might take**	Normal timescales	Screening estimate from published network data; ask your installer to confirm.
ENERGY — GENERATION **Your roof for solar panels**	Amber: Solar panels possible, with less output	Best roof: an east-facing roof at about 31° (the front), about 22 m². Room for about 5 panels (2.1 kWp), generating about 1,722 kWh a year (80% of the best possible here). See 'Your roof for solar panels'.
ELECTRICITY NETWORK **Exporting from solar panels or a battery**	Export capacity: Good	Solar panels or a battery can export in the normal way.
ENERGY — HEATING **Your heating and switching to electric**	Mains gas boiler	Consider a heat pump. It would raise the home's electricity demand — the power drawn at once, not the size of the bill.
ENERGY — EFFICIENCY **Energy efficiency (EPC)**	EPC C — meets C for 2030	Nothing to do.
UTILITY — SUPPLY **Your home's own electricity supply**	Worth checking	Homes of this age and type often share a supply with a neighbour (a "looped" supply) or have a small main fuse; an electrician can confirm both. About 3.9 million homes in Great Britain share a supply this way — roughly one in seven, and between about 6% and 25% depending on the network operator. The operators do not hold a reliable record of which homes are affected, so only a utility search and a site visit can confirm.

What to do next

- The local electricity network looks able to support your home going electric. If you add a heat pump or EV charger, your installer will notify or apply to the network operator in the normal way.
- Reinforcing the network to carry extra demand is not charged to a domestic customer: Ofgem moved demand connections to a fully shallow charging boundary in April 2023, so that cost is recovered through everyone's distribution charges. Work at the property itself, such as a larger service cable or main fuse, can still be charged, and only an operator's quotation can confirm this.

Your home

Heating now	Mains gas boiler
Switching to electric	**Moderate** change — a heat pump of roughly 6 kW (heat output) is suggested
Property	Semi-Detached house, 78 m², built 1950-1966
Off the gas grid	No
Solar panels recorded	No
Check the supply	Yes — homes of this age and type often share a supply or have a small main fuse; an electrician can confirm

Switching to a heat pump plus EV charging would be a moderate increase in electricity demand — a typical single-phase supply takes that, though what this home actually has is one for an electrician or the network operator to confirm.

Homes of this age and type are more likely to share ("loop") their electricity supply with a neighbour, which can delay heat-pump or EV installations.

Utilities and running costs

About £2,360–£2,460 a year (£195–£205 a month) at prices for 1 October–31 December 2026.

Green: Lower than typical Energy costs about 26% less than a typical gas-heated 3-bedroom home at West Midlands region prices (index 74; typical = 100). Bedrooms: 3, from the sale particulars.

Utility	Connection	Network owns it; call when it fails	Supplier or provider sends the bill	Typical cost a year
Electricity	Mains	National Grid Electricity Distribution	Octopus Energy	£660 1,770 kWh a year
Gas	Mains	Cadent	Octopus Energy	£690 7,310 kWh a year
Water	Mains in this area	Severn Trent Water	Severn Trent Water	£590 with sewerage
Sewerage	Public sewer or private; not recorded per property	Severn Trent Water	Severn Trent Water	Included with water
Heating	Mains gas boiler	—	—	In the gas cost
Broadband	Gigabit-capable for 100% of the postcode (Ofcom)	Not published per address	Your choice of provider	£430–£520 typical package
Total	**£195–£205 a month**			**£2,360–£2,460**

Typical costs for this type of home at prices for 1 October–31 December 2026. Your bills depend on how you use energy and the tariffs you choose. Not included: council tax, insurance, TV licence and mobile phone costs.

- Energy use is based on homes in this postcode, adjusted for this home's floor area; prices are the Ofgem price cap, West Midlands region, paying by Direct Debit.
- Energy use: DESNZ postcode-level gas and electricity consumption, 2024 (meter readings); floor-area scaling measured from NEED (gas 0.72, electricity 0.54).
- Energy prices: Ofgem energy price cap, 1 October–31 December 2026 (West Midlands, Direct Debit).
- Water: Water UK average household bills 2026–27 (28 January 2026).
- Broadband: Ofcom, Pricing and consumer engagement 2025 (September 2025 prices).
- Typical home: DESNZ National Energy Efficiency Data-Framework (NEED) median gas and electricity use by number of bedrooms, England and Wales; bedrooms as entered from the sale particulars.

Services and utilities

The services questions on the property information form, answered from published data where a dataset exists. **Confirmed** means a published dataset states it for this property or area; **inferred** means the data points to an answer without stating it. The line under a status says when the answer was true and, where it is not confirmed, who can confirm it. 5 answered from published data, 6 inferred.

