Paper 1

Annex 1.9

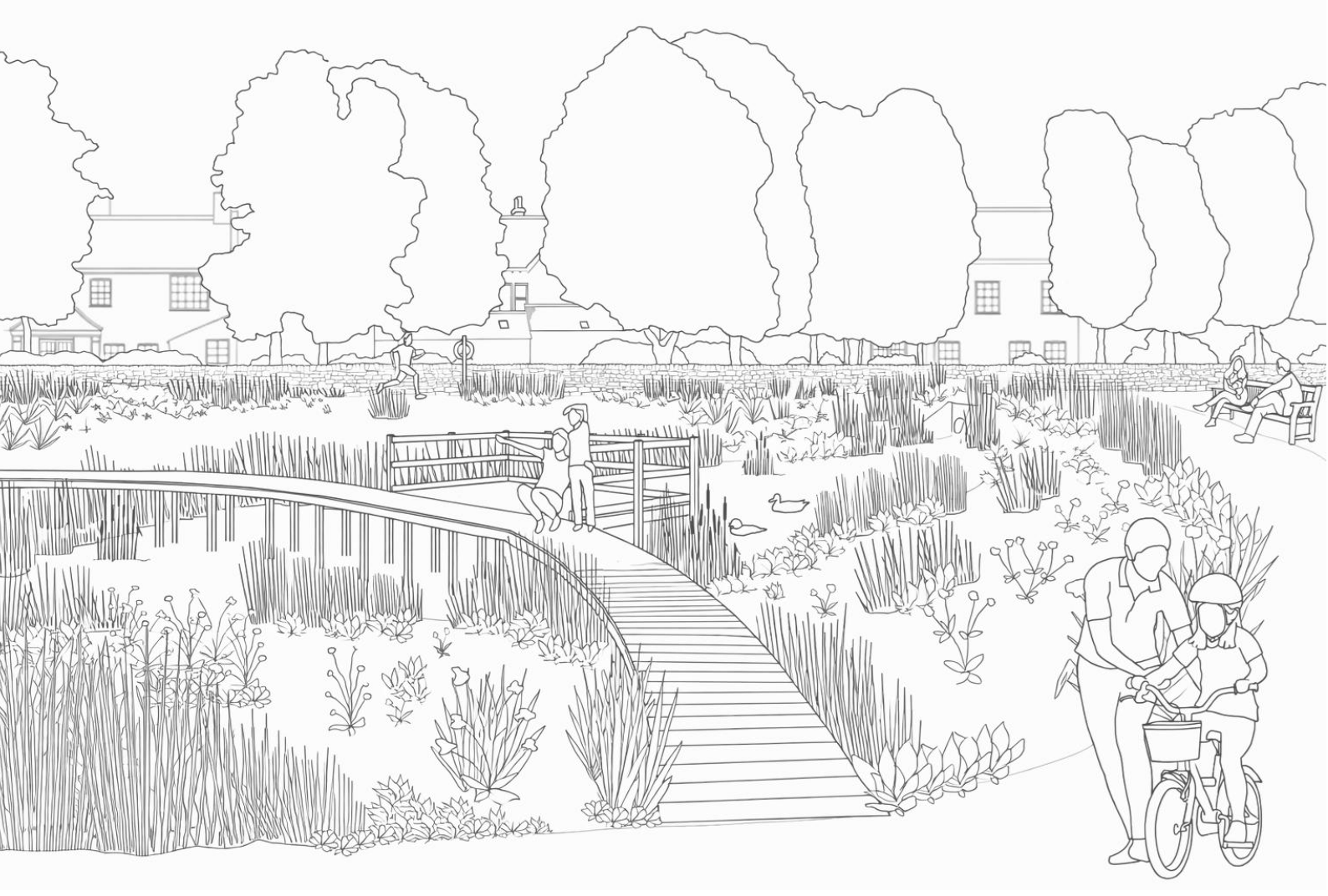
Cairngorms
National Park Authority
Ùghdarras Pàirc Nàiseanta a'
Mhonaidh Ruaidh

Sustainable places

Schedule 9: Energy

Cairngorms National Park Local Development Plan: Evidence Report

March 2026



Schedule 9: Energy

March 2026

Schedule contents

Requirements addressed in this schedule

Table 1 Information required by the Town and Country Planning (Scotland) Act 1997, as amended (CNPA003), regarding the issue addressed in this schedule.

Section	Requirement
Section 15(5)(a)	The principal physical, cultural, [economic], social, built heritage and [environmental] characteristics of the district.
Section 15(5)(b)	The principal purposes for which the land is used,
Section 15(5)(d)	The infrastructure of the district (including communications, transport and drainage systems, systems for the supply of water and energy, and health care and education facilities).
Section 15(5)(e)	How that infrastructure is used.
Section 15(5)(f)	Any change which the planning authority think may occur in relation to any of the matters mentioned in paragraphs (a) to (eb).
Section 15(5A)	In subsection (5)(d), references to systems for the supply of energy include in particular land available for the development and use of facilities for renewable sources of energy.
Section 16(2)(a)	To take into account— i. The National Planning Framework and ii. Any local outcomes improvement plan (within the meaning of section 6 of the Community Empowerment (Scotland) Act 2015) for the part of their district to which the local development plan relates, iii. Any registered local place plan (see schedule 19) that is for the part of their district to which the local development plan relates.
Section 16(2)(b)	Are to have regard to such information and considerations as may be prescribed.

Section	Requirement
Section 16(2)(c)	May have regard to such other information and considerations as appear to them to be relevant.
Section 16B(3)(a)	The evidence report is to set out the planning authority's view on the matters listed in section 15(5) for land in the part of the authority's district to which the local development plan will relate,
Section 16B(3)(e)	Include such other matters as are prescribed.
Section 16B(4)(c)	The evidence report is also to include a statement on the extent to which the views expressed under paragraphs (a) and (b) have been taken into account in the report.
Section 264A	In the exercise, with respect to any land in a National Park, of any power under the planning Acts, special attention shall be paid to the desirability of exercising the power consistently with the National Park Plan as adopted under section 12(7)(a) of the National Parks (Scotland) Act 2000 (asp 10).

Links to evidence

International documents

- CNPA139 - UNESCO's Education for Sustainable Development mission

Legislation

- CNPA003 - Town and Country Planning (Scotland) Act 1997
- CNPA004 - National Park (Scotland) Act 2000
- CNPA348 - Climate Change (Emissions Reduction Targets) (Scotland) Act 2019
- CNPA634 - Natural Environment (Scotland) Bill as passed

National documents

- CNPA008 - National Planning Framework 4
- CNPA007 - National Performance Framework
- CNPA060 - Securing a green recovery on a path to net zero: climate change plan 2018 – 2032 update
- CNPA107 - Infrastructure Plan for Scotland 2021 – 2022 to 2025 – 26
- CNPA109 - Draft Energy Strategy and Just Transition Plan 2023
- CNPA110 - The Hydrogen Policy Statement 2020
- CNPA111 - The Hydrogen Action Plan 2022
- CNPA112 - Bioenergy update, March 2021
- CNPA113 - Draft Bioenergy Policy Statement

- CNPA1001 - Scotland's Hydrogen Assets

Key agency documents

- CNPA114 - Beyond 2030. A national blueprint for a decarbonised electricity system in Great Britain
- CNPA117 - Renewable Energy Guide for Developers & Communities working with Scottish Water
- CNPA116 - Historic Environment Scotland Climate Action Plan 2020 – 2025
- CNPA148 - NatureScot Micro renewables and the natural heritage: Revised guidance 2016
- CNPA149 - Historic Environment Scotland Managing Change in the Historic Environment: Micro-renewables
- CNPA151 - NatureScot General pre-application and scoping advice for solar farms
- CNPA150 - NatureScot Hydroelectric schemes and the natural heritage 2015
- CNPA152 - Nature Scot Position Statement: Bioenergy and Natural Heritage 2013
- CNPA153 - NatureScot Background to our Position Statement on Bioenergy and the Natural Heritage 2013

Scottish and Southern Energy Network documents

- CNPA140 - ESO: The Electricity Ten Year Statement
- CNPA143 - SSEN Transmission – Projects delivering a network for Net Zero: Pathway to 2030
- CNPA145 - SSEN Transmission welcomes 'Beyond 2030' investment plan for future energy system
- CNPA146 - SSEN Transmission: Overview of Central Highlands Projects
- CNPA998 - Beauly Denny 400kV Upgrade
- CNPA115 - SSEN Distribution Future Energy Scenarios 2023: Results and methodology report for the North of Scotland licence area
- CNPA136 - SHEPD Network Development Report (log in required)
- CNPA138 - SSEN Long term development statements (LTDS)
- CNPA161 - Report on Consultation (Site Selection) Coire Mashie Substation
- CNPA169 - SSEN Distribution Strategic Development Plans
- CNPA999 - SSEN Distribution Inverness 132kV Supply Area Strategic Development Plan
- CNPA1145 - SSEN Distribution Persley 132kV Supply Area Strategic Development Plan
- CNPA1103 - SSEN Distribution Tealing 132kV supply Area Strategic Plan
- CNPA725 - SSEN Distribution Errochty 132kV supply Area strategic Development Plan
- CNPA1071 - Kintore Grid Supply Point Strategic Development Plan
- CNPA1158 - SSEN Innovation Portfolio: Future Agriculture Resilience Mapping

- CNPA743 - Scotch Whisky Association: Sustainability in the Scotch Whisky Industry (Strategy)
- CNPA1218 - SSEN Distribution Strategic Development Plans Methodology
- CNPA1387 – SSEN Distribution Publications and Reports

National Park Authority documents

- CNPA010 - Cairngorms National Park Partnership Plan 2022
- CNPA027 - Cairngorms Youth Action Team Place Standard Tool Engagement 2024
- CNPA028 - Cairngorms National Park Gypsy and Traveller 2024
- CNPA833 - Cairngorms Local development plan place standard tool engagement with Kingussie High School Youth Forum 2025
- CNPA834 - Local development plan place standard tool engagement with the Cairngorms National Park Junior Rangers 2025
- CNPA835 - Cairngorms Local development plan place standard tool engagement with Aviemore Neurodiversity Support Youth Group 2025
- CNPA1104 - Cairngorms National Park Local Development Plan engagement - gamification approach 2025
- CNPA1105 - Local Development Plan engagement – Planning Power with Cairngorms 2030
- CNPA528 - Cairngorms 2030
- CNPA016 - Cairngorms National Park Local Development Plan 2021
- CNPA334 - Cairngorms National Park Local Development Plan 2021 – Delivery Programme 2025
- CNPA097 - Cairngorms National Park Local Development Plan 3: Strategic Flood Risk Assessment 2024
- CNPA1349 - Topic: Energy - engagement version

Local authority documents

- CNPA118 - Moray Council Hydrogen Strategy 2022
- CNPA048 – Grantown-on-Spey Conservation Area Management Plan
- CNPA638 - 2024 – 2027 Highland Outcome Improvement Plan
- CNPA636 - Aberdeenshire Local Outcomes Improvement Plan 2017 – 2027 (website)
- CNPA637 - Angus Community Plan 2022 – 2030
- CNPA639 - Moray Local Outcomes Improvement Plan v2
- CNPA640 - Perth and Kinross Community Plan (Local Outcomes Improvement Plan) 2022 – 2032
- CNPA1091 – 2024 – 2027 Highland Outcome Improvement Plan – Delivery Plan

Community action plans

- CNPA063 - Aviemore, Rothiemurchus and Glenmore Community Action Plan: Looking to 2030
- CNPA119 - Ballater and Crathie Community Action Plan 2023
- CNPA064 - Blair Atholl Community Action Plan: Looking to 2030
- CNPA374 - Boat of Garten Community Action Plan: Looking to 2030
- CNPA121 - Braemar Community Action Plan
- CNPA122 - Carrbridge Community Action Plan: Looking to 2030
- CNPA125 - Dalwhinnie Community Action Plan: Looking to 2030
- CNPA065 - Grantown on Spey Community Action Plan 2025
- CNPA127 - Kincraig Community Action Plan
- CNPA066 - Kingussie Community Action Plan: Looking to 2030
- CNPA129 - Laggan Community Action Plan: Looking to 2030
- CNPA130 - Mount Blair Community Action Plan
- CNPA131 - Nethy Bridge Community Action Plan: Looking to 2030
- CNPA132 - Newtonmore Community Action Plan: Looking to 2030
- CNPA133 - Strathdon Community Action Plan: Looking to 2030

Data sources

- CNPA135 - The Local Energy Net Zero Accelerator (LENZA) tool
- CNPA137 - SSEN Network Capacity and Generation Availability Maps
- CNPA141 - Scottish Energy Statistics Hub
- CNPA142 - SSEN Transmission
- CNPA144 - Electricity System Operator for Great Britain (ESO)
- CNPA1000 - Energy Statistics for Scotland – Q4 2024
- CNPA1227 - Braemar community hydro
- CNPA1228 - SSEN Transmission New Coire Mashie 400kV Substation and Loch Earba Pumped Hydro Scheme Connection (information)
- CNPA1229 - SSEN Transmission New Coire Mashie 400kV Substation 3D Visual Portal

Consultation material

- CNPA014 - Email - Highlands and Islands Enterprise on changes to schedules
- CNPA1230 - SSEN Transmission comments on early draft of schedule
- CNPA1340 - Evidence report engagement responses
- CNPA1388 - Email – Engagement with SSEN Distribution on updated schedule

Summary of evidence

Policy context

National Planning Framework 4

National Planning Framework 4 (CNPA008) aims to 'to encourage, promote and facilitate all forms of renewable energy development onshore and offshore. This includes energy generation, storage, new and replacement transmission and distribution infrastructure and emerging low carbon and zero emissions technologies including hydrogen and carbon capture utilisation and storage'.

National Planning Framework 4 states that local development plans should seek to realise their area's full potential for electricity and heat from renewable, low carbon and zero emission sources by identifying a range of opportunities for energy development.

Policy 11(a) specifically addresses energy and states that proposals for all forms of renewable, low carbon and zero emission technologies should be supported. Policy 11(a)ii. States in relation development proposals for all forms of renewable, low carbon and zero emissions technologies enabling works, such as grid transmission and distribution infrastructure will be supported. With regard to the Cairngorms National Park, Policy 11(b) states that wind farms in National Parks will not be supported. Policy 11(b) sets out the need for development proposals to maximise net economic benefit.

Policy 11(d) states that development proposals that impact on international or national designations will be assessed in relation to Policy 4. The international and national nature designations in the Cairngorms National Park are detailed in Schedule 5: Natural Heritage.

Finally, Policy 11(e) sets out the design and mitigation criteria to address the impacts of proposals. It states that, when considering the impacts, significant weight should be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets. It advises that in the case of proposals for grid infrastructure, consideration should be given to underground connections where possible.