Service	Question	What the data says	Status
Electricity	Is a supply connected?	Yes — the EPC records the home's electricity use (assessed 2023-05-10). Source: EPC register · 2023-05-10	○ inferred as at the EPC, 2023-05-10 — to check
Gas	Is the property connected to mains gas?	Yes — the EPC records mains gas (Boiler and radiators, mains gas). Source: EPC register · 2023-05-10	○ inferred as at the EPC, 2023-05-10 — to check
Water	Which company supplies water?	Severn Trent Water — Independent Water Networks (a new appointee) serves this site within the area. Source: Apogee GridCheck network operator search · 2026-11-20	● confirmed water company's appointed area
Water	Is a mains water supply available to the property?	Yes — Severn Trent Water is the appointed water company for this address and has a statutory duty to supply it. Whether this home draws mains water or a private supply (a well, borehole or spring) is not recorded per property. Source: Apogee GridCheck network operator search · 2026-11-20	● confirmed appointed area — statutory duty to supply
Sewerage	Is the property connected to a public sewer?	Not recorded per property in published data. A private arrangement — a septic tank, cesspit or treatment plant — is possible, and is more common in rural and off-gas properties; private drainage carries its own rules (the general binding rules; a septic tank discharging to a watercourse must have been replaced). A drainage and water search (CON29DW) confirms this for the property. Source: No published dataset records the connection	○ inferred to check — a CON29DW search confirms it
Water	Is the water supply area water stressed?	Yes — the Environment Agency classifies Severn Trent Water's supply area as seriously water stressed (its Chester zone excepted), which lets the company charge every customer by meter; restrictions on use in a dry year are more likely here than in areas not so classified. Source: Environment Agency, Water stressed areas – final classification, 1 July 2021 (Open Government Licence) · 2021-07-01	● confirmed EA area classification, 2021-07-01
Heating	What heating does the property have?	Mains gas Mains gas boiler — EPC: Boiler and radiators, mains gas, assessed 2023-05-10. Source: EPC register · 2023-05-10	● confirmed as at the EPC, 2023-05-10
Solar	Are solar panels fitted?	No — none recorded on the EPC. Source: EPC register · 2023-05-10	● confirmed as at the EPC, 2023-05-10

Service	Question	What the data says	Status
Solar	Is the roof suited to solar panels?	Amber: Solar panels possible, with less output — an east-facing roof at about 31°, about 22 m², room for about 5 panels (2.1 kWp). No listed building or conservation area was found for this address in the national planning data. See 'Your roof for solar panels'. Source: Environment Agency LIDAR surface model, building outline and PVGIS — sources in full under 'Your roof for solar panels' · 2026-11-20	○ inferred an installer's survey confirms what fits
Broadband	What broadband is available?	In this postcode 100% of premises can get gigabit-capable broadband; 100% superfast (30 Mbit/s+). Speeds at an individual address can differ; Ofcom's online broadband checker gives the figure for the address. Source: Ofcom Connected Nations, postcode data (January 2026) · January 2026	○ inferred to check — address speeds differ by postcode
Broadband	Is a faster broadband connection planned for this address?	A gigabit-capable connection is already recorded here. BDUK's view at the Open Market Review named below, for England and Wales. BDUK says not all suppliers return data to the review, so there are gaps in it and it can differ from Ofcom's coverage figures. It records whether a build is intended, not when a particular home will be connected — the published contract date is a payment milestone, not a completion date. Only the provider can confirm what a home can order today. Source: Building Digital UK, Premises in BDUK plans — May 2026 Open Market Review · 2026-05	○ inferred to check — a utility search can assist

Heating fuel shows how far the home's main heating is from running on electricity. Green: already electric. Amber: mains gas, a heat network or biomass; replacing it with a heat pump is a standard change. Red: oil, LPG or solid fuel; these homes are off the gas grid and usually furthest from electric heating. The rating describes the fuel the EPC records, except where it reads 'Gas not confirmed': there the certificate records mains gas but the gas supply could not be confirmed from the details supplied with the order, so the fuel is in question rather than known. It is not a judgement of the heating system's condition or of the property.

Electricity and gas supply details

As supplied by the ordering service when this report was ordered (TA6 section 12). A note below says where they differ from this report's own network data.

	Provider	Network operator	Meter number (MPAN / MPRN)
Mains electricity	Octopus Energy	National Grid (West Midlands)	14 1918 6012 009
Mains gas	Octopus Energy	Cadent (West Midlands)	2447704905

The MPAN and MPRN numbers are a requirement in a TA6 and are the numbers required to enable switching of your energy meter supplier. They are individual to the meters at the property and confirm the availability of a connection. They identify the meter, not any person, and say nothing about who lives at the property. A meter number confirms that a connection exists; it says nothing about spare capacity on the network, which this report assesses separately.

This data is supplied under licence from the utility transporter or other provider of the information, and is subject to the terms and conditions of that licence, as well as being for the legitimate purpose and use of this report only. Should you require a copy of the relevant licence then one can be provided on request from the ordering service.

Your local electricity network

Electric (DNO) Supply Area

nationalgrid National Grid Electricity Distribution is the electricity distribution network operator for this address.

We assess the primary substation that supplies your area — **Worcester**. A primary substation typically serves several thousand homes.

Network capacity today

Good

The local primary substation has about 20.3 MW of spare capacity for new demand in the network operator's current forecast.

Electrification pressure

Moderate

Forecast demand growth is about 12.1 MW by 2030 — about 59% of the spare capacity today. By 2035 the same forecast reaches about 20.3 MW, about the same as the spare capacity today.

Reinforcement outlook

Not currently needed

Capacity is adequate for forecast growth; no reinforcement is needed in the near term.

Solar & battery export

Good

About 31.8 MW of generation headroom at the local primary substation.

Energy efficiency (EPC)

Current EPC

C → could reach **B**

Current EPC rating C, potential B.

EPC C — meets C for 2030

Your home already meets EPC C, the standard announced by government in January 2026 (consultation response published with the Warm Homes Plan) for privately rented homes in England and Wales from 1 October 2030.