National Planning Framework 4 Policy 19 addresses heating and cooling. The Policy aims to 'encourage, promote and facilitate development that supports decarbonised solutions to heat and cooling demand and ensure adaptation to more extreme temperatures'. There is therefore a connection between Policy 11 and Policy 19 in terms

of energy demand. Matters specifically relating to heating and cooling are covered in Schedule 15: Heating and cooling.

Policy 18: Infrastructure First also has a key connection to this paper in relation to the infrastructure capacity of the energy networks in the National Park. To support Policy 18, local development plans should be based on an integrated infrastructure first approach. SSEN Transmission and SSEN Distribution as the transmission and distribution providers of the energy networks in and serving the National Park have informed the preparation of this paper (SSENs an abbreviation of Scottish and Southern Electricity Networks and is used throughout this schedule).

Policy 2: Climate mitigation and adaption also have a bearing on the plans and strategies outlines in this section. Overarching matters related in Policy 2 are covered in Schedule 4: Climate change.

The north region's spatial priorities, which cover the National Park and are relevant to this policy area are:

- Protect environmental assets and stimulate investment in natural and engineered solutions to climate change and nature restoration, whilst decarbonising transport and building resilient connections.
- Support local economic development by making sustainable use of the area's worldclass environmental assets to innovate and lead greener growth.

National developments are also identified to support delivery of the spatial strategy for the north region. Of relevance to this policy area are:

- National Development 2: Pumped Hydro Storage, which aims to play a significant role in balancing and optimising electricity generation and maintaining the operability of the electricity system as part of Scotland's transition to net zero.
- National Development 3: Strategic Renewable Electricity Generation and Transmission Infrastructure, which aims to support renewable electricity generation, repowering, and expansion of the electricity grid.
- National Development 4: Circular Economy Material Management Facilities, which aims to support the development of facilities required to achieve a circular economy. This sector will provide a range of business, skills and employment opportunities as part of a just transition to a net zero economy.

There are also links relevant to this schedule with National Planning Policy 1 tackling the climate and nature crises, as well as Policy 3: biodiversity, Policy 4: natural places; Policy 6: forestry, woodland and trees; and Policy 5: soils. This is evident in National Planning

Framework 4 Policy 11e) where project design and mitigation consider biodiversity impacts including on birds, trees, woods and forests.

Legislation and national documents

National Parks (Scotland) Act 2000

The National Park has four distinct aims as set out in The National Parks (Scotland) Act 2000 (CNPA004). As outlined in Schedule 1: Plan outcomes, these will be amended by the Natural Environment Scotland (Scotland) Bill (CNPA634) once enacted. These are, as will be amended by the Natural Environment (Scotland) Bill:

- To conserve and enhance the area's natural and cultural heritage.
- To promote sustainable management and use of the area's natural resources.
- To promote public understanding and enjoyment of the area's natural and cultural heritage.
- To promote sustainable economic, social and cultural development of the area's communities.

All of the aims are relevant to the matters discussed in this schedule. The aims are all to be pursued collectively. However, if there is conflict between the first aim and any of the others, greater weight is given to the first aim (as set out in Section 9(6) of the 2000 Act).

Securing a green recovery on a path to net zero: climate change plan 2018 – 2032 update

The document (CNPA060), published in December 2020, provides an update to the 2018 Climate Change Plan. Since that plan was published, Scottish Government has set new ambitious targets to end its contribution to climate change by 2045. Scottish Government has committed to reduce emissions by 75% by 2030 (compared with 1990) and to net zero by 2045. As Scotland emerged from COVID 19 the Government identified an opportunity to rebuild the economy in a way that delivers a greener, fairer and more equal society. The update sets out the Government's approach to delivering a green recovery and sets out a pathway to deliver its climate change targets. In line with the 2018 plan, the focus is on the period up to 2032.

With regards to electricity, the update highlights that as Scotland transitions to net zero, a growing and increasingly decarbonised electricity sector is critical to enabling other parts of the economy to decarbonise – notably transport, buildings and industry.

The Plan also outlines that in order for Scotland to meet its climate change targets there needs to be shift from a low to a zero-carbon electricity system, with the potential for Negative Emission Technologies to deliver negative emissions from the electricity sector, for example through the use of bioenergy for electricity generation combined with carbon capture and storage.

The update sets out the following vision that renewable generation will increase substantially between now and 2032, and Scottish Government expects to see the development of between 11 and 16GW of capacity during this period, helping to decarbonise the transport and heating energy demand.

To deliver this, the Plan sets out a number of outcomes, that are supported by policies and proposals, relating to electricity. The Proposed Plan should support the delivery of the outcomes set out in the Plan. These are as follows.

1. The electricity system will be powered by a high penetration of renewables, aided by a range of flexible and responsive technologies.
2. Scotland's electricity supply is secure and flexible, with a system robust against fluctuations and interruptions to supply.
3. Scotland secures maximum economic benefit from the continued investment and growth in electricity generation capacity and support for the new and innovative technologies which will deliver its decarbonisation goals.

Matters relating to Scottish Government's commitment to energy reduction and responding to climate change is established in the Climate Change (Scotland) Act 2009 as amended and by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 (CNPA348) which are covered in Schedule 4: Climate Change. The Proposed Plan should support and reflect the outcomes of the Climate Change Plan, and any subsequent Climate Change Plans published by Scottish Government during the preparation of the proposed plan.

Infrastructure Investment Plan 2021 – 2022 to 2025 – 2026

The Infrastructure Investment Plan (CNPA107) focuses on three core strategic themes for guiding investment in decisions in Scotland, namely:

- Enabling the transition to net zero emissions and environmental sustainability.
- Driving inclusive economic growth.
- Building resilient and sustainable places.

The Infrastructure Investment Plan is closely linked to the development of the National Planning Framework 4 (CNPA008) and the Climate Change Plan (CNPA060) which aim to support the delivery of the Plan.

The Climate Change Plan update (CNPA060) shows how Scotland will drive down emissions to meet its climate targets up to the year 2032. Scottish Government has committed to £1.6 billion investment in heat and energy efficiency in Scotland's homes and buildings. Scottish Government are rolling out a Net Zero Carbon Public Sector Buildings Standard, ensuring new public buildings are net zero ready.

Draft Energy Strategy and Just Transition Plan 2023

In 2023 Scottish Government opened consultation for the Energy and Just Transition Plan (CNPA109) which will provide a route map of actions Scottish Government will take to deliver a flourishing net zero energy system that supplies affordable, resilient and clean energy to Scotland's workers, households, communities and businesses.

The draft strategy sets out the target of delivering more than 20GW of additional renewable electricity on and offshore by 2030. Ambitions are set for increased contributions from solar, hydro, marine energy and hydrogen in Scotland's energy mix, and for accelerating the decarbonisation of domestic, industry, transport, and heat. In the National Park in the absence of wind or marine energy generation, solar and small-scale hydro projects may be put forward.

The strategy also reinforced the UK Government Policy position that by 2030, the need for new petrol and diesel cars and vans are to be phased out. It also sets out Scottish Government's commitment to reducing car kilometres by 20% by 2030 (more detail on transport in the National Park is available in Schedule 11: Sustainable transport). This opens opportunities for hydrogen re-fuelling opportunities and the increase in projected electric vehicles will increase electricity demand in the National Park.

The vision set out in the document highlights the importance of community owned renewable projects aiming to 'maximise community benefit from energy projects, including through community ownership and shared ownership of renewables.' The draft strategy sets out the aim of 2GW of community and locally owned energy by 2030 across Scotland.

As of January 2026, the final Strategy has still not been published, but if it is during the preparation of the Proposed Plan, the final version, including any amendments or revisions will be taken into account.

The Hydrogen Policy Statement 2020

The Hydrogen Policy Statement (CNPA110) sets out Scotland's ambition to become a leading hydrogen nation, generating at least 5GW of renewable and low carbon hydrogen by 2030 and at least 25GW by 2045. This is intended to support Scottish Government's commitment to achieve net zero by 2045, aligning with the Scottish Government's Climate Change Plan. This ambition expects both battery electric and hydrogen systems to decarbonise transport in Scotland. To date, most of Scotland's emissions reductions have come from decarbonisation of electricity generation. Decarbonisation of heat, industry and transport are now priorities and require a broader range of technologies, strategies and energy systems. Further details on the Scottish Government's Climate Change Plan is covered in Schedule 4: Climate change.

The Hydrogen Policy Statement and subsequent Hydrogen Action Plan aim to support Scottish Government's ambition to establish low carbon hydrogen production at scale by the mid-2020s, linked to Carbon Capture and Storage.

The Hydrogen Action Plan 2022

The Hydrogen Action Plan (CNPA111) sets out Scottish Government's five-year action plan to support the development of a hydrogen economy in Scotland supporting the countries transition to net zero by 2045. It follows the roadmap set out by The Hydrogen Policy Statement setting out its ambition is to transform Scotland into a leading producer and exporter of hydrogen.

The north of Scotland Hydrogen project is underway to deliver hydrogen to the north of Scotland. It is a series of scalable green hydrogen projects based in the Cromarty Firth which will produce hydrogen from renewable energy for regional, national and export use. The Phase 1 project aims to have a 35MW electrolyser facility operational by the end of 2024, producing up to 14 tonnes of renewable hydrogen per day to meet local distillery demands and prove the technology at this scale. The project will initially supply renewable hydrogen to local distilleries.

In addition to the existing projects the Hydrogen Action Plan earmarks the following projects in close proximity to the National Park:

- The Inverness hydrogen transport hub
- Inverurie energy hub

Although there are no current or planned hydrogen projects in the Cairngorms National Park, an increase in future anticipated demand may require infrastructure within the National Park. One of the key actions in the Hydrogen Plan is to ensure the regulatory,

planning and consenting framework for renewable developments support the scale up of hydrogen use and production. Within the National Park, the Proposed Plan should support the enabling of hydrogen projects. As there are no on-gas properties in the National Park, it can be expected that hydrogen use will be mainly confined to transport related infrastructure.

There are a number of businesses, including distilleries, located in the National Park which in future may look to hydrogen to decarbonise their operations.

The Emerging Energy Technologies Fund is a £180m package of funding up to 2025 / 2026 that will provide capital support to accelerate low carbon infrastructure projects and unlock private sector co-investment that will be essential to deliver net zero. The fund will make £100m available to support renewable hydrogen projects in line with Scottish Government's Hydrogen Policy Statement.

Beyond 2030. A national blueprint for a decarbonised electricity system in Great Britain.

The document (CNPA114) has been produced by the National Grid Electricity System Operator for Great Britain. Its function is to operate Great Britain's electricity transmission system, working with work in partnership with governments, the Office of Gas and Electricity Markets (Ofgem), and industry to guide Great Britain on what energy resources, markets, and networks are required to securely accelerate the transition away from fossil fuels into new energy technologies and economies.

The blueprint recognises that Britain's electricity needs are predicted to significantly increase (by up to approximately 65 per cent) by 2035. The Electricity System Operator, alongside Great Britain's Transmission Owners, have undertaken a network assessment to recommend a high level network design to accommodate the countries decarbonised electricity network.

In response to the Energy Act 2023, the Electricity System Operator is transitioning into an independent public corporation named the National Energy System Operator in the summer of 2024.

The electricity transmission network in and connecting to the Cairngorms National Park is used to transport high voltage electricity over long distances, to ensure all the settlements and buildings in the National Park are connected and supplied. Great Britain has three onshore Transmission Owners that own, maintain, and develop

their networks. In the Cairngorms National Park and the north of Scotland region as a whole the Transmission owner is Scottish and Southern Energy Networks Transmission (SSEN Transmission).

Bioenergy update, March 2021

In 2021, Scottish Government published a Bioenergy Update (CNPA112) which set out the current role of bioenergy and how that may change as Scotland moves towards a net zero future. Scottish Government identified the complex interdependencies throughout the biomass supply chain, as well as the potential competition for finite resources. The Update set out the importance of a strategic deployment of bioenergy technologies to ensure available resources are used in the most effective way. The document highlights the emerging role for Bioenergy with Carbon Capture and Storage as integral to achieving the negative emissions potential which will make net zero possible in Scotland. The Proposed Plan should support development that supports the use of bioenergy technology which supports a reduction in emissions and supports Scotland's net zero targets.

Draft Bioenergy Policy Statement 2024

The draft policy statement (CNPA113) sets out the parameters that need to be considered when setting bioenergy use now and, in the future, to support a reduction in emissions to meet the Climate Change Plan targets. It identifies what Scottish Government thinks the priority uses of bioenergy are in the short, medium and long term, and sets out the potential domestic biomass supply that could be available as feedstock for energy production. It examines how available domestic biomass feedstock could be increased by planting energy crops. It also acknowledges the potential constraints on the use of bioenergy, the importance of having strict sustainability criteria and that biomass feedstock production and use should facilitate key sustainable development goals.

The Statement points out that in Scotland the wood fuel supply chains are efficient and for the most part based on domestic supplies, and Scotland has a large number of distilleries, including many located in remote or island locations. The by-products of whisky production can be used to generate energy, or they can utilise biomass to displace fossil fuels.

Scotland priorities for bioenergy use at a high-level follow those set out by the UK Biomass Strategy. In the short term there will continue to be demand for biomass to be used in power, heat and transport. Where possible, Scotland supports early adoption of Carbon Capture Utilisation and Storage paired with bioenergy applications. In the

medium term it is expected bioenergy will transition away from unabated uses towards Bioenergy with Carbon Capture and Storage technologies.

In the short to medium term, it is expected bioenergy will be utilised through the following:

- Power – new biogas combined and heat power (CHP) plants that utilise waste resources.
- Heating – biomass or biofuel offer a solution to buildings not able to transition to clean heating systems (for example heat networks and heat pumps).
- Transport – use of biofuels for Heavy Duty Vehicles and Heavy Good Vehicles.
- Industry - Distilleries and breweries, pulp and paper mill, wood panel and pellet production, fuel switching from fossil fuels with potential for linking to future carbon capture and storage infrastructure.

The longer term (post 2035) use of bioenergy should prioritise bioenergy with carbon capture and storage applications where possible, and the majority of biomass uses should deliver negative emissions, but specific timing and detail will depend on how technologies develop.

The majority of Scotland's renewable heat currently comes from bioenergy, with 67% from biomass and 16% from biomethane injected to the gas grid (biomethane currently accounts for 1.65% of Scottish gas demand). For buildings, biomass boilers that burn wood pellets, chips or logs are a well-established heating technology, however changes to the Building Standards in Scotland in 2024 mean that under the New Build Heat Standard, solid fuel burning stoves can only be installed in new homes to provide 'emergency heating' where required. Removing biomass from buildings as a source of heat will potentially increase the demand for electricity for heating.