Certificate date	10 May 2023

Improvements recommended on the EPC	Indicative cost (from the EPC)
Floor insulation (solid floor)	£4,000 - £6,000
Solar water heating	£4,000 - £6,000
Solar photovoltaic panels, 2.5 kWp	£3,500 - £5,500

How the EPC works out this saving, if the home reached EPC B

From the certificate	Cost now	At EPC B	Saving a year
Heating	£969	£893	£76
Hot water	£344	£202	£142
Lighting	£126	£126	£0
Total	**£1,439**	**£1,221**	**£218**

Together, the EPC puts the typical saving at £218 a year on heating, hot water and lighting. The EPC prints a cost for each improvement but not a saving for each one, so this is the certificate's whole-home figure, not a quotation. These are the certificate's own figures, at the prices and the standard occupancy the EPC assumes, so they are not comparable with the running costs earlier in this report.

These are the ranges printed on the EPC, not quotations. The certificate also recommends solar panels, at 2.5 kWp. That is the standard size the EPC calculation assumes, not a measurement of this roof; the 2.15 kWp under “Your roof for solar panels” is measured from the surface model and is what the roof could hold. The certificate itself also shows a typical yearly saving for each improvement: certificate **9809-3026-2205-8327-6204** at find-energy-certificate.service.gov.uk.

Your roof for solar panels

Amber: Solar panels possible, with less output Best roof: an east-facing roof at about 31° (the front), about 22 m². Room for about 5 panels (2.1 kWp), generating about 1,722 kWh a year (80% of the best possible here). **That is about as much electricity as a home of this size in this postcode typically uses in 355 days.**

It is a comparison of size only. Panels generate most in summer and least in winter, while a home's demand does not follow the same shape, so this is not the share of your own electricity they would cover, nor a saving.

The next best part of the roof, south-facing at about 35°, has room for about 3 panels (1.3 kWp), generating about 1,284 kWh a year (99% of the best possible here). Each panel there would make about the same as what it would on the best face.

Roof windows that sit flush with the roof (rooflights) cannot be seen in the survey this report uses, and smaller fittings such as chimney stacks, flues, vents and aerials are not always picked up. Where a roof has them, fewer panels may fit than shown here. An installer's survey of the roof confirms what fits.

What the panels might save

In a year this roof could make about 1,722 kWh of electricity, and this home uses about 1,769 kWh. Panels only save money on the electricity used in the house as it is made — about 26% of what they make, because most generation happens in the middle of the day. That is worth roughly £100 to £130 a year off the bill, depending on how much of the day someone is home.

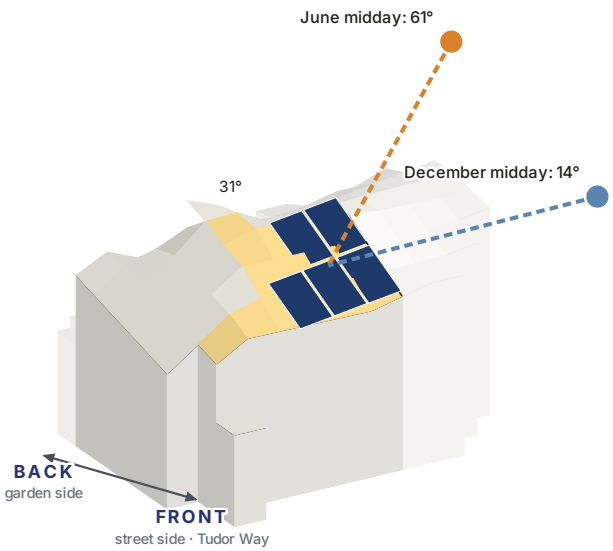
The same figures as an installer would set them out	Without a battery	With a 5 kWh battery
Electricity from the panels used in the home	448 kWh	1,257 kWh
...as a share of what the panels make (self-consumption)	26%	73%
...as a share of the electricity the home uses (grid independence)	25%	71%
Worth a year at this report's electricity price	£110	£320

Worked from an assumed 1,769 kWh of electricity a year and 1,722 kWh generated, for a home occupied about half the day. A home out all day would use less of it (22%), one occupied all day more (29%).

These are averages for homes of this size with a roof like this, not a prediction for this house, and they are a basis for comparing installers' offers rather than a quotation. Exported electricity earns a little more under an export tariff, which is not counted here because it depends on the supplier. Panels do not reduce a gas bill.

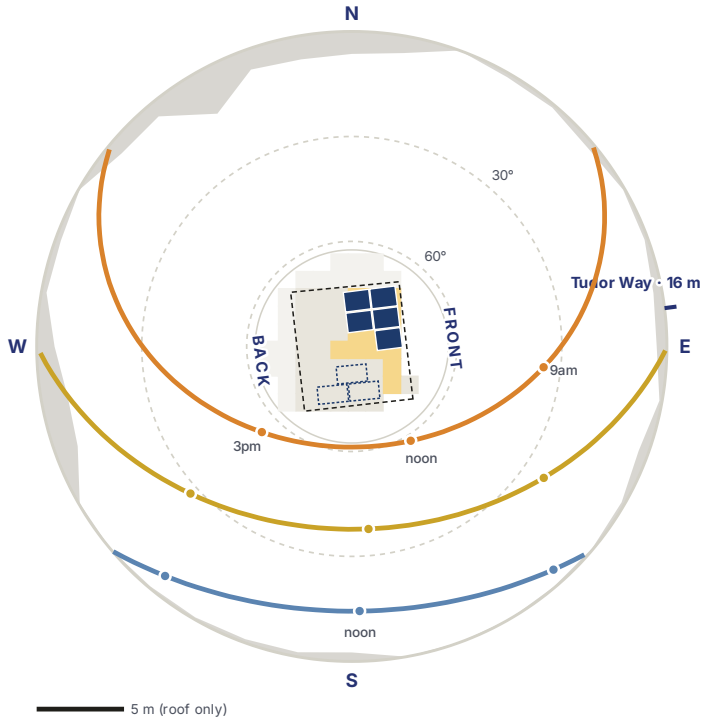
The solar PV self-consumption has been calculated in accordance with the MCS Guidance Note "DETERMINING THE SELF-CONSUMPTION OF DOMESTIC SOLAR PHOTOVOLTAIC (PV) INSTALLATIONS WITH AND WITHOUT ELECTRICAL ENERGY STORAGE". The self-consumption is valid before the impact of power diverters, electric space and water heating and electric vehicle charging are considered. Sources: Share used at home from MCS Guidance Note MGD 003 (1 August 2019); generation from PVGIS and the roof survey; electricity price as used for the running costs in this report (1 October–31 December 2026).

Little shading: no trees or buildings nearby block low sun on the best roof. That is what was standing when this area was surveyed from the air, in March 2020. Trees are felled, lopped and grown, so what is standing today is what counts. The roof diagram below shows the trees and buildings this figure is based on, and it is worth comparing against what is standing today. No listed building or conservation area was found for this address in the national planning data. Before ordering, check the address on Historic England's online list or with the council: a house that is neither listed nor in a conservation area can often have roof panels as permitted development, within size limits (see the Planning Portal).



The home as the aerial survey measures it, seen from the south-east: each roof surface at its surveyed height and pitch, the best face shaded, the panels where they were laid out; walls plain, neighbours in grey.

	Panels	kWp	kWh a year	of best
FRONT best side	5	2.1	1,720	80%
SOUTH (BACK) alternative	3	1.3	1,280	99%



The sun at this home (best side of roof only)

- 21 June
- 21 March / 21 September
- 21 December
- Trees and buildings around the home that block low sun
- 5 panels of about 430 W
- Best roof face
- The roof as the survey measures it, on its 1 m grid
- Neighbouring roofs the survey shows, for context
- The south-facing face at the back: room for panels, less output each
- Direction of Tudor Way, the nearest named road: the front

The roof seen from above, north at the top, inside the sun's daily paths at this home (UK clock times). The shaded edge shows trees and buildings around the home that block low sun. The grey roof is the one the aerial survey shows, on its 1 m grid, inside the dashed building outline from the mapping; the home in 3D is drawn from the same survey, each roof surface at its measured height and pitch, with the sun's height at midday in June and December; the neighbours' roofs are in lighter grey. The front is the side facing Tudor Way, the nearest named road (16 m away); the back is the side opposite. The panels are drawn where the survey shows clear roof: an installer's survey confirms what fits.

Sources: Environment Agency LIDAR Composite first-return surface model, 1 m (© Environment Agency, OGL); OS OpenMap Local building outline (© Crown copyright, OGL); PVGIS © European Communities, 2001-2026; HM Land Registry INSPIRE Index Polygons: this information is subject to Crown copyright and database rights 2026 and is reproduced with the permission of HM Land Registry; the polygons (including the associated geometry, namely x, y co-ordinates) are subject to Crown copyright and database rights 2026 Ordnance Survey AC0000851063; Listed buildings and conservation areas: planning.data.gov.uk (© Historic England 2026; contains Ordnance Survey data © Crown copyright and database right 2026; OGL; Historic England GIS data obtained on 2026-10-03) · 2026-11-20

Network overview

Most homes do not connect to the primary substation. They connect to a secondary substation, which steps high voltage down to the low voltage used in the street. A single home's heat pump or car charger is a few kilowatts against a substation serving a street or an estate, and the operator decides which substation a home is connected to — not always the nearest.

Every network operator must publish a Long Term Development Statement at least once a year, forecasting the capacity and headroom of its network under a range of load-growth scenarios, and most publish further data beside it — Network Development Plans, Distribution Network Options Assessments and substation headroom tables. The network findings in this report are taken from those publications.

Secondary substation	Distance	What the operator publishes
Howard Rd - Dines Green	136 m	261 kW spare · the operator rates it Green
Dines Green - Worcester	269 m	221 kW spare · the operator rates it Green
Dines Green Church - Dines Green	399 m	405 kW spare · the operator rates it Green

Source: NGED Network Opportunity Map. Secondary substations within 2 km, nearest first. The rating is the network operator's own, and operators do not publish how it is set, so it should be read separately from the capacity figure beside it. Across NGED's network a green rating covers substations with a few kilowatts of spare capacity and substations with several megawatts, so for this network it is not a measure of spare capacity.

At a glance across this report

Spare capacity at the nearest secondary substation	**Green** — from the operator's own rating
Spare capacity at the primary substation	**Good · 20.3 MW spare** — from the operator's published headroom
Demand growth at the primary substation	**Moderate · 12.1 MW more by 2030** — from the operator's published forecast
Planned network work	**Not currently needed** — from the operator's published schemes
The licence area's power-cut record	**Mixed against the GB average** — from Ofgem's published figures

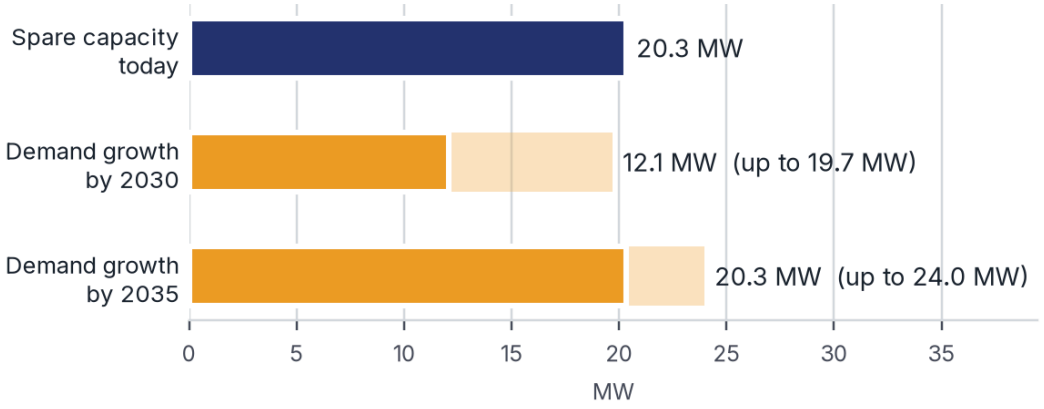
The ratings above are ours, applied to the published figure beside each one; where a rating is the network operator's own it says so. Each is set out in full in its own section.