Key agency documents

Renewable energy guide for developers and communities working with Scottish Water

The document (CNPA117) aims to help developers and communities understand how to engage with Scottish Water to develop renewable energy and low carbon heat projects. There are a number of existing small-scale hydro projects in the National Park (Table 4), in addition to some of the Community Action Plans setting out community aspirations to explore community energy generation projects, including hydro projects. There are three main categories of supply, outlined in the document, that could be utilised for hydro projects namely:

4. Renewable development is installed on third party land adjacent to a Scottish Water asset and a private water supply is connected to the Scottish Water asset as a secondary off-grid supply. Any surplus power can be exported to the grid via Scottish Water's grid connection if there is export capacity available in the network.
5. Renewable development is installed on Scottish Water land or assets and a private wire supply is connected to the Scottish Water asset as a secondary off-grid supply within the site. An example of this would be installing a solar array on an area of a Scottish Water asset not in use on an operational asset. Any surplus power can be exported to the grid via Scottish Water's grid connection if there is export capacity available in the network.
6. Renewable development is installed on Scottish Water land or catchments and the electricity is exported to the grid via a developer export connection. An example of this would be installing a hydro turbine in a Scottish Water reservoir. In this case, the developer would sign a land rental agreement with Scottish Water as there is no requirement for the electricity as there is no demand.

The document also sets out Scottish Water's Horizon project which is facilitating low carbon heat projects by enabling the extraction of heat from Scottish Water's vast wastewater network. The Horizons project is partnered with SHARC Energy Systems who provide technology to capture and distribute the heat found in the sewer network. However, due to the applied use being most efficient and practical for buildings with a circa heat demand of over 1GWh, in the National Park application of this technology would be limited.

Historic Environment Scotland Climate Action Plan 2020 – 2025

The Action Plan (CNPA116) sets out how Historic Environment Scotland plan to transform the way they operate in response to the growing climate emergency. The actions focus on:

- How they will tackle the causes of the climate crisis and respond to the impacts.
- Changes in the way they protect and operate some of Scotland's most recognisable places and landmarks and the landscapes and infrastructure around them.
- Sharing knowledge, building resilience, and investing in sustainability to support others to address the climate emergency.

The Action Plan contains a number of actions specific to energy and carbon management. These include:

- Setting a long term 'net-zero' target by 2045, in line with new national emission reduction targets.

- Ensure that energy and carbon management objectives are mainstreamed within strategic and operational decision-making across the organisation.
- Develop increased funding options for carbon reduction projects, including external partnerships, loan funding and potential for leasing of appliances and infrastructure.
- Support energy efficiency retrofit programmes and qualification development for construction industry, including working with Scottish Government and partners (for example, Energy Saving Trust, Home Energy Scotland) to develop toolkits such as the Energy Improvements Report to improve domestic energy efficiency.
- Continue to improve energy reduction at sites through the installation of low-energy systems (for example, lighting and heating), improved controls and insulation measures.

Scottish and Southern Electricity Networks documents

SSEN Distribution Future Energy Scenarios 2023: Results and methodology report for the North of Scotland licence area

Scottish and Southern Electricity Networks (SSEN) Distribution is the electricity distribution arm of the energy company, Scottish and Southern Energy. SSEN Distribution are the Distribution Network Operator for the north of Scotland and as such the Cairngorms National Park. This report (CNPA115) outlines the results from the 2023 Distribution Future Energy Scenarios analysis for SSEN's north of Scotland electricity distribution network licence area (which covers the Cairngorms National Park). The north of Scotland electricity distribution licence area refers to the area served by the low voltage (LV), 11kV and 33kV network that is managed by SSEN.

Across the whole of the north of Scotland licence area base line there is currently 3.7GW of generation and storage capacity connected to SSEN Distribution's network. Within the National Park small scale hydropower sites contribute to the overall mix of key baseline technologies across the whole of the north of Scotland.

In the north of Scotland licence area there is 13GW of generation and storage capacity that either has a connection agreement or an offer to connect to SSEN Distribution's network. This includes one project within the National Park.

SSEN Distribution Strategic Development Plans

SSEN Distribution follows a strategic network planning process to ensure energy delivery while enabling pathways to net zero. Strategic Development Plans (CNPA169) are one part of this strategic network planning process and providing a blueprint of long term electricity system needs.

Strategic Development Plans bridge the gap between the Distribution Future Energy Scenarios and projects entering the Distribution Network Options Assessment process. These plans utilise the Distribution Future Energy Scenarios and stakeholder insights from local spatial plans to translate forecasts into system needs out to 2050. Recommendations from the strategic development plans outline the initial steps that SSEN Distribution believe should be taken on that pathway to develop the network in an efficient and stakeholder led way.

The Strategic Development Plans are living plans reviewed on an annual basis as SSEN's Distribution Future Energy Scenarios forecasts are updated. They act as blueprints to assist SSEN Distribution's connections and planning teams with the future network development. The recommendations from the Strategic Development Plans allow SSEN Distribution to respond swiftly to customer needs with works that form critical components of a long-term plan.

For each Strategic Development Plan, SSEN Distribution have published final and draft versions of the plans for consultation. SSEN Distribution intend to refresh the Strategic Development Plans on an annual basis. SSEN publish drafts for consultation plans and reports here:

- https://www.ssen.co.uk/about-ssen/dso/publications-and-reports/ (CNPA1387)

The Strategic Development Plans (Figure 1) that relate to the energy assets (Figure 5) supplying areas within the National Park are:

- Inverness 132kV Supply Area Strategic Development Plan (CNPA999)
- Persley 132kV Supply Area Strategic Development Plan (CNPA1145)
- Tealing 132kV Supply Area Strategic Plan (CNPA1103)
- Errochty 132kV Supply Area strategic Development Plan (CNPA725)
- Kintore Grid Supply Point Strategic Development Plan (final following consultation) (CNPA1071)

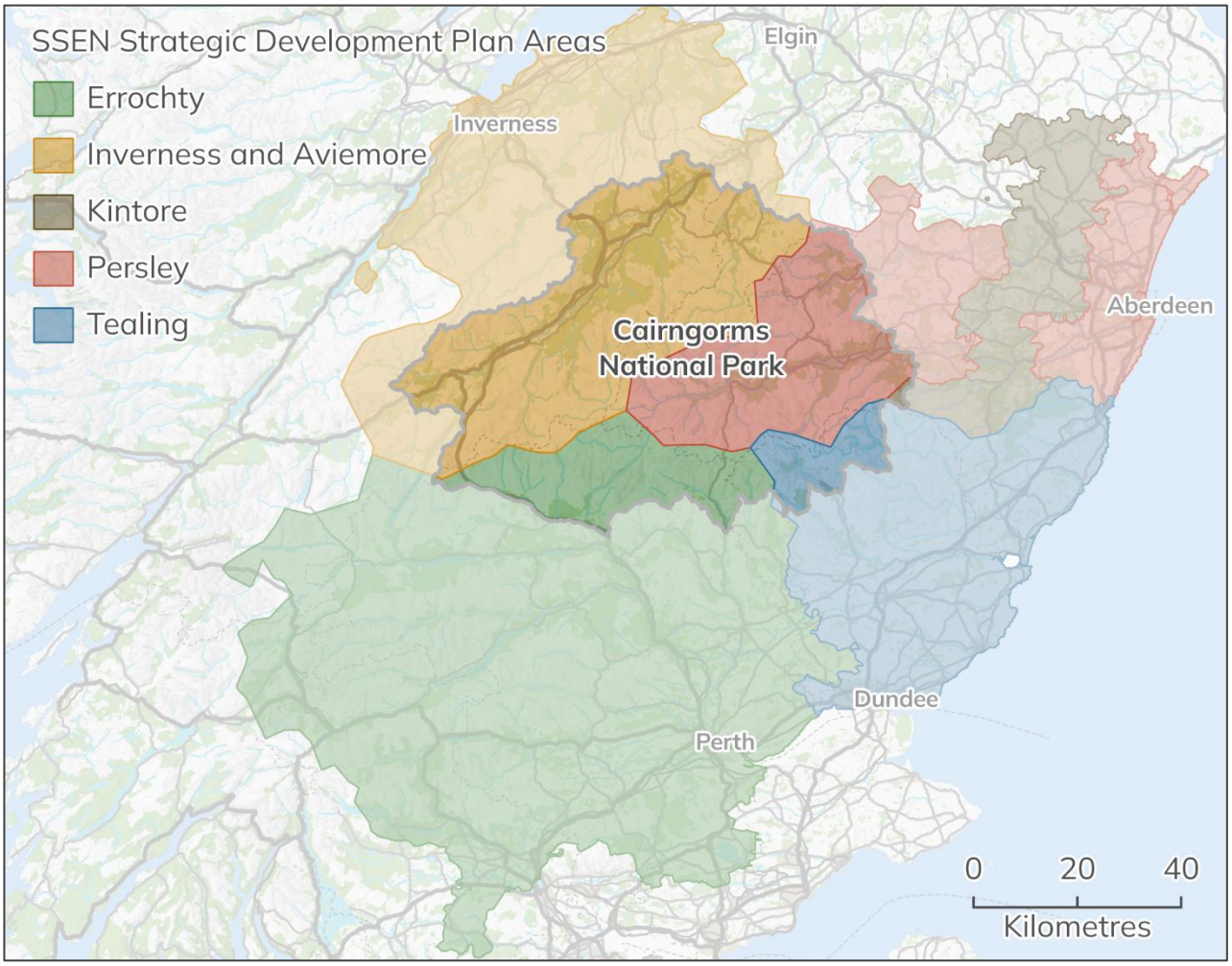


Figure 1 SSEN Distribution Strategic Development Plan areas that cover areas within the Cairngorms National Park. Data provided by SSEN Distribution. Cairngorms National Park Authority © Crown copyright and database rights 2026 Ordnance Survey AC0000821810. Contains data © SSEN Distribution, 2026.

This section examines the future network development affecting SSEN Distribution assets (Figure 5) that supply the National Park area. Detail on the methodology of the development of the Strategic Development Plans is available here:

- https://www.ssen.co.uk/globalassets/about-us/dso/publication--reports/strategic-development-plans---methodology-january-2025.pdf (CNPA1218)

The Plans set out the context for the supply area and future electricity forecasts. Forecasts take into account and reflect:

- Generation and storage
- Electric vehicle charging
- Electrification of heat
- New building housing development

- Commercial and industrial electrification

In relation to commercial and industrial electrification, one of the key considerations highlighted in more than one of the plans for areas in the National Park is that of distilleries. The majority of these distilleries currently rely on fossil fuels for heat production. The Scotch Whisky Association has set a target to achieve net zero emissions across the Scotch whisky industry by 2040 (CNPA743). The decarbonisation of these distilleries could significantly increase demand on local distribution networks.

SSEN Distribution have been approached by a number of whisky production companies in the area to request upgraded 33kV supplies to electrify their distilling processes. The primary driver for this transition is to meet evolving regulatory requirements around carbon intensity. Target completion timelines for these upgrades span from the mid-2020s into the 2030s. SSEN Distribution are actively engaging with distilleries in the region to understand their future demand projections. More information on the distilleries in the National Park is available in Schedule 23: Tourism.

Given the rural nature of the National Park, the decarbonisation of the agricultural sector is an important consideration. SSEN leads the innovation project 'Future Agricultural Resilience Mapping' (CNPA1158) which aims to understand the future energy requirements and means of decarbonising the domestic farming industry. This sector is currently still largely dependent on fossil fuels, and the project will support its investigations into the impact of food production on the electricity distribution system, to work out where reinforcement is needed. A data-driven tool to inform network planning will be devised and through this work, the Future Agricultural Resilience Mapping project will address the gap between the energy demands for food production and future network planning. More information on agriculture land in the National Park is available in Schedule 8: Land use, soil and resources.

SSEN Distribution reports that they have engaged with the local authorities to gauge the future demand from housing development but do not report any significant growth affecting supply. There are also no other large industrial consumers identified in the National Park that may affect the distribution. Information on industry is available in Schedule 21: Economic development.

The Strategic Development Plans also set out the specific system needs arising from SSEN Distribution's future spatial plans under the following headings:

- Future Energy High Voltage system needs to 2035 (near-term to medium-term distribution network system needs that have been identified through power system analysis).
- Future Energy High Voltage system needs to 2050.
- Future Hight Voltage / Low Voltage system needs to 2050.

As well as the Energy High Voltage system needs (to 2035 and 2050) identified in the Plans, increased penetration of low carbon technologies connecting to the distribution network will result in system needs on the High Voltage and Low Voltage networks. To provide a view on the impact of these technologies on the distribution network here SSEN Distriction has used their load model which estimates a half-hourly annual demand profile for each household based on a series of demographic, geographic and heating type factors. No implications are arising from this information for the Proposed Plan at this stage. The Park Authority will continue to engage with SSEN distribution to ensure the most up to date information is taken into account during the preparation of the Proposed Plan.

The connection of low carbon technologies across the High Voltage and Low Voltage networks will result in significant demand growth. Where it has been identified that there are overloads projected, mitigations may need to be put in place by SSEN Distribution.

Finally, the Strategic Development Plans also set out recommendations for SSEN Distribution which include reviewing development, capacity and constrains on the network to identify solutions. This includes understanding how rural decarbonisation could impact load on the network.

The Park Authority will continue to engage with SSEN Distribution to ensure the most up to date information on the energy distribution assets and network capacity is reflected in the Proposed Plan.

Inverness 132kV Supply Area Strategic Development Plan

The Inverness and Aviemore Strategic Development Plan draft for consultation (CNPA999) was published in October 2025. The focus area of this Plan includes the Boat of Garten Grid supply point (Figure 5). The Boat of Garten Grid Supply Point currently serves approximately 11,000 customers.

Of particular note in terms of potential considerations from this Strategic Development Plan for the National Park is the effect of decarbonisation of distilleries. Within the Inverness and Aviemore 132kV Supply Area there are 18 registered distilleries with most located close to the River Spey that runs through the supply area. Speyside in Moray and Highlands, which is partly in this Plan's supply area, is home to the greatest concentration of whisky distilleries in Scotland. More information on the distilleries in the National Park is available in Schedule 23: Tourism.

The Plan does not identify any network interventions (work in progress) at the Boat of Garten Grid Supply point. This Grid Supply Point serves the following primary substations serving residents in the National Park (Figure 5):

- Ballindalloch
- Grantown on Spey
- Boat of Garten
- Aviemore
- Kingussie
- Dalwhinnie

Energy High Voltage system needs to 2035

In relation to the Boat of Garten Grid Supply Point, the Plan reports the following considerations for the Future Energy High Voltage system needs to 2035 at Aviemore, Kingussie, Ballindalloch and Kingussie Primary Substations.