How close the substation is

The nearest secondary substation is 136 m from this home. At the wall of a final distribution substation the magnetic field is about 1 to 2 microtesla, falling to the background level found anywhere (0.01 to 0.2 microtesla) within 1 to 2 metres of the wall. The public exposure reference level the United Kingdom applies at 50 Hz is 360 microtesla.
Source: emfs.info (the electricity industry's EMF information service); ICNIRP 1998 guidelines, which UK policy applies.
Noise, fire and contamination of land from a substation are not rated here. A noise assessment is made against a measured source level and the area's own background, and the published fire and oil-containment figures are design clearances inside the compound rather than thresholds at a neighbouring home. None of the three can be confirmed from distance.

Recorded connections in your area: not enough yet to report (we show figures only once at least 5 are recorded, to protect privacy).

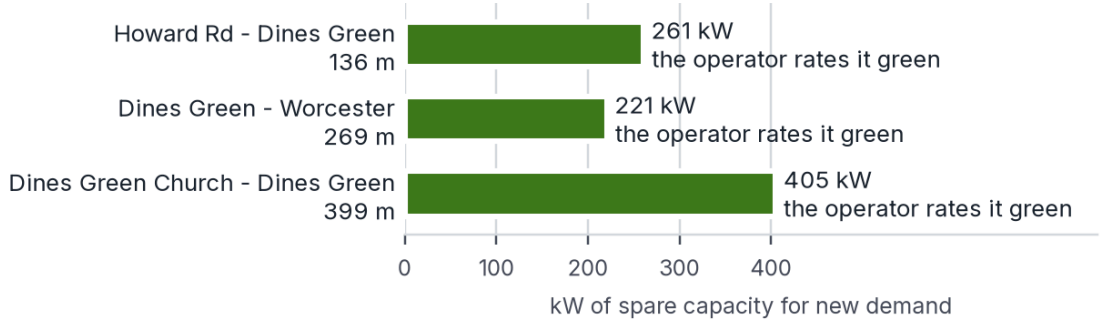
How much demand is coming



Forecast growth in peak demand at the primary substation, compared with the spare capacity today. Solid bars show the typical scenario; the paler bar behind shows the highest of the 5 published scenarios. Source: the network operator's network headroom forecast.

Spare capacity at the nearest secondary substations

A single home connects to a **secondary substation** below the primary. The operator publishes spare capacity and a rating for each one. A heat pump or charger draws a few kilowatts, so a secondary substation with room is a good sign. Only the operator's response to an application confirms it.



Source: NGED Network Opportunity Map. Secondary substations within 2 km of the home, nearest first, coloured by the operator's own green/amber/red rating. The operator connects a home to the secondary substation it chooses, not necessarily the nearest.

What this home would need, and what the local network carries

Once fully electrified - a heat pump and a home charger - this home's supply would need to carry about 15 kVA. That is the figure given with the order. Whether that can simply be notified to the network operator or needs its agreement depends on how many phases the supply has, and no dataset records that per property - the operators hold it for about a quarter of properties and their own systems disagree about half the time. An electrician or the operator can confirm it for this home.

On a single-phase supply, 15 kVA is above the 13.8 kVA (60 A) per phase notification limit, so the operator must confirm the supply can carry it. Between 60 A and 100 A per phase it should answer within ten working days.

On a three-phase supply, 15 kVA is within the 41.4 kVA per phase the operator need only be notified about.

Spread across the 28 premises this postcode holds, each fully electrified home adds about 2.9 kW to the peak of the substation serving them - an after-diversity figure, because not every heat pump runs and not every car charges at the same moment. On that basis the premises here would together draw about 89 kW once electrified, against about 50 kW on today's heating.

A home's own requirement and its after-diversity contribution to a substation are different quantities and are not interchangeable. After-diversity maximum demand per dwelling, and the three-phase threshold: INA Low Voltage Design Standard 2023-24. Site demand (ADMD x premises + 8 kW): SP Energy Networks ESDD-02-012, section 11.4. Connection thresholds: Energy Networks Association, EV charge point and heat pump connections form (v3.3). Only the operator's answer to an application confirms what this home can have.

Resilience of the networks serving this home: flooding, coastal erosion and the reliability record

The licence area's reliability record

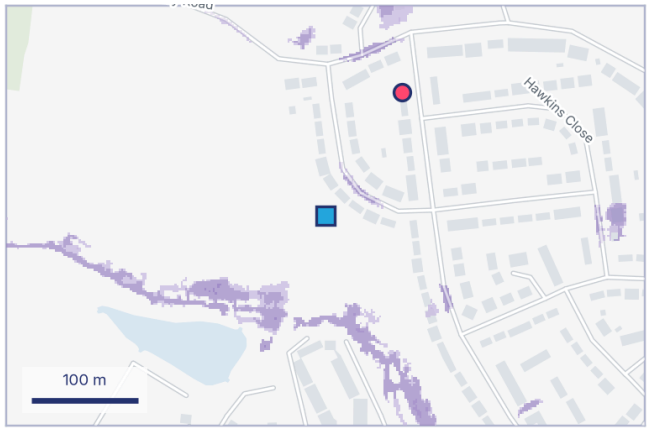
Mixed against the GB average

46 interruptions per 100 customers against 40 for Great Britain as a whole, and 34 minutes against 35; 8th of 14 licence areas for minutes lost in 2024-25.

This band compares the licence area with Ofgem's published figure for Great Britain in the same year. It describes the **network** the home depends on, not the home. The flooding and coastal-erosion findings below are set out as each agency publishes them — the zone, the band or the projection at each substation, on the agency's own scale — and are not scored or rated here.

The nearest secondary substation (136 m away), Howard Rd - Dines Green, lies outside Flood Zones 2 and 3; it lies outside the areas the Environment Agency maps for flooding from rivers and sea and from surface water. The primary substation serving this home, Worcester, lies outside Flood Zones 2 and 3; it lies outside the areas the Environment Agency maps for flooding from rivers and sea and from surface water. Neither site lies within the areas the Environment Agency projects could be lost to coastal erosion by 2105 under any of its scenarios.

Howard Rd - Dines Green



Substation · This home · Surface water: high risk · Surface water: medium risk

Worcester



Substation · Flood Zone 3 (rivers and sea, before defences) · Flood Zone 2 · Surface water: high risk · Surface water: medium risk

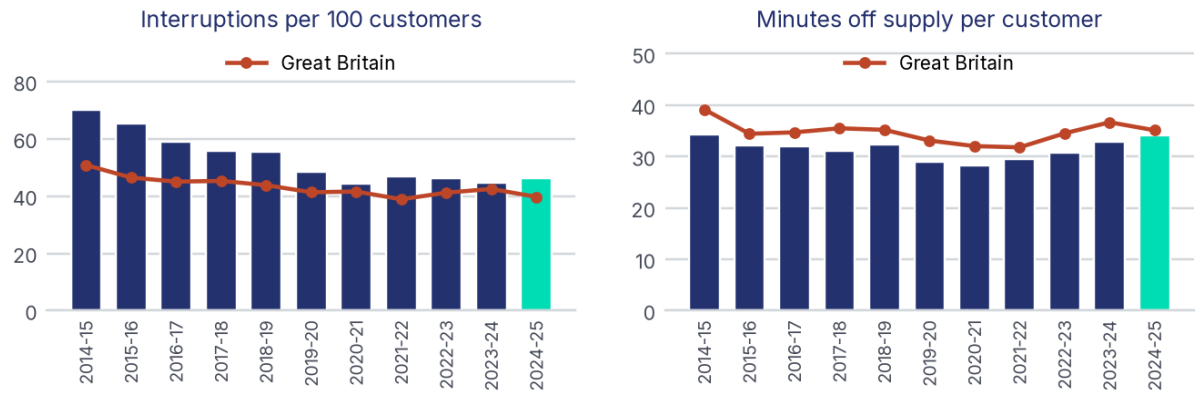
Where the water is around each substation, with the substation marked and this home shown where it falls inside the view. **These maps show what is mapped nearby; the findings above are read at the substation itself** — so a site described above as outside the areas mapped for a hazard can still have that hazard mapped a short distance away, and the map and the sentence are both right. Flood Zones are the Flood Map for Planning's extents, which are drawn **without** defences; surface water is mapped separately because it is a different hazard. The bands quoted above, which do count defences, are not redrawn here.

Nearest secondary substation	Primary substation
Outside Flood Zones 2 and 3	Outside Flood Zones 2 and 3
Outside the areas mapped for flooding from rivers and sea	Outside the areas mapped for flooding from rivers and sea
Outside the areas mapped for flooding from surface water	Outside the areas mapped for flooding from surface water
No record of past flooding here	No record of past flooding here

What the flood layers say at each substation. A measure with a published band is shown on the agency's own four-step scale; where the agency maps no risk at that point, the site lies outside the areas mapped for that hazard, which is below its lowest published band.

A physical climate risk to the infrastructure the property depends on, in the terms of the Law Society practice note *Climate change and property*; the home's own flood and erosion risk is not assessed here. A substation described as outside the mapping falls outside every scenario all the way to 2105. Flooding and coastal erosion are the physical climate hazards with site-level data for network assets; storms, heat, wildfire and subsidence are not assessed for these sites. Source: Environment Agency: Flood Map for Planning, Risk of Flooding from Rivers and Sea, and Risk of Flooding from Surface Water (Open Government Licence); Environment Agency: National Coastal Erosion Risk Mapping 2024 (Open Government Licence), which the Agency says is intended for guidance only and cannot provide details for individual properties; substation locations from the network operators' published data.

Reliability record: in the West Midlands licence area (National Grid Electricity Distribution), customers had on average 46 supply interruptions per 100 customers and 34 minutes without power per customer in 2024-25, planned and unplanned together (44 interruptions and 30 minutes of them unplanned), by Ofgem's Interruptions Incentive Scheme figures (severe weather events adjusted as Ofgem does); across Great Britain as a whole the figures were 40 interruptions and 35 minutes (Ofgem's total). Over 2014-15 to 2024-25 the area's figures ran from 44 to 70 interruptions and 28 to 34 minutes a year; the worst year for minutes lost was 2014-15. On this record a customer in the area has about a 35% chance of an unplanned power cut of more than three minutes in a year (about one every 2½ years) and is without power about 30 minutes a year on average — an area figure: streets and feeders within it differ.