Aviemore and Kingussie Primary Substations sit along a rural circuit spur from the Boat of Garten Grid Supply Point. There is also a back feed to Keith Grid Supply Point. Potential options to resolve this constraint are:

- Upgrade the circuits, either by reinforcing the lower rated sections of circuit or reducing length thereby reducing impedance.
- Alter the distribution of load along the spur through load transfers.
- Install a STATCOM or voltage regulator along the circuit.

Ballindalloch Primary Substation is at the end of a long and rural circuit from the Boat of Garten Grid Supply Point. There is also a Normal Open Point to Keith Grid Supply Point. Potential options to resolve this constraint are:

- Upgrade the circuits, either by reinforcing the lower rated sections of circuit or reducing the length thereby reducing impedance.
- Feed all or part of Ballindalloch primary substation from Keith Grid Supply Point, reducing load on the network.
- Install a STATCOM or voltage regulator along the circuit.

Kingussie Primary Substation consists of two 7MVA transformers and experiences an overload in N-1 conditions. Potential options to resolve this constraint are:

- Reinforce the existing transformers to a higher rating.
- Shift load on the 11kV network, reducing the 11kV load connected to Aviemore or Dalwhinnie Primary Substation.
- Install another primary along the 33kV network, splitting the 11kV load.

Future Energy High Voltage system needs to 2050

In relation to the Boat of Garten Grid Supply Point the Plan reports the following considerations for the Future Energy High Voltage system needs to 2050 at Dalwhinnie. Dalwhinnie Primary Substation is a single 1MVA transformer and is expected to experience overload during intact conditions. Potential options to resolve this constraint are:

- Upgrade the existing transformer to accommodate load growth.
- Install an additional transformer at Dalwhinnie Primary Substation, increasing the resilience of the network.
- Shift load away from Dalwhinnie on the 11kV network.

There is also a constraint identified at the Tomatin Primary Substation which has no direct implications for the supply in the National Park.

Persley 132kV Supply Area Strategic Development Plan

The Persley Strategic Development Plan (CNPA1145) was published in August 2025. The focus area of this Plan includes the Tarland Grid Supply Point which supplies areas of the National Park (Figure 5). The Tarland Grid Supply Point serves 10,237 customers both withing and out with the National Park. Kintore Grid Supply Point is also supplied via Persley 132kV substation and has an individual Strategic Development Plan.
The Tarland Grid Supply Point serves the following substations that supply areas of the National Park (Figure 5):

- Strathdon
- Ballater
- Aboyne

Persley 132kV supplies parts of the Aberdeenshire Council area. Some of the area supplied by the Persley 132kV supply is within Cairngorms National Park, including Braemar and Ballater. This area is largely rural, featuring notable sites such as Royal Lochnager distillery, Balmoral Castle and Lecht Ski Centre. As is the case for the

Inverness 132kV Supply Area the potential future decarbonisation of distilleries is also a key consideration.

Projects in progress

Network interventions can be caused by a variety of different drivers. Examples of common drivers are load related growth, specific customer connections, and asset health. Across the Persley 132kV supply area, these drivers have already triggered network interventions that have now progressed to detailed design and delivery.
In terms of forecasting in the Strategic Development Plan, these works are assumed to be complete, with any resulting increase in capacity considered to be released.

Projects that affect the supply in the National Park include works at the Aboyne and Ballater Primary Substations and plans for the new Braemar Primary Substation (Tarland Grid Supply Point), these include works to:

- Extend existing Grid supply Point switch room to accommodate 2 x Circuit breakers.
- Isolate Aboyne Primary Substation from the existing ring circuit arrangement with Ballater Primary Substation, by installing two new cable circuits, and close the ring to the west of Aboyne
- Upgrade the switchboard at Ballater Primary Substation and include 2 x STATCOMs.
- Establish a new Primary Substation at Braemar by repurposing an existing 11kV overhead line from Ballater Primary Substation to 33kV, and the addition of a new 33kV underground cable.

Future Energy High Voltage System Needs to 2035

Nothing noted relating to the Tarland Grid Supply Point in relation to the substations serving the National Park area.

Future Energy High Voltage System Needs to 2050

Nothing noted relating to the Tarland Grid Supply Point in relation to the substations serving the National Park area.

In the Persley 132kV supply area, onshore wind generation serves as a large-scale renewable energy resource on the distribution network, due to Aberdeenshire's strong and consistent wind conditions along the northeast coast of Scotland. These projects contribute substantial generation capacity to the electricity grid, with current installed capacity reaching 130MW and projections indicating an increase to 340MW by 2050, under the Consumer Transformation scenario. There is a significant amount of industry work reforming the approach to generation and storage connections and the connections queue. Initiatives such as CP2030 and Connections Reform have the

potential to change our current forecasts. SSEN Distribution will look to provide updated projections as the outputs of these programmes are understood.

As noted in the Strategic Development Plan, Aberdeenshire and Aberdeen local authorities have significant plans to decarbonise transport. The shift to electrified transport is likely to be a large source of electricity load growth across Persley and will be a key consideration for SSEN's strategic planning. The Park Authority will continue to engage with SSEN Distribution to inform the preparation of the Proposed Plan.

Tealing 132kV supply Area Strategic Plan

The Tealing Strategic Development Plan draft for consultation (CNPA1103) was published in October 2025. The focus area of this Plan includes the Bridge of Dun and Lunanhead Grid supply points that supply areas of the National Park (Figure 5). The Bridge of Dun Grid Supply Point currently serves approximately 15,600 customers, and the Lunanhead Grid Supply Point supplies 16,700 customers. It should be noted that only a small proportion of the customers served by both Grid Supply Points are residents within the National Park.

Lunanhead supplies the Primary Substation of Maryton that serves a small rural sparsely populated area of the National Park. Similarly, the Bridge of Dun Grid Supply Point supplies Inchbare which also serves only a small rural sparsely populated area of the National Park.

The Plan also notes that SSEN Transmission is in the early stages of replacing the existing 90 MVA transformer (GT1) at Lunanhead with a 120 MVA unit, to match the capacity of GT2, which will also undergo reconfiguration. This reinforcement has been triggered to support a connection pipeline of 64.2 MW, due for connection by October 2029. Although Lunanhead Grid Supply Point supplies the Maryton Primary Substation there are no implications arsing for the Proposed Plan at this stage from this development. The Park Authority will continue to engage with both SSEN Transmission and SSEN Distribution during the preparation of the Proposed Plan.

<u>Work in progress</u>

The Plan outlines the following network interventions which have progressed to detailed design and delivery. In terms of the Plan, these works are assumed to be complete, with any resulting increase in capacity considered to be released. Network interventions affecting supply to the National Park include:

At Bridge of Dun Grid Supply Point works include:

- 2 x Primary Substation transformers upgraded from 7.5/15 to 20/40MVA.
- Whole 33kV and 11kV Primary substation switchboard replaced.
- Grid Supply Point 33kV switchboard replaced.
- New Grid Supply Point to be triggered for multiple contracted generation projects as current Grid Supply Point no longer has distribution options available – driven by need for load reinforcement.

At Lunanhead Grid Supply Point works include:

- New Grid Supply Point to be triggered for multiple contracted generation projects as current Grid Supply Point no longer has distribution options available – driven by need for load reinforcement.

Future Energy High Voltage System Needs to 2035

The following distribution network needs have been identified at the Lunanhead and Bridge of Dun Grid Supply Points and Primary Substations supplying areas within the National Park.

Lunanhead Grid Supply Point - 1L5 circuit to Maryton Primary Substation - Thermal constraints imminent due to 1km of weak rated UG cable, remaining circuits do not overload till 2031. Options to resolve include:

- Upgrade existing cables.
- Procurement of flexibility services
- Load shedding on the 11kV network (both Primary Substations have interconnections with Lunanhead Primary Substation) Bridge of Dun Grid Supply Point - 1L5 circuit to Inchbare Primary Substation.

Bridge of Dun Grid Supply Point - 1L5 circuit to Inchbare, Logie Pert and St Cyrus Primary Substation. Voltage and thermal constraints occur simultaneously and options to resolve include:

- Upgrade existing overhead line and underground cable to a larger conductor (higher thermal rating and lower impedance, hence lower voltage drop).
- Procurement of flexibility services.
- Load shedding on the 11kV network (several interconnections with multiple Primary Substations) The inverse N-1 outage, shown in Table 3, Row 3, also presents constraints. A broader intervention approach may be required, such as isolating one of the larger Primary Substations with dedicated 33 kV feeds. At present, six Primary Substations are supplied through a single feeder under an N-1 outage. Isolating Primary Substations would help to address these constraints and improve overall network resilience

Future Energy High Voltage System Needs to 2050
Nothing noted relating to the Bridge of Dun or Lunanhead Grid Supply Point in relation to the substations serving the National Park area.

Strategic Development Plan recommendations:
The Plan recommends that system needs that have been identified to arise in the near term should be progressed through the Distribution Network Options Assessment process to develop a more in-depth solution. For this Strategic Development Plan, this includes no transformer thermal constraints at Maryton or Inchbare Primary Substations. However, the plan identifies Thermal and / or voltage constraints on the:

- Circuit to Inverarity and Maryton Primary Substation.
- Circuit to Inchbare, Logie Pert and St Cyrus Primary Substation.

At present the constraints mentioned about do not raise any implications for the Proposed Plan. The Park Authority will continue to engage with SSEN Distribution to ensure any updates to the Strategic Development Plan inform the Plan preparation.

Errochty 132kV Supply Area Strategic Development Plan
The Errochty Strategic Development Plan draft for consultation (CNPA725) was published in October 2025. The focus area of this Plan includes the Rannoch, Tummel Bridge and Couper Angus Grid supply points, which serve areas of the National Park (Figure 5). The supply area covered by this Strategic Development Plan forms part of the overall SSEN Transmission Strategy. The Transmission Strategy consists of four projects that are relevant to the Errochty 132kV switching station:

- Beauly – Denny 400kV Upgrade
- Cambushinnie 400kV Substation
- Errochty Grid Supply Point
- Lochay 132/11kV Transformer Replacement

Although the improvements are outwith the National Park, they have a bearing on the energy delivery to areas of the National Park that are served by the Grid Supply Points served by the Errochty 132kV supply.

The number of customers served in total (both in and outwith the National Park) by the Grid Supply Points serving areas of the National Park (Figure 5) is as follows:

- Couper Angus Grid Supply Point - 16,107 customers.
- Rannoch Grid Supply Point – 506 customers.
- Timmel Bride Grid Supply Point – 6,836 customers.

Work in progress

The Plan outlines the following network interventions which have progressed to detailed design and delivery. In terms of the Plan, these works are assumed to be complete, with any resulting increase in capacity considered to be released. Network interventions affecting supply to the National Park works at Couper Angus, Rannoch and Tummel Bride Grid Supply Points.

Couper Angus Grid Supply Point works include the Coupar Angus 11kV Switchboard & T2 Replacement:

- Replacement of existing 8MVA primary transformer with 15MVA unit.
- Replacement of 7 panel 11kV switchboard.

Expected completion 2026.

Tummel Bridge Grid Supply Point works potentially affecting supply in the National Park include the Errochty / Tummel Bridge Works Integration works and the creation of a new Errochty Grid Supply Point comprising of:

- 2x 90MVA grid transformers.
- Diversion of the 5x existing 33kV circuits from Tummel Bridge Grid Supply Point to the new Errochty Grid Supply Point.
- Install a new 33kV circuit from the new Errochty Grid Supply Point -Tummel Primary, which will be disconnected from the existing 4H0 33kV circuit currently feeding Tummel Power Station
- Bonskeid T1 Transformer Replacement- replacement of the existing 5MVA Bonskeid primary transformer with a 6.3MVA unit.

Works associated with the Calvine Primary Substation to the Calvine Primary Transformer which include:

- Replacement of the existing 2.5MVA Calvine primary transformer with a 6.3MVA unit.
- Installation of one new 33kV circuit breaker.
- Removal of the existing 33kV pole mounted circuit
- breaker (PMCB) within Calvine primary substation.
- Installation of a new 3 panel 11kV switchboard.

Future Energy High Voltage System Needs to 2035

The following distribution network needs have been identified at the Couper Angus Grid Supply Point and Primary Substations supplying areas within the National Park.

Couper Angus Grid Supply Point – Dalrulzion Primary Substation (2x 33kV Transformers):

- Thermal Constraint identified - thermal overload of Dalrulzion primary transformers under N-1 conditions.
- Voltage Constraint identified - low voltage from 2034 onwards under N-1 and intact conditions. conditions.

Potential options to resolve this constraint are:

- Reinforcement of existing primary transformer.
- Assess options for transfer of some 11kV load onto adjacent interconnected Primary Substation's.
- Establish a new primary substation and transfer some 11kV load from the existing Dalrulzion Primary Substation.
- New Grid Supply Point in the Dalrulzion / Bankfoot / Dunkeld vicinity and new 33kV circuits to interconnect with Coupar Angus 1L5 & 2L5.
- Assess options for procuring flexibility services.

Couper Angus Grid Supply Point – Alyth Primary Substation (2x 33kV Transformers):

- Thermal Constraint identified - Thermal overload of Alyth primary transformers under N-1 conditions.
- Voltage Constraint - Low voltage from 2034 onwards under N-1 and intact conditions.

Potential options to resolve this constraint are:

- Reinforcement of existing primary transformer.
- Assess options for transfer of some 11kV load onto adjacent interconnected primary substations.
- Establish a new primary substation and transfer some 11kV load from the existing Alyth Primary Substation.
- New Grid Supply Point in the Dalrulzion / Bankfoot / Dunkeld vicinity and new 33kV circuits to interconnect with Coupar Angus 1L5 & 2L5.
- Assess options for procuring flexibility services.

Rannoch Grid Supply Point - Blackmount PSS (33kV Transformer):

- Thermal Constraint - thermal overload of Blackmount primary transformer under N-1 conditions.

Potential options to resolve this constraint are:

- Reinforcement of existing primary transformer (Pole-mounted).

- Assess options for procuring flexibility services.

Future EHV System Needs to 2050

In relation to the Tummel Bridge Grid Supply Point the Plan reports the following considerations for the Future Energy High Voltage system needs to 2050:

Tummel Bridge 33kV circuit 3L5:

- Voltage Constraint - low voltage from 2040 onwards under Intact and N-1 conditions.

Potential options to resolve this constraint are:

- Reinforcement of existing Tummel Bridge / Errochty 3L5/6L5 33kV ring circuit.
- New Grid Supply Point in the Dunkeld vicinity and new 33kV circuits to interconnect with Killin 4L5 & Tummel Bridge / Errochty 5L5 circuits.
- Installation of voltage compensation assets

Tummel Bridge 33kV ring circuit 3L5/6L5:

- Voltage Constraint - low voltage from 2040 onwards under Intact conditions.

Potential options to resolve this constraint are:

- Reinforcement of existing Tummel Bridge / Errochty 3L5/6L5 33kV ring circuit.
- New GSP in the Dunkeld vicinity and new 33kV circuits to interconnect with Killin 4L5 and Tummel Bridge / Errochty 5L5 circuits.
- Installation of voltage compensation assets.

Strategic Development Plan recommendations

Recommendations set out in the Plan relating to the energy infrastructure supplying the residents of the National Park include the following:

System needs that have been identified at earlier timescales (ahead of 2035) should be studied in more detail. Work in these timescales should be progressed for more detailed assessment through the Distribution Network Options Assessment process. For this Strategic Development Plan, this includes the following Primary Substations:

- Dalrulzion Primary Substation (2x 33kV Transformers)
- Alyth Primary Substations (2x 33kV Transformers)

SSEN are advised to ensure an open channel of communication is present between SSEN Distribution, SSEN Transmission and National Energy System Operator regarding the following:

- The possibility / feasibility of establishing new Grid Supply Points located in the vicinity of Dalrulzion / Dunkeld / Bankfoot. This should be explored in further detail as a potential option to alleviate future forecasted constraints on the existing Abernethy, Burghmuir, Coupar Angus, Killin, Tummel Bridge / Errochty distribution networks and increasing network resilience within the region.
- The development of policy to unlock the ability of local and community-based generation to connect.

The connection of low carbon technologies across the High Voltage and Low Voltage networks will result in significant demand growth. Where it has been identified that there are overloads projected, mitigations will need to be put in place. The Park Authority will continue to engage with SSEN Distribution to ensure any updates to the Strategic Development Plan inform the Plan preparation.

Kintore Grid Supply Point Strategic Development Plan

The Kintore Strategic Development Plan (CNPA1071) was published in July 2025. The focus area of this Plan is the Kintore Grid supply points, which supplies the Banchory Primary Substation (Figure 5) which supplies a small rural area south of Glen Tanar. A new Grid Supply Point (Kintore 2) is under development in the Kintore area driven by the high volume of generation connections requests in the region. This has an estimated completion date of before 2035.

There are ongoing works at the Banchory Primary Substation to reinforce cable with 500Al cable from Banchory to Kintore Grid Supply Point (expected completion 2028 / 29). There are projected constraints identified to 2050 at Banchory Primary Substation, due to projected load growth. However, given the fact that the area within the National Park is largely uninhabited and covers an area where no development is expected to be realised in the Proposed Plan given its remote location. There are no implications arising from this Strategic Development Plan with regard to the preparation of the Proposed Plan.

National Park Authority documents

Cairngorms National Park Partnership Plan 2022 – 2027

The National Park Partnership Plan (CNPA010) Objective A1 aims to ensure the Cairngorms National Park reaches net zero as soon as possible and contributes all it can to helping Scotland meet its net zero commitments.

Policy B1 seeks to deliver a wellbeing economy in the Cairngorms National Park which strengthens existing business sectors, supports business start-ups, develops green jobs, supports diversification and the circular economy, and maintains the number of workers employed in the National Park. This can, in part, be achieved through criterion f:

- Broadening the economic base of the National Park into sectors such as the creative industries and renewable energy, making stronger links with higher and further education.

Policy C2 seeks to support the development of a low carbon, circular economy, with a particular focus on:

a) Increasing renewable electricity and heat generation, especially biomass, hydro, solar, small-scale wind turbines and heat exchange pumps that are compatible with conserving the special qualities of the National Park and maintain the integrity of designated sites.
b) Supporting businesses and communities to use less energy, reduce emissions, improve the energy efficiency of existing buildings, generate low impact renewable energy, reduce, reuse and recycle resources, and plan for a changing climate.
c) Maximising the benefits to communities through direct use of locally generated energy or, where sold to the grid, reinvesting income to support community development.

Policy C2 also sets out that 'large-scale wind turbines are not compatible with the landscape character or special landscape qualities of the National Park. They are inappropriate within the National Park or in areas outside the National Park where they adversely affect its landscape character or special landscape qualities'[1].

Cairngorms 2030

The Cairngorms 2030 projects (CNPA528) will support the delivery of the National Park Partnership Plan 2022 – 2027. In the Partnership Plan, the Park Authority have committed via objective A1 – 'Net Zero' to putting the power to tackle the climate and nature crises in the hands of people who live, visit and work in The Cairngorms National Park.

Two projects that are of relevance to energy are:

- Climate conscious communities
- Climate learning and education

[1] The landscape impacts of wind farm development are covered in Schedule 6: Landscape.

The climate conscious communities project will increase awareness and deepen understanding of the climate emergency and its relevance to residents, communities, landowners and businesses in the National Park through a series of dedicated workshops. The workshops, led by Keep Scotland Beautiful, are aimed at anyone with a desire to increase their understanding and make more informed decisions to reduce their impact on the environment.

The climate learning and education project will put the voices of young people at the heart of decision making in the National Park and will empower and inspire young people and educators to take forward pro-environmental behaviours and activity. The Park Authority will adopt the United Nations Educational, Scientific and Cultural Organization (UNESCO)'s Education for Sustainable Development mission (CNPA139) and make it relevant to the Cairngorms National Park and its people.

Local authority documents

Moray Council Hydrogen Strategy 2022

The Council's Hydrogen Strategy (CNPA118) aims to support the Scotland Hydrogen Action Plan. Moray Council is exploring opportunities with partners to develop pilot projects and considering suitable hydrogen production and refuelling sites. A report to the Council's Economic Development and Infrastructure Services Committee on 6 February 2024 approved a Scoping Report for delivery of Phase two of the Moray Hydrogen Strategy.

The Strategy aims to support the growth of a hydrogen economy in Moray during the short to medium term, including connecting into adjacent areas, which could:

- Contribute towards a reduction in greenhouse gas and particulate emissions.
- Improve the security of Moray's energy supply.
- Increase and make better use of local renewable energy generation; and help to address fuel poverty issues, particularly in rural areas.

To deliver a hydrogen economy the following key steps are proposed in the Moray Hydrogen Strategy:

- In the short term (2023 – 2030): create a hydrogen steering group within Moray to drive the development of hydrogen opportunities, stimulating both supply and demand. This group is led by Moray Council and includes key stakeholders from the industrial base and wider community.
- Develop a pilot project to generate demand for hydrogen locally. A small-scale pilot project or projects are proposed to include combined hydrogen generators, storage

and refuelling at a single site. The potential locations to be considered are not within the National Park.
- In the short to medium term, the aim is to expand the hydrogen generation facilities to further stimulate the demand from road freight transport and from the industrial users such as the distilleries.
- In the long term (beyond 2040), the hydrogen economy for Moray could be based on generating hydrogen from green electricity sources within Moray, purchasing hydrogen from outside the area, and distributing hydrogen through the area through a pipeline network. The demand for hydrogen would come from a wider range of sectors including the distilleries, other high-heat industry, the road haulage industry, council services and potentially to heat homes and businesses.

Local outcomes improvement plans

Local outcome improvement plans outline key priorities for each community board area that have been identified through a range of engagement processes and are based on the needs of local communities. They set out an approach to working with and empowering our local communities, enabling them to contribute to, influence and shape locally identified actions around the priorities to achieve improved outcomes for their areas. The five local authorities which overlap the Cairngorms National Park all have individual Local outcome improvement plans (in some cases referred to as community plans).

While the Cairngorms National Park Partnership Plan (CNPA010) is the source of the vision for the local development plan (as explained in Schedule 1: Plan outcomes) the local development plan may support the delivery of the vision and priorities of local outcome improvement plans. A summary of issues relating to this schedule for each local authority are set out below.

Aberdeenshire Local Outcome Improvement Plan 2017 – 2027

The Aberdeenshire Community Planning Partnership's Local outcomes improvement plan (CNPA636) sets a ten year vision. One of two current priorities agreed in September 2024 is place based community planning. While there are no Local Place Plans registered covering any areas in the National Park, the proposed plan will have regard to the community action plans.

Angus Community Plan 2022 – 2030

The Angus Partnership's community plan (CNPA637) has a vision for 2030 that Angus is a great place to live, work and visit. 'Caring for our People' is one of three priorities to

achieve the vision. The plan recognises that 40% of households are experiencing fuel poverty and that this is likely to grow. The partnership is exploring how to best mitigate the situation. 'Caring for our Place' is another one of the three priorities. The plan explains that council housing stock is being retrofitted to reduce energy use.

2024 – 2027 Highland Outcome Improvement Plan

Energy issues are not considered in the Highland outcome improvement plan (CNPA638).

2024 – 2027 Highland Outcome Improvement Plan Delivery Plan

The Highland outcome improvement plan delivery plan (CNPA1091) introduces cross-cutting themes to deliver the three priorities (people, place, prosperity). Under the 'community wealth building' cross-cutting theme, a measure of success will be, 'greater community benefit from renewables realised'. Under the 'housing' cross-cutting theme, one aim to tackle the Highland Housing Challenge is to realise new or serviced sites for housing through renewable energy schemes.

Moray Local Outcome Improvement Plan (2016 – 2026)

Energy issues are not considered in the Moray Planning Partnership's local outcome improvement plan (CNPA639)

Perth and Kinross Community Plan (Local Outcomes Improvement Plan) 2022 – 2032

Perth and Kinross Community Planning Partnership's community plan (CNPA640) has an ambition to be the best place in Scotland for everyone to live life well, free from poverty and inequality. Five priorities are identified, all of which focus on inequalities. The cost of living crisis is identified as a cross-cutting issue characterised by a global economic downturn and volatility in energy prices. Identified actions under the reducing poverty strategic priority include 'supporting improved energy efficiency in homes'.

Community action plans

The following action plans identify issues and / or priorities relating to energy.

Aviemore, Rothiemurchus and Glenmore Community Action Plan: Looking to 2030

Under the climate conscious community theme, the Action Plan (CNPA063) contains a priority to improve public transport to reduce the need for and use of cars. An action to deliver this is to commission electric buses for regular access to Glenmore and Cairngorm Mountain. This may present additional considerations for energy infrastructure to accommodate charging provision.

Furthermore, under the economically thriving community theme, the action plan contains a priority to increase parking availability or deliver a better bus service for workers in the town. An action to deliver this is to investigate the feasibility of a park and ride scheme, which would include charging points for electric vehicles.

More information on transport matters in the National Park is covered in Schedule 11: Sustainable transport.

Ballater and Crathie Community Action Plan 2023

Under the environment and energy theme, the Action Plan (CNPA119) sets out the aim 'to strive to make Ballater and Crathie as resilient, self-sufficient and carbon negative a place in which to live, work and visit as they can'. The community set the following strategic goal:

- To investigate the provision of local energy supply whether ground source, solar, hydro-electric or geothermal and how best to improve the provision of transport with less carbon dioxide generation.

It also sets a tactical goal to promote the insulation of properties and ways to assist reduction in the need for energy.

Blair Athol Community Action Plan: Looking to 2030

Within the Action Plan (CNPA064) The community express the need for further electric vehicle charging in the area. Data on electric vehicle charging in the Cairngorms National Park is available in Schedule 11: Sustainable transport. There are no other implications for this schedule.

Boat of Garten Community Action Plan: Looking to 2030

In the Action Plan (CNPA374), there were no implications for the Proposed Plan arising from the suggestions listed under the five themed headings. However, the engagement with the community did lead to the following suggestions for improvement relating to energy under the environmental heading (appendix ii):

- Electric vehicle chargers that charge faster … and work!
- Renewable energy project (wind, solar) for the village

Braemar Community Action Plan

Under theme four: Community capacity the community set out its plans to complete the community hydro scheme on the Corriemulzie Burn on the Mar Estate, with income

generated made available or local projects. The project was completed in 2016 and a 100kW hydro-electric scheme is now generating electricity which is fed into the national Grid. More details on the hydro scheme can be found here on the Braemar community hydro groups Facebook page (CNPA1227).

Braemar Community Action Plan is currently under review and an updated version is due to be published later in 2026.

Carrbridge Community Action Plan: Looking to 2030

Under the climate conscious community theme, the Plan (CNPA122) sets out the following priority:

- (to) Use our natural assets to develop enterprise, business and tourism opportunities. The Community are seeking to explore harnessing renewable energy for local use which could include hydro or wind energy generation the community are seeking to:
- Engage with the Park Authority for support with possible hydro project using the Dulnain and also community wind turbines.
- Buy community shares in a local windfarm and add one extra wind turbine generator to the development next to Tom nan Clach. For example, the Fintry ownership model, to provide income to village for further projects.

Under the same priority the community highlight the desire for a community led development and explore the use of the sawmill area for commercial use. This could include a site for solar panels and energy storage for the whole village.

During the public consultation the following suggestions were made supporting the proposed actions:

- A community owned renewable energy project for example a wind turbine that could generate both energy and income.
- Possible shared renewable energy scheme (could the community take 'ownership' of one or two of the wind turbines going in on the Dava and benefit directly from renewable power?).

Dalwhinnie Community Action Plan: Looking to 2030

In the Action Plan (CNPA125) under the climate conscious community theme the community have set out a priority to 'reduce energy consumption as a village and for households', The Plan sets out the community aim to investigate and seek advice and support available with the aim of setting up an information event at hall for local residents and businesses to drop in. They set out the aim to work with Laggan Community Council who expressed a desire to do something similar.

Within the responses relating to the environment the suggestion to turn off streetlights could also produce energy savings as well as providing solar lights located within bus stops for environmentally friendly on demand lighting. Coupled with an increase in the electric charging facilities for residents and tourists.

Grantown-on-Spey Community Action Plan: Looking to 2030
In the Action Plan (CNPA065), under the theme of a climate conscious community is the suggestion addressing the Conservation Area Management Plan (CNPA048). Actions supporting this suggestion include:

- Remove barriers for energy improvements for example solar panels and PVC windows keeping aesthetics suitable.
- Release the 1960s and 70s bungalows from the Plan restrictions – they are unfair and unjustifiable

Matters relating to conservation areas in the National Park are covered in Schedule 7: Historic and cultural heritage.

Kincraig and Locality Community Action Plan: Looking to 2030
Within the socially connected communities theme, the Action Plan (CNPA127) contains a priority to improve public transport. An action to deliver this priority is to commission electric buses for regular services between Aviemore, Kincraig and Kingussie, to help people access jobs, services and recreation. This may present additional considerations for energy infrastructure to accommodate charging provision. Within the same theme there is a priority addressing the community hall and an action to install electric vehicle chargers.