The licence area each year against Ofgem's figure for Great Britain in the same year; the teal bar is the latest year, the one the figures above use. Source: Ofgem, RIIO-ED1 and RIIO-ED2 Electricity Distribution annual reports, supplementary data files (Interruptions Incentive Scheme; Open Government Licence).

A record of the network the home depends on, for the whole licence area — not a forecast for this address; the weather of each year, storms above all, shows in it. Ofgem's measures: customer interruptions are the number of customers whose supply is interrupted for three minutes or longer in the year per 100 customers connected; customer minutes lost are the minutes off supply in the year per customer connected. Planned (notified) and unplanned interruptions are counted separately; interruptions under three minutes are not counted; days of severe weather above the statutory threshold (eight or more times the normal daily fault rate) are set aside as Ofgem agrees them. Source: Ofgem, RIIO-ED1 and RIIO-ED2 Electricity Distribution annual reports, supplementary data files (Interruptions Incentive Scheme; Open Government Licence).

If a long interruption would matter to you

The record above is for the licence area, not for this address, and nothing about it is a forecast. Where an area's record is worse than the Great Britain figure on either measure, as this one is, some buyers take advice on keeping essential circuits running through a cut. Two arrangements can do that. Neither follows from the record, neither is suggested for this home, and both cost money — they are set out here only so the question can be put to someone qualified.

A home battery, if it is specified to run in island mode. Worth knowing before anyone assumes otherwise: a standard solar or battery installation does not keep the lights on. It is required to disconnect automatically when the public supply fails, so that people working on isolated parts of the network are not put at risk. A battery intended to carry a home through a cut has to be specified for that, and the network operator's full connection process applies rather than the fast-track one.

A standby generator through a changeover arrangement. A generator used this way is connected as a switched alternative to the mains — never alongside it — so that it cannot feed the network, and it needs its own means of earthing. It is work for a qualified electrician, and a generator should never be run into an ordinary socket.

You may wish to seek advice from a qualified installer or electrician on whether either would suit this home, and what it would cost. Nothing here is a recommendation that this home needs either.

What a heat pump and a car charger would add

Neither figure below is this home's maximum demand. A heat pump's electrical draw depends on the weather it is sized for and on the unit chosen, and the Energy Networks Association's own connection form says a load survey is required to establish a home's maximum demand. These are the published industry thresholds an installer's figures get measured against.

- From this home's Energy Performance Certificate, a heat pump of roughly 6 kW heat output would suit it. Its electrical draw is a fraction of that — a heat pump moves heat rather than making it — and the installer sizes it.
- A standard domestic charge point draws 7.4 kW (32 A on a single-phase supply).

The thresholds these get measured against

- A heat pump system whose maximum demand is 32 A or less can be connected and the operator simply notified, rather than applied to in advance.
- The same notification route covers the home while its total maximum demand stays under 13.8 kVA (60 A) per phase.

- Above 60 A per phase the operator must confirm the supply can carry it. Between 60 A and 100 A it should answer within ten working days.

Source: Energy Networks Association, EV charge point and heat pump connections form (v3.3). Only the electrical network operator's answer to an application confirms for certain what this home can have.

What this report does not cover

This is a **desktop screening report** about energy and utilities. It does not look at the secondary substation or cable serving your street, your home's service cable, main fuse or whether the supply is shared, the wiring inside the home, or the cost or design of any installation. Network operators publish little data below primary-substation level, so these can only be confirmed by an installer's application to the network operator. For technical questions, speak to an installer, electrician, surveyor or energy assessor. The property's own flood, coastal-erosion, subsidence and overheating risks — the physical climate risks to the home itself — are not assessed here; they are the subject of a separate climate search, which this report does not replace. Mobile signal is not covered: it is published per postcode only through Ofcom's own service, and Ofcom's free public checker confirms it for this postcode.

How confident we are

All the data we needed was available, matched to a published boundary and up to date.

How we did it

The area readiness score is a rule-based screening assessment of the primary substation that supplies your area, drawing on three things the network operator publishes: its spare capacity today, its forecast of demand growth to 2030, and any reinforcement or flexibility schemes with their dates. Solar and battery export is shown separately and does not affect the headline. Home details come from the Energy Performance Certificate register; heat-pump sizes are indicative. The method does not give a probability of any outcome. The full method statement (v0.17.210-2026-11-17) is available to instructing firms on request. Sources: network operator network headroom forecasts and Network Development Plans, Distribution Network Options Assessments, Long Term Development Statements; EPC register; OS Open UPRN / ONS postcode data; Energy Networks Association guidance; TA6 Property Information Form (6th edition, 2025). Roof for solar panels: see that section. Time to connect: a screening estimate from published network data, replaced by recorded connection outcomes for the area where enough are held. Letting standard: EPC C by 1 October 2030 for privately rented homes in England and Wales, announced by government in January 2026 (consultation response published with the Warm Homes Plan).
Scenarios. Forecasts come from the network headroom forecast published by National Grid Electricity Distribution for the local primary substation under 5 scenarios: Best View, Consumer Transformation, Falling Short, Leading the Way, System Transformation. Findings use 2030; 2035 is shown for context.
Network data: NGED network headroom forecast 2026, base year 2026, dated 2026-01-01; matched by published supply-area boundary.

For your conveyancer

Energy and utility findings by their effect on the property, in line with the Law Society practice note: Climate change and property (June 2025). It repeats findings from above deliberately: it is written to be lifted whole onto the report on title, with none of this report beside it.