Kingussie Community Action Plan Consultation Results: Looking to 2030
The Action Plan (CNPA066) sets out the suggestion to explore further community energy projects under the theme of 'an economically thriving community'. The suggestion aims to develop options for community wind, solar or hydro schemes to provide community income and sets out the following actions:

- Develop a local green energy strategy and evaluate opportunities Install electric vehicle chargers in public car parks to bring in income.
- Community rent rooftops for solar panels.
- Establish a community enterprise to train up young people to do retrofit projects (insulation for example).
- Explore district heating opportunities.

- Work with: Cairngorms National Park Authority, Scottish and Sothern Energy Networks, Highlands and Islands Enterprise, Kingussie Community Development Company, The Highland Council, Energy Trust, Schools

There is also a suggestion to provide more electric vehicle chargers to support visitor spend at the local shops. More information on transport matters in the National Park is covered in Schedule 11: Sustainable transport.

Laggan Community Action Plan: Looking to 2023

Under the theme of a climate conscious community, the Action Plan (CNPA129) sets out the priority of 'energy efficient housing and community properties'. To achieve this the community will seek to:

- Investigate opportunities for a village turbine (electric or hydro).

Under the theme of a socially connected community the community sets out the priority of 'having affordable places to live'. The community sets out the following action to achieve this:

- Community support scheme to help residents & businesses make their homes more energy efficient/better insulated (double glazing, solar panels, heat pumps, smart meters and other similar things) this will be delivered through:
  - Investigating advice and support available – set up an information event at hall for local residents and businesses to drop in.
  - Exploring possible use of Southern and Scottish Energy Networks money for a scheme.

Under the suggestions put forward as part of their community consultation the following responses were garnered:

- The need for insulation and energy efficiency programme with support for local housing.
- Initiate a programme of insulation and energy efficiency inspections undertaken in all tenanted properties and community owned properties to reduce energy use and costs.
- Explore possibilities for a community renewable energy scheme at the Speyside dam.

The community did express the need for further electric vehicle charging in the area. Matter relating to electric vehicle charging provision is addressed in Schedule 11: Sustainable transport.

Mount Blair Community Action Plan

The vision set out in the Action Plan (CNPA130) includes the following aim of reducing its carbon footprint and lowering its costs of living, which in part can be achieved through the use of renewable energy and lowering the communities carbon footprint.

One of the main strategies, titled Infrastructure and renewable energy specifically addresses the communities' challenges in terms of high cost of fuel. To tackle this the community proposed the following priorities:

- Develop wood fuel / biomass community initiative
- Establish collective buying scheme for oil.

The Action Plan also sets out the priorities under the community and recreational facilities theme (three) to:

- Support Ballintuim Village Hall to make improvements to car parking area, install renewable and cost-effective heating and other upgrades.

Nethy Bridge Community Action Plan: Looking to 2030

Under the theme of an economically thriving community the Action Plan (CNPA131) sets the priority to review the possibility of a community owned renewable energy project involving looking into the feasibility for wind turbines, hydro scheme or solar farm to help fund other community initiatives. They propose the following actions to achieve this:

- Revisit up to date possibilities for community energy scheme and revenue generation for benefit of community projects. Feasibility study for locations for example Dell farm solar. Need to seek advice on funding sources.
- Consider a wider range of renewables for example Nano hydro micro generators.
- Lobby Scottish Government and Cairngorms National Park Authority to amend policy to allow for 2 – 3 community owned turbines for example above Dirdhu which is out of sight for most.
- Support for individual households to help with green energy generation.
- Advice sessions and help with funding installations.
- Encourage use of small domestic wind turbines.

Under the other suggestions the community would like to explore and see initiatives to help the community learn about better insulation and other energy efficiency measures.

Newtonmore Community Action Plan: Looking to 2030

Under the theme of a climate conscious community the Action Plan (CNPA132) sets the priority to 'use our natural assets to develop enterprise business and tourism opportunities'. To achieve this the community action plan sets out the action to:

Explore harnessing renewable energy for local income generation (hydro/wind), this involves:

- Speaking with National Park Authority for support with possible hydro project using the Calder or Allt Laraidh and also community wind turbines.
- Buy community shares in a local windfarm and add an extra wind turbine generator to a development for example the Fintry ownership model, to provide income to village for further projects.

The community are also keen to build community resilience, through delivering more EV charging points and improving heating and insulation of local homes.
Under the other suggestions the community would like to explore options for future proofing for houses with alternative heating supplies away from fossil fuels / home insulation measures.

Strathdon Community Action Plan: looking to 2030

Under the theme of a climate conscious community the Action Plan (CNPA133) sets the priority to develop community renewable energy projects. This includes the following actions:

- More solar panels on public buildings.
- Wood fuel project to make money and donate to wood bank.
- Develop power generation using water, rivers, burns etc.
- Continue discussions with Dorenell Windfarm regarding future community financial benefits.
- Doune Cabin can be used to recycle unwanted goods and plants and advertises larger items and services.
- Use existing buildings and empty spaces rather than build new because they are more climate friendly.

Baseline of energy infrastructure matters

This section provides baseline information on electricity infrastructure transmission and distribution capacity and information on energy generation and storage.

There are links between this policy area and:

- Schedule 1: Plan outcomes
- Schedule 3: Site assessment methodology
- Schedule 4: Climate change
- Schedule 5: Natural heritage
- Schedule 6: Landscape
- Schedule 7: Historic and cultural heritage
- Schedule 8: Land use and resources
- Schedule 10: Zero waste
- Schedule 11: Sustainable transport
- Schedule 13: Housing
- Schedule 15: Heating and cooling
- Schedule 19: Flood risk and water management
- Schedule 21: Economic development

Electricity infrastructure transmission and distribution capacity

The National Grid Electricity Ten Year Statement (CNPA140) reports that over the next decade the British Electricity Transmission System faces growing system needs, driven primarily by low carbon and renewable generation. This will drive requirements for new network capability in the move towards the 2035 UK Government target of 100% zero carbon electricity system and beyond. In Scotland, future generation growth is primarily from renewable generation located at the peripherals of the network. Different solutions are required to ensure the high voltages are managed in central Scotland.

Electrical transmission

SSEN Transmission are responsible for the electrical transmission serving the distribution network that provides electricity to the residents and businesses in the Cairngorms National Park. The primary source of data of open data on SSEN Transmission can be accessed here:

- https://www.ssen-transmission.co.uk/ (CNPA142)

SSEN Transmission are investing over £20bn to upgrade the network infrastructure across the north of Scotland between now and 2030.

As a mass transporter of renewable energy, the north of Scotland electricity transmission network has a major role to play in supporting delivery of Scotland and the UK's 2030 net zero targets, connecting new onshore and offshore renewables generation and transporting the power generated to demand centres in the rest of Scotland and beyond.

This investment is critical to powering change and meeting Scotland and the UK's renewable energy targets, accelerating Scotland's delivery to meet the 2030 offshore wind connection dates, known as the Pathway to 2030.

The projects include new overhead lines, substations and subsea links and are part of a major upgrade of the electricity transmission network across Great Britain. More information on SSEN Transmission projects can be found here:

- https://www.ssen-transmission.co.uk/projects/2030-projects/ (CNPA143).

SSEN Transmission projects

The Electricity Supply Operator's plan for the north of Scotland sets out proposals for a number of projects to proceed now for delivery by 2035 (CNPA145), which combined represent a potential estimated investment of over £5bn for SSEN Transmission (Figure 3) (CNPA146).

SSEN Transmission have indicated that the 'progression of these investments will require an appropriate regulatory framework, including early confirmation that SSEN Transmission will be the Delivery Body, alongside securing all planning and regulatory approvals. They will also be subject to extensive public consultation to help inform the development of these new and upgraded network infrastructure requirements.'

Beauly Denny upgrade

The Beauly to Denny overhead power line, which is 220km long, runs from Beauly, north of Inverness, to Denny near Falkirk. It was the first 400kV overhead line built in the network area and became fully operational in 2015. It carries electricity from windfarms and other renewable energy schemes in the north to consumers further south. The line crosses the Cairngorms National Park, entering the National Park north west of Dalwhinnie, close to Kinloch Laggan. From Dalwhinnie, it follows the River Trium and the A9 before turning directly south and leaving the National Park. Approximately 35km of the overhead line is within the National Park.

The Beauly Denny 400kV upgrade project (CNPA998) involves upgrading the existing overhead power lines to accommodate additional renewable electricity generation.

There are two circuits on the overhead line, one running at 400kV and the other at 275kV. Scottish and Southern Energy Networks Transmission are now required to upgrade the second circuit to 400kV to help transport large scale renewable generation from the north of Scotland to areas of demand.

Due to the overhead line being constructed for 400kV operation on each of its two circuits, SSEN's transmission team do not anticipate that any alterations to the existing overhead line will be required in order to upgrade it. More details on the completed project can be found here:

- https://www.ssen-transmission.co.uk/projects/project-map/beauly-denny-400kv-upgrade/ (CNPA998)

New Coire Mashie 400kV substation and Loch Earba pumped hydro scheme connection

The Earba pumped storage hydro scheme project was granted Section 36 consent (under the Electricity Act 1989) by the Scottish Government in March 2025. If built it will be the largest pumped hydro scheme in the United Kingdom with an installed capacity of up to 1,800MW and would operate by transferring water between a lower reservoir, Lochan na h-Earba and an upper reservoir, Loch a' Bhealaich Leamhain. The project has been submitted to Ofgem, the government regulator for funding.

Lochan na h-Earba is located approximately 10km outside of the Cairngorms National Park's boundary and 24km west of Laggan (a designated rural settlement in the National Park).

While the scheme will be located outwith the National Park, it must be connected to the National Grid, which means connection to the Beauly – Denny overhead line, which crosses the National Park. A new substation, which is expected to be located within the National Park, is required along with an underground cable to make the connections. These two projects are summarised below:

<u>New Coire Mashie 400kV substation</u>

A new 400kV substation is required to allow connection of the Earba pumped storage hydro scheme to the National Grid, via the existing Beauly Denny overhead line. The

substation needs to be located close to the Beauly Denny line to limit the additional infrastructure required.

New Earba 400kV underground cable

A new 400kV underground cable is required to connect from the Earba pumped storage hydro scheme to the proposed Coire Mashie substation.

It would be approximately 15km in length, depending on the route option that is chosen following consultation.

Consultation Report November 2025

SSEN Transmission have published a Report on Consultation (CNPA1228) for the Corie Mashie substation and Loch Earba pumped hydro scheme connection. The report provides a summary of the extensive feedback received during the consultation period, outlines how this feedback has been considered.

In terms of the new Coire Mashie 400kV substation the report states that Option 1 (Figure 2) will be taken forward to the next stage of development. The site is located within the Cairngorms National Park.

Following the review of the consultation feedback and accounting for the additional engineering constraints associated with Route Option B2, SSEN Transmission concluded that the Proposed Route Option to take forwards to alignment selection stage is Route Option 1, Route Option B1, Route Option B3. This includes a section of the route from the Loch Earba pumped hydro scheme, outwith the National Park, traversing the western boundary of the National Park to connect to the new proposed substation within the National Park. (Figure 2).

More detail on the preferred options is available in the report (CNPA1228).

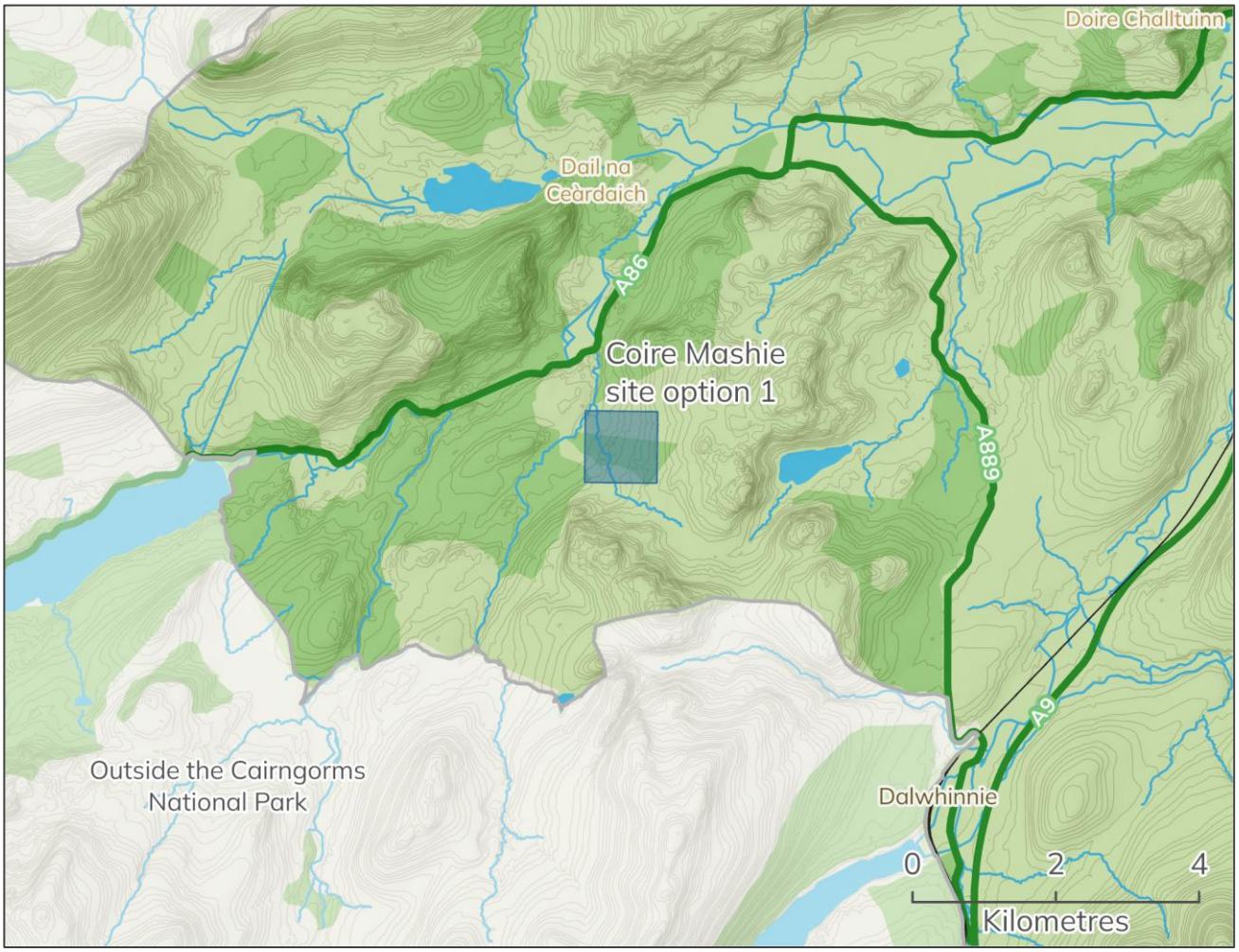


Figure 2 Location for the proposed Corie Mashie substation within the Cairngorms National Park (CNPA1228). Cairngorms National Park Authority © Crown copyright and database rights 2026 Ordnance Survey AC0000821810. Contains data © SSEN Distribution, 2026.

The report (CNPA1228) states that while all of the appraised site locations presented a range of environmental and engineering challenges, the challenges associated with Option 1 were considered by SSEN Transmission to be manageable and capable of being addressed through further design and mitigation work.

SSEN Transmission advises that the publication of the Report on Consultation marks the completion of the first round of non-statutory consultation, during which SSEN Transmission sought views on the proposed route for the 400kV connection, and substation locations. SSEN Transmission will continue to engage with stakeholders ahead of further community consultation in the new year, as they work to refine their proposals.

SSEN Transmission advises that the project is expected to start in mid-2028 and be completed in late 2032.

You can view the report and all other relevant material, here:

- New Coire Mashie 400kV Substation and Earba Pumped Hydro Scheme Connection - SSEN Transmission (CNPA1228)

SSEN Transmission have also published a link to the 3D Visual Portal where 3D images of the proposed development can be viewed:

- https://www.3dwtech.co.uk/dashboard/ssen/earba-and-coire-mashie/portal-en/ (CNPA1229)

SSEN Transmission have engaged with the Park Authority's planning team regarding the project and indicated that it is their view that it would be the Park Authority who would determine the planning application, and not the Energy Consents Unit.

Net Zero: Pathway to 2030

SSEN Transmission's Projects delivering a network for Net Zero: Pathway to 2030 (CNPA143) also sets out the new Peterhead to Beauly transmission line (Figure 3). Although the planned new Peterhead to Beauly 400kV transmission line project will not directly impact on the National Park, its delivery will bring indirect benefits in terms of reinforcing the electricity supply to the distribution network operating within the National Park and may help to improve capacity for any future renewable energy generating projects which may come forward in the next ten year Local Development Plan period.

Figure 3 Planned improvements to the SSEN Transmission network in the central highlands. SSEN Transmission, 2024 (CNPA143).

Delivery

In the case of proposals for new, or improvements to existing, grid infrastructure, it would be preferable for underground connections to be utilised where possible. However, SSEN Transmission has requested that the Park Authority be mindful that new electrical transmission grid projects may need to be administered within the next ten year Local Development Plan which could not be undergrounded due to, for example, geological constraints or because the environmental impact of excavating carbon-rich soils may outweigh the benefits of the development (CNPA1230). Therefore, they request that a pragmatic approach should be taken in relation to the supporting policy in the Proposed Plan.

SSEN Transmission has also communicated (CNPA1230) that they would be attempting to underground as much infrastructure as possible in National Parks due to the special qualities of its landscape and direct economic benefits this provides to local economies through tourism.

Electrical distribution

Electricity doesn't reach the homes and businesses of the residents in the National Park via the transmission network, it is the distribution network that handles this part of the operation. SSEN Distribution are the responsible organisation who 'distribute' the electricity to the end users in the north of Scotland and the National Park. They connect the transmission network to where electricity is used, 'distributing' it at lower, more usable voltages.

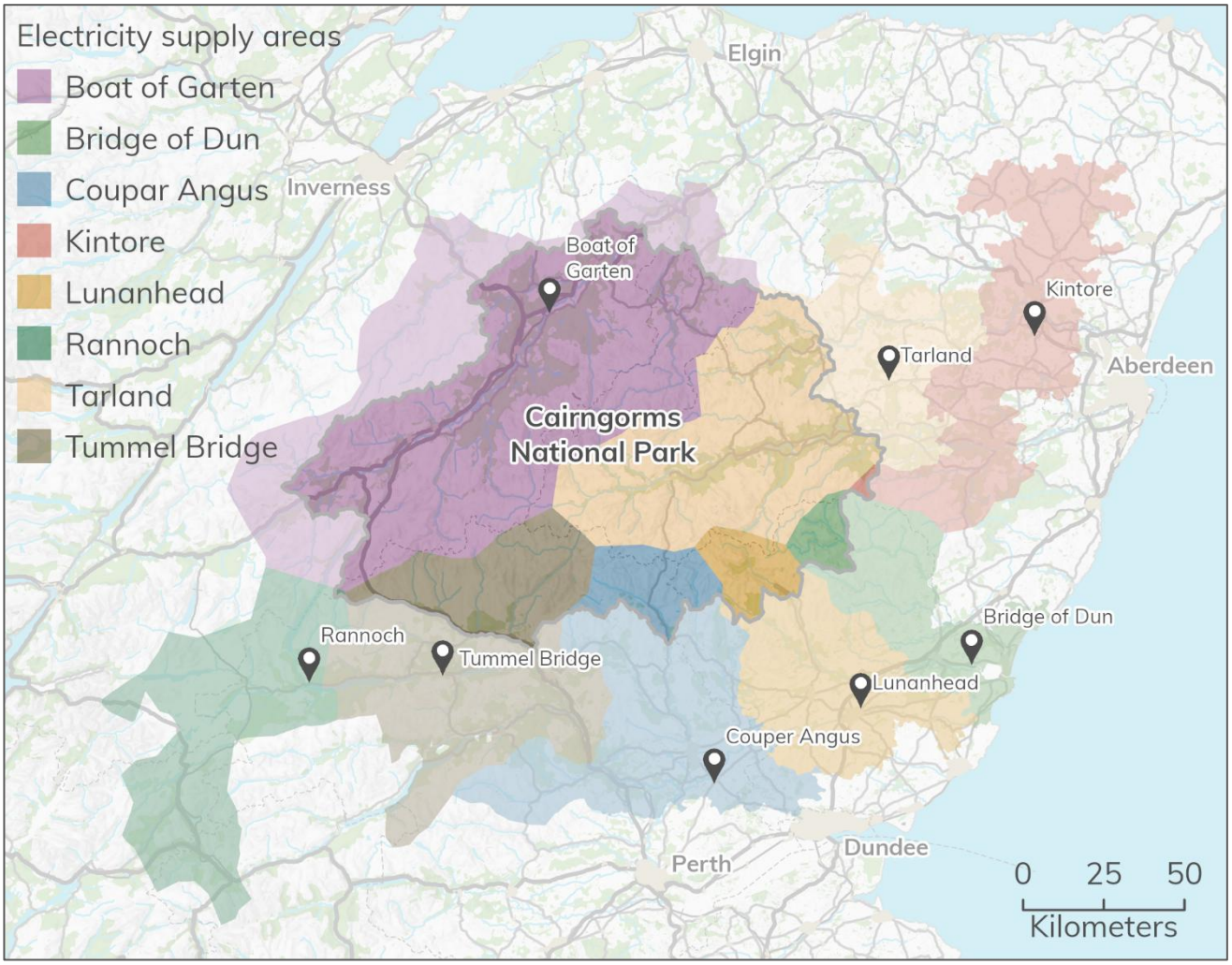


Figure 4 Grid Supply Points and Grid Supply Areas serving areas covered by the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2026 Ordnance Survey AC0000821810. Contains data © SSEN Distribution, 2026.

The Grid Supply Points are where the transmission network is connected to the distribution network. Grid Supply Points are substations that act as the interface between SSEN's 132kV distribution network and the transmission network operated at 400kV or 275kV. The supply of electricity enters the distribution network through the Grid Supply Points (CNPA137) which serve supply areas (Figure 4).

Each of the Grid Supply Points shown in Figure 4 are then connected to smaller substations within the supply areas that provide electricity to the areas of the National Park. It is worth noting that some of the substations are outwith the National Park boundary but are distributing electricity to areas within the National Park boundary (Figure 5). Each of the substation located within a supply area are connected to the Grid Supply Point for that area.

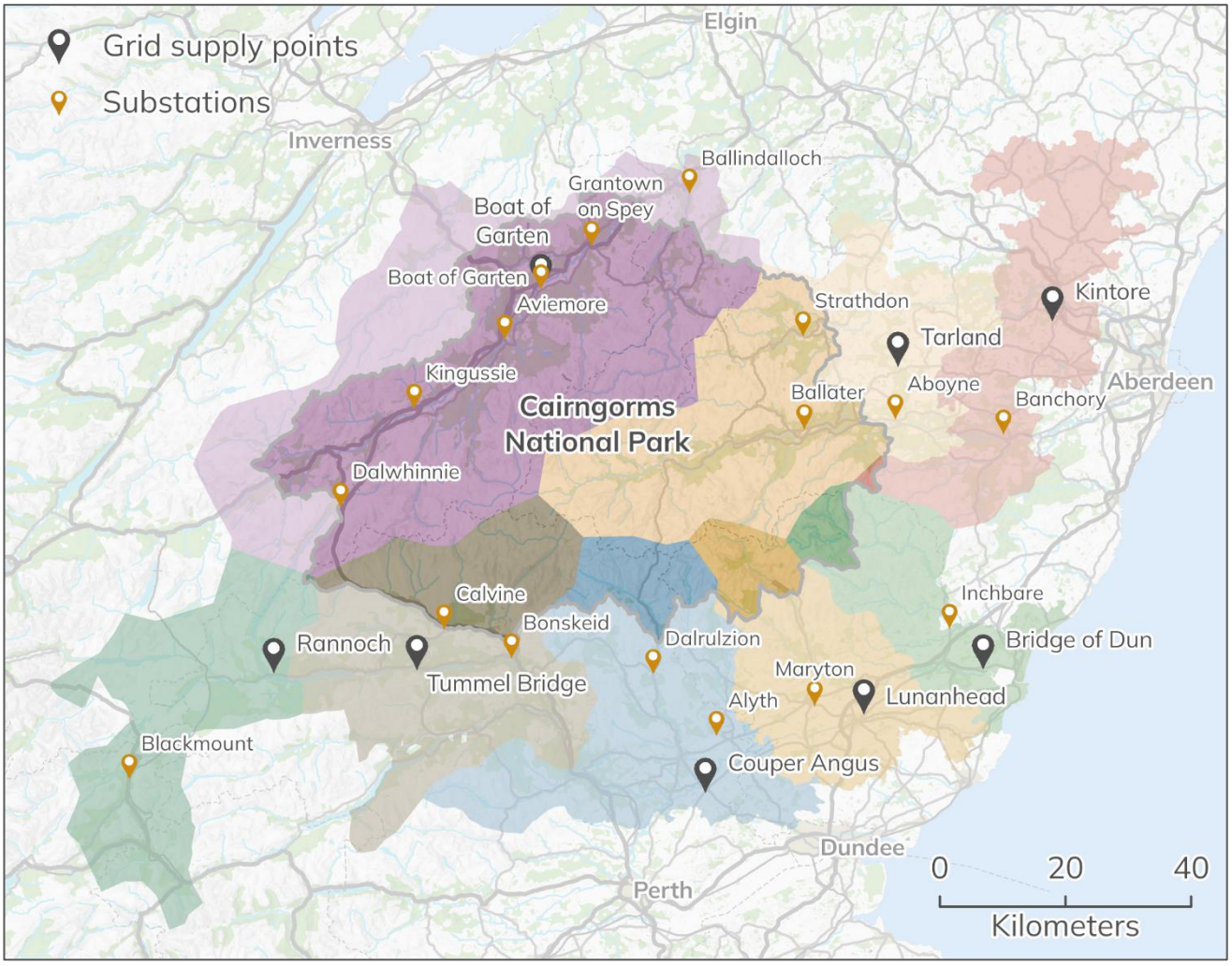


Figure 5 Substations that distribute electricity to the areas of the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2026 Ordnance Survey AC0000821810. Contains data © SSEN Distribution, 2026 (CNPA137).

Network capacity

SSEN Distribution publish network maps that provide an indication of their network's capability to connect loads of greater than 200amps and electricity generators applying under the G99 process to major substations (Figure 6) (CNPA137).

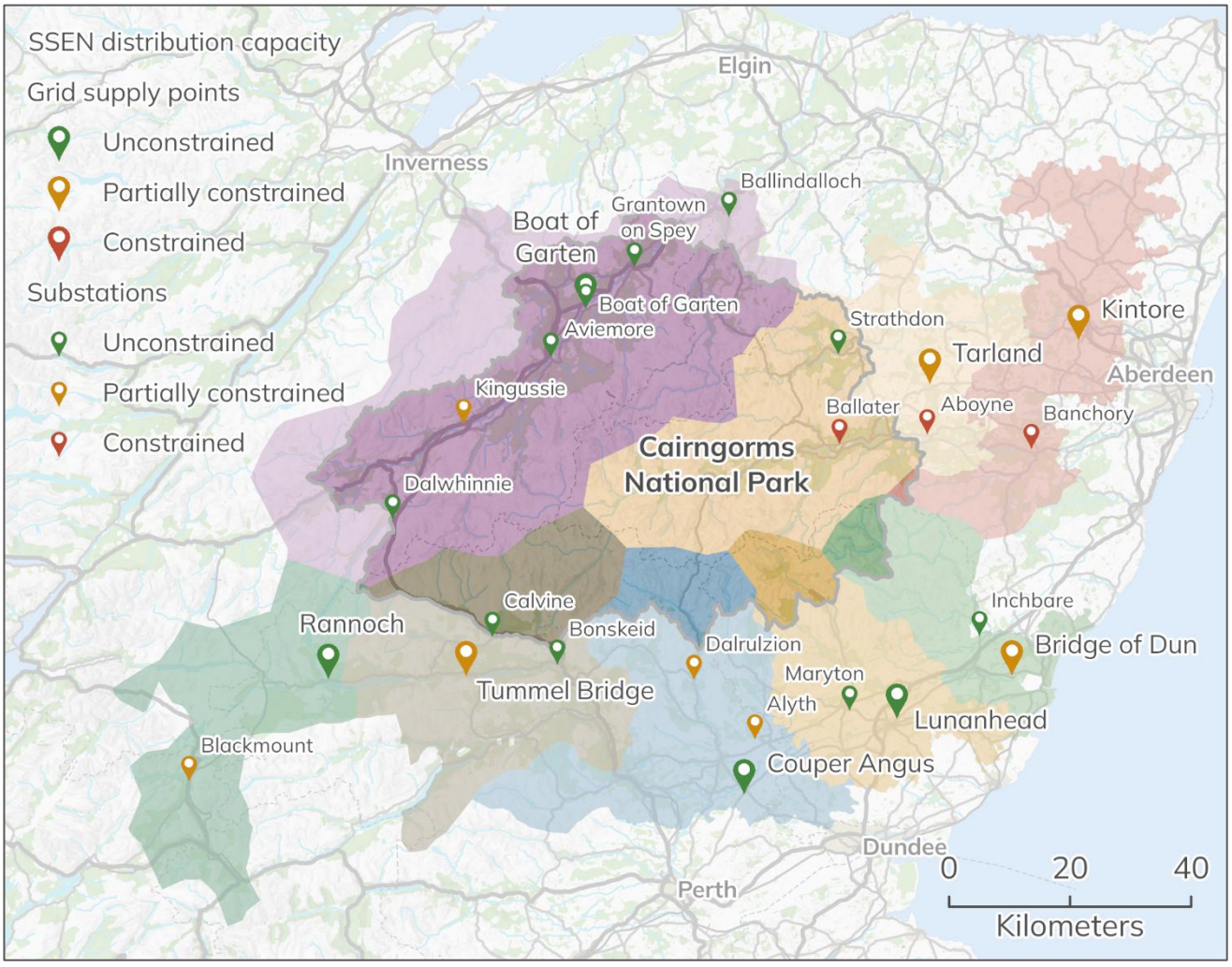


Figure 6 Network capacity – classification of Grid Supply Points and substation SSEN Distribution assets serving the areas of the Cairngorms National Park in terms of the distribution status in 2025. Cairngorms National Park Authority © Crown copyright and database rights 2026 Ordnance Survey AC0000821810. Contains data © SSEN Distribution, 2026 (CNPA137).