FOR THE REPORT ON TITLE

Report reference ETR-WR25QY-20261120-C5C04350, dated 20 November 2026. Transition risks (energy and utilities): Local electricity network: well placed. Time to connect: normal timescales (screening estimate). EPC C, potential B. Whether the electricity supply is shared with a neighbouring property is not recorded in published data. Utilities from published data: gas network Cadent; water Severn Trent Water — Independent Water Networks (a new appointee) serves this site within the area; sewerage Severn Trent Water; broadband gigabit-capable for 100% of the postcode (Ofcom). Physical risks to the infrastructure the property depends on: Nearest secondary substation (Howard Rd - Dines Green): outside Flood Zones 2 and 3. Primary substation (Worcester): outside Flood Zones 2 and 3. Coastal erosion: neither substation is within the Environment Agency's projected erosion areas to 2105 under any scenario (NCERM 2024). Reliability record for the licence area, 2024-25: 46 supply interruptions per 100 customers, 34 minutes without power per customer (Ofgem); Great Britain 40 and 35. The report is a desktop screening assessment from published data; it does not assess the property's own supply or wiring, and its technical content is not verified by the conveyancer. The property's own flood, coastal-erosion, subsidence and overheating risks are not assessed here and are the subject of a separate climate search.

Data sources

This report is a desktop assessment built from published data. The network findings come from the distribution network operators' own published figures: their network headroom forecasts, Network Development Plans, Distribution Network Options Assessments and Long Term Development Statements. The home's details come from the Energy Performance Certificate register. The utility networks serving the address come from the appointed-area and asset data of the companies themselves, and from Apogee's GridCheck network operator search for gas, water and sewerage.

The primary substation is matched to the home by the operator's own published supply-area boundary where one exists, and by proximity where it does not; the report says which was used. Flood, coastal-erosion and water-stress findings come from the Environment Agency, and the supply-reliability record from Ofgem. No assumption about layout or demand is supplied by anyone: nothing in this report is modelled from information given by any party to the transaction.

Summary and next steps

Electricity networks change constantly. New connections are made and the operator's own plans move, so the capacity described here is a single point in time and can be taken up by others after this report is issued. Only the network operator's answer to an application confirms what a particular home can have.

If you are planning a heat pump, an electric-car charger, a battery or solar panels, your installer makes that application for you in the normal way. Talk to your conveyancer before exchange about anything in this report that concerns you, and speak to a member of the Apogee team if you would like help with a formal application.

Disclaimer

This report relies in part on data, maps and documentation provided by third-party organisations (including Distribution Network Operators, local authorities and specialist consultancies).

Apogee Property & Utility Consultants Ltd exercise reasonable skill and care in compiling and interpreting such information but cannot guarantee its completeness or accuracy. We accept no liability for any loss or damage arising from errors or omissions in third-party data. Users should treat capacity figures as indicative and are strongly advised to obtain formal, site-specific confirmation (for example by submitting a formal connection application) before making any investment or design decisions.

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Apogee take no responsibility for the accuracy of the size, number, or location of panels proposed in this report, and cannot guarantee it will match a proposal from a solar panel installer's survey.

The running costs are typical figures for a home of this type and size at published regional prices, not a quotation and not a prediction of this household's bills. Apogee take no responsibility for any difference between them and the amounts a household is charged.

Findings from the Energy Performance Certificate register are reproduced as that register records them. Apogee take no responsibility for the accuracy of a certificate, which is the assessor's own, nor for any change to the property since it was lodged. Certificates are sometimes wrong - a heating fuel recorded as mains gas at a property served only by oil, for example - and where one is wrong or out of date, the findings drawn from it here are wrong with it: the heating, its running costs, the heat-pump sizing and the letting position all follow the certificate. The letting standards themselves are stated as they stand today: the EPC E minimum is in force, while the EPC C standard for 2030 is government policy announced in January 2026 and not yet law, so its date, spending cap and exemptions may change.

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Acronyms and key terms

Acronyms			
BDUK	Building Digital UK	**DNO**	Distribution Network Operator
DNOA	Distribution Network Options Assessment	**EMF**	Electric and magnetic fields
ENA	Energy Networks Association	**EPC**	Energy Performance Certificate
EV	Electric vehicle	**kVA**	Kilovolt-amperes (apparent power)
kW	Kilowatt (power)	**kWh**	Kilowatt-hour (energy)
LTDS	Long Term Development Statement	**MW**	Megawatt (1,000 kilowatts)
NEED	National Energy Efficiency Data-Framework	**OMR**	Open Market Review
TA6	The Law Society's Property Information Form	**UPRN**	Unique Property Reference Number

Key terms	
Headroom	The spare capacity a network operator publishes for a substation — how much more demand it can take before work is needed. The figures in this report are the operator's published network headroom.
Primary substation	A substation handling high voltages, usually stepping 33kV or 66kV down to 11kV. One typically serves several thousand homes.
Secondary substation	A smaller substation stepping high voltage — typically 11kV — down to low voltage for distribution locally. This is the substation a single home connects to.
Maximum demand	The power a home draws at once, rather than the energy it uses over a year. A connection application is assessed on maximum demand, and the Energy Networks Association's own form says a load survey is needed to establish it.
Gigabit-capable	A connection able to deliver 1,000 Mbit/s or more. Ofcom counts a premises as covered where an operator reports an end user could order such a service there.
Open Market Review	How Building Digital UK asks broadband suppliers where they have built, and where they plan to build, so that public money is not spent where a commercial build is coming. Suppliers are not obliged to answer, so the resulting view has gaps in it.

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