The data provides constraint information down to primary substation level. The data provides an indication of the network's capability and provides information on the potential opportunities to connect to the network. The distribution network data for the SSEN Distribution assets in the National Park, which includes the Grid Supply Points and substations, indicates that there are a number of assets that are either constrained in terms of Transmission or Distribution or both (Table 2). The SSEN Distribution Strategic

Development Plans set out planned works to address distribution constraints at assets within or serving the National Park.

If there is a constrained substation this means the network does not have the capacity to transport electricity required or produced from a new connection. If the transmission or distribution works are constrained or partially constrained, then reinforcement works will be needed to connect to the network at that point, which will incur additional costs to complete the connection. If constraint statuses are partially or fully constrained further information is provided on what works are underway and what the completion date is.

Detailed substation information: network capacity

SSEN Distribution provides detailed breakdown of circuit information at substation locations such as voltage, constraint levels, ongoing works at transmission and distribution levels (Table 2) (CNPA137).

Table 2 Detailed Capacity Information on SSEN Distribution assets serving settlements within the Cairngorms National Park. Data from SSEN Distribution, Data correct as of January 2026 (CNPA137).

Asset location	Settlements served by asset	Settlement status[2]	Asset type	Grid Supply Point	Voltage (kV)	Transmission status	Distribution status	Constraint status / planned works to address.
Boat of Garten	All settlements within Highland area of National Park and Tomintoul and Glenlivet.	4 Strategic settlements, 7 intermediate settlements, and 7 rural settlements.	Grid Supply Point	Not applicable	132 / 33	Constrained	Unconstrained	Partially constrained - transmission work scheduled to be confirmed subject to transmission assessment.
Dalwhinnie	Dalwhinnie	Rural	Substation	Boat of Garten	33 / 11	Constrained	Unconstrained	Partially constrained - undefined transmission reinforcement date.
	Laggan	Rural						
Kingussie	Kingussie	Strategic	Substation	Boat of Garten	33 / 11	Constrained	Partially constrained	Partially constrained - undefined transmission reinforcement date.
	Newtonmore	Strategic						
	Kincraig	Intermediate						
	Insh	Rural						
Aviemore	Aviemore	Strategic	Substation		33 / 11	Constrained	Unconstrained	

[2] As defined by the Cairngorms National Park Partnership Plan's (CNPA010) spatial strategy. See Schedule 1: Plan outcomes for more information.

Asset location	Settlements served by asset	Settlement status[2]	Asset type	Grid Supply Point	Voltage (kV)	Transmission status	Distribution status	Constraint status / planned works to address.
	Coylumbridge	Rural		Boat of Garten				Partially constrained - undefined transmission reinforcement date.
	Glenmore	Rural						
	Inverdruie	Rural						
Boat of Garten	Boat of Garten	Intermediate	Substation	Boat of Garten	33 / 11	Constrained	Unconstrained	Partially constrained - undefined transmission reinforcement date.
	Carrbridge	Intermediate						
	Nethy Bridge	Intermediate						
Grantown-on-Spey	Grantown-on-Spey	Strategic	Substation	Boat of Garten	33 / 11	Constrained	Unconstrained	Partially constrained - undefined transmission reinforcement date.
	Cromdale	Intermediate						
	Dulnain Bridge	Intermediate						
Ballindalloch	Tomintoul	Intermediate	Substation	Boat of Garten	33 / 11	Constrained	Unconstrained	Partially constrained - undefined transmission reinforcement date.
	Glenlivet	Rural						
Tummel Bridge	All settlements within Perth and Kinross area of National Park, except for Glenshee.	1 intermediate settlement, and 3 rural settlements.	Grid Supply Point	Not applicable	132 / 33	Unconstrained	Partially constrained	Partially constrained - transmission works to establish the replacement GSP Errochty – expected completion date is June 2026. Distribution works to transfer 5 x 33kV circuits from Tummel

Asset location	Settlements served by asset	Settlement status[2]	Asset type	Grid Supply Point	Voltage (kV)	Transmission status	Distribution status	Constraint status / planned works to address.
								Bridge 33KV switchboard to the new Errochty 33kV switchboard – expected completion date is June 2026.
Calvine	Blair Atholl	Intermediate	Substation	Tummel Bridge	33 / 11	Unconstrained	Unconstrained	Unconstrained
	Calvine	Rural						
	Pitagown	Rural						
Bonskeid	Killiecrankie	Rural	Substation	Tummel Bridge	33 / 11	Unconstrained	Unconstrained	Unconstrained
Tarland	All settlements within Aberdeenshire area of National Park.	1 Strategic settlement, 1 intermediate settlement, and 2 rural settlements.	Grid Supply Point	Not applicable	132 / 33	Constrained	Partially constrained	Partially constrained - distribution works include a new primary substation to be established in the Ruthven area including an 8MVA transformer (March 2027). Also separating Aboyne Primary from the Tarland 33kV ring, installing 2 x 4MVAr STATCOM's at Ballater Primary and establish a new primary substation in

Asset location	Settlements served by asset	Settlement status[2]	Asset type	Grid Supply Point	Voltage (kV)	Transmission status	Distribution status	Constraint status / planned works to address.
								the Braemar area including 2 x 6.3MVA transformers (March 2028). Reinforcing Tarland feeder 304 between Tarland GSP and Strathdon Primary (March 2028). Also reinforcing Tarland feeder 305 between Tarland GSP and Whitehouse Primary (March 2028). All works expected to be completed in March 2028
Strathdon	Strathdon	Rural	Substation	Tarland	33 / 11	Constrained	Unconstrained	Partially constrained with transmission reinforcement expected to be completed in March 2028.
Ballater	Ballater	Strategic	Substation	Tarland	33 / 11	Constrained	Constrained	Constrained - with transmission reinforcement expected to be
	Braemar	Intermediate						
	Dinnet	Rural						

Asset location	Settlements served by asset	Settlement status[2]	Asset type	Grid Supply Point	Voltage (kV)	Transmission status	Distribution status	Constraint status / planned works to address.
								completed in March 2028.
Bridge of Dun	No settlements	Not applicable	Grid Supply Point	Not applicable	132 / 33	Constrained	Partially constrained	Partially constrained - transmission works subject to transmission assessment with completion date to be confirmed. Distribution works to reinforce both 33kV circuits between Bridge of Dun GSP and Montrose North Primary – expected completion date is March 2030.
Rannoch	No settlements	Not applicable	Grid Supply Point	Not applicable	132 / 33	Constrained	Unconstrained	Partially constrained - transmission works subject to transmission assessment – completion date to be confirmed.
Kintore	No settlements	Not applicable	Grid Supply Point	Not applicable	132 / 33	Constrained	Partially constrained	Partially constrained - transmission works subject to transmission assessment with

Asset location	Settlements served by asset	Settlement status[2]	Asset type	Grid Supply Point	Voltage (kV)	Transmission status	Distribution status	Constraint status / planned works to address.
								completion date to be confirmed.
Lunanhead	No settlements	Not applicable	Grid Supply Point	Not applicable	132 / 33	Constrained	Unconstrained	Partially constrained - transmission works subject to transmission assessment with completion date to be confirmed.
Couper Angus	Glenshee	Rural	Grid Supply Point	Not applicable	132 / 33	Constrained	Unconstrained	Partially constrained – transmission works to establish a new 132/33kV GSP 'Couper Angus 2' (name to be confirmed) – subject to transmission assessment. Transmission completion date to be confirmed.
Dalrulzion	Glenshee	Rural	Substation	Coupar Angus	33 / 11	Constrained	Partially constrained	Partially constrained - undefined transmission reinforcement date.
Banchory	No settlements	Not applicable	Substation	Kintore	33 / 11	Constrained	Constrained	Constrained - transmission and distribution reinforcements

Asset location	Settlements served by asset	Settlement status[2]	Asset type	Grid Supply Point	Voltage (kV)	Transmission status	Distribution status	Constraint status / planned works to address.
								expected to be completed 2029.
Aboyne	Dinnet	Rural	Substation	Tarland	33 / 11	Constrained	Constrained	Constrained - transmission reinforcement expected to be completed March 2028.
Maryton	No settlements	Not applicable	Substation	Lunanhead	33 / 11	Constrained	Unconstrained	Partially constrained – undefined transmission completion date.
Alyth	No settlements	Not applicable	Substation	Coupar Angus	33 / 11	Constrained	Partially constrained	Partially constrained – undefined transmission completion date.
Inchbare	No settlements	Not applicable	Substation	Bridge of Dun	33 / 11	Constrained	Unconstrained	Partially constrained – undefined transmission reinforcement completion date.
Blackmount	No settlements	Not applicable	Substation	Rannoch	33 /11	Constrained	Partially Constrained	Partially constrained – undefined transmission reinforcement completion date.

Scottish Hydro Electric Power Distribution projects

Scottish Hydro Electric Power Distribution Network Development Report 2024

This is the Scottish and Southern Electricity Networks Distribution's (SSEN Distribution) 2024 Network Development Report for the Scottish Hydro Electric Power Distribution licence area. The report (CNPA136) is part of a suite of new information that sets out SSEN Distribution's longer term Network Development Plans for its distribution networks.

It gives users access to information pertaining to SSEN Distribution's network plans for the next ten years in relation to its 11kV networks and above, allowing all interested parties to better assess and identify the future opportunities to use and engage with SSEN Distribution and the network. The report includes:

- A description of those parts of the Distribution Network Operator's network that are most suited to new connections and distribution of further quantities of electricity.
- A description of those parts of the Distribution Network Operator's network where reinforcement may be required to connect new capacity and new loads.
- Information that supports the secure and efficient operation, coordination, development and interoperability of the interconnected system.
- Flexibility or Energy Efficiency Services that the Distribution Network Operator's reasonably expects to need as an alternative to reinforcement.

The Report and SSEN Distribution's wider Network Development Plan build on existing publications, including the Long-term Development Statements and Flexibility Services publications, which provide information on SSEN Distribution's nearer-term opportunities and key focus areas as they continue to develop and improve the network to meet the changing needs and requirements of all stakeholders.

The report provides a comprehensive view of SSEN Distribution's network, bringing together their plans for the current price control period (RIIO-ED2, which runs until March 2028) and initial programmes for subsequent years, up to 2034.

<u>Scottish Hydro Electric Power Distribution Network Development interventions</u>

The Scottish Hydro Electric Power Distribution Network Development Report (CNPA136) also provides information on planned interventions in the Scottish Hydro Electric Power Distribution Network Development licence area, within or affecting distribution networks on the Cairngorms National Park. There are two planned interventions potentially affecting supply in the National Park, namely at Tarland and Tummel Bridge.

Proposed interventions to address identified constraints on the energy infrastructure supplying the National Park to 2035 and 2050 are detailed in SSEN's Strategic Network Plans (page 17).

SSEN Distribution ED2 (2023 – 2028) capital projects

Additional SSEN Distribution ED2 (2023 – 2028) capital projects that are planned for delivery in the Cairngorms National Park are shown in Table 3. The ED2 period is SSEN Distribution's price control five-year timeline whereby they are provided with suitable funds from Ofgem to complete certain projects. SSEN Distribution have informed the National Park Authority that there will be further projects in the ED3 period, post 2028 for the next five years but these are still being developed. In addition to the above there will be a large volume of new connection projects whereby SSEN Distribution are providing supplies to new homes, industrial buildings, etc. These are more reactive projects lead by customers requesting supply and are part of SSEN Distribution's business as usual activities.

Table 3 List of SSEN Distribution ED2 (2023 – 2028) capital projects (CNPA136).

Project number	Project name	Grid reference
PH002739	Aboyne and Ballater 11kV network reinforcement	NJ47370192
PH003314	Ballater River Dee Crossing Solution	NO36829488
PH004221	Tarland Ring Voltage Solution	Various locations on Electric Office
PH004324	AONB 806.001 Braemar / Marr Lodge Linn o Dee	NO13029085
PH003316	Dalwhinnie 33kV CB and Pole Structures Replacement	NN63678467

Scottish Hydro Electric Power Distribution Network Development Long-term Development Statement

SSEN Distribution's Long-term development statements (CNPA138) provide information for anyone connecting to SSEN's distribution system at extra high voltage (EHV) level (including high voltage busbar of primary substations). They are designed to help to identify and evaluate opportunities for entering into arrangements with SSEN Distribution relating to use of system or connection. The statements include the following: network data; the likely development of its distribution system; plans for

modifying the distribution system; and identification of parts of the distribution system that are likely to reach capacity limit in the next years. The information provided in the Scottish Hydro Electric Power Distribution Network Development Long Term Development Statement is reflected in the Scottish Hydro Electric Power Distribution Network Development Network Development Report (CNPA136).

The Local Energy Net Zero Accelerator tool

The Local Energy Net Zero Accelerator tool (CNPA135) has been developed by SSEN to support users in their strategic energy planning endeavours. At the time of writing this tool is only available to the local authorities in Scotland, however there are plans to include the National Parks at a later point. The tool is designed to support local area energy plans as well as informing the production of the local heat and energy efficiency strategies produced by the local authorities. Local authority local heat and energy efficiency strategies are covered in Schedule 15: Heating and cooling. The platform (currently in a beta phase) provides local authorities and their delivery partners with data and modelling tools that support informed decision making, including information on network capacity, building stock, and energy consumption.

Distribution assets

A key initial consideration of the site selection process will be identifying any existing SSEN Distribution assets on the site. Figure 7 shows the locations of all substations in the National Park, including primary substations, ground and pole mounted distribution units.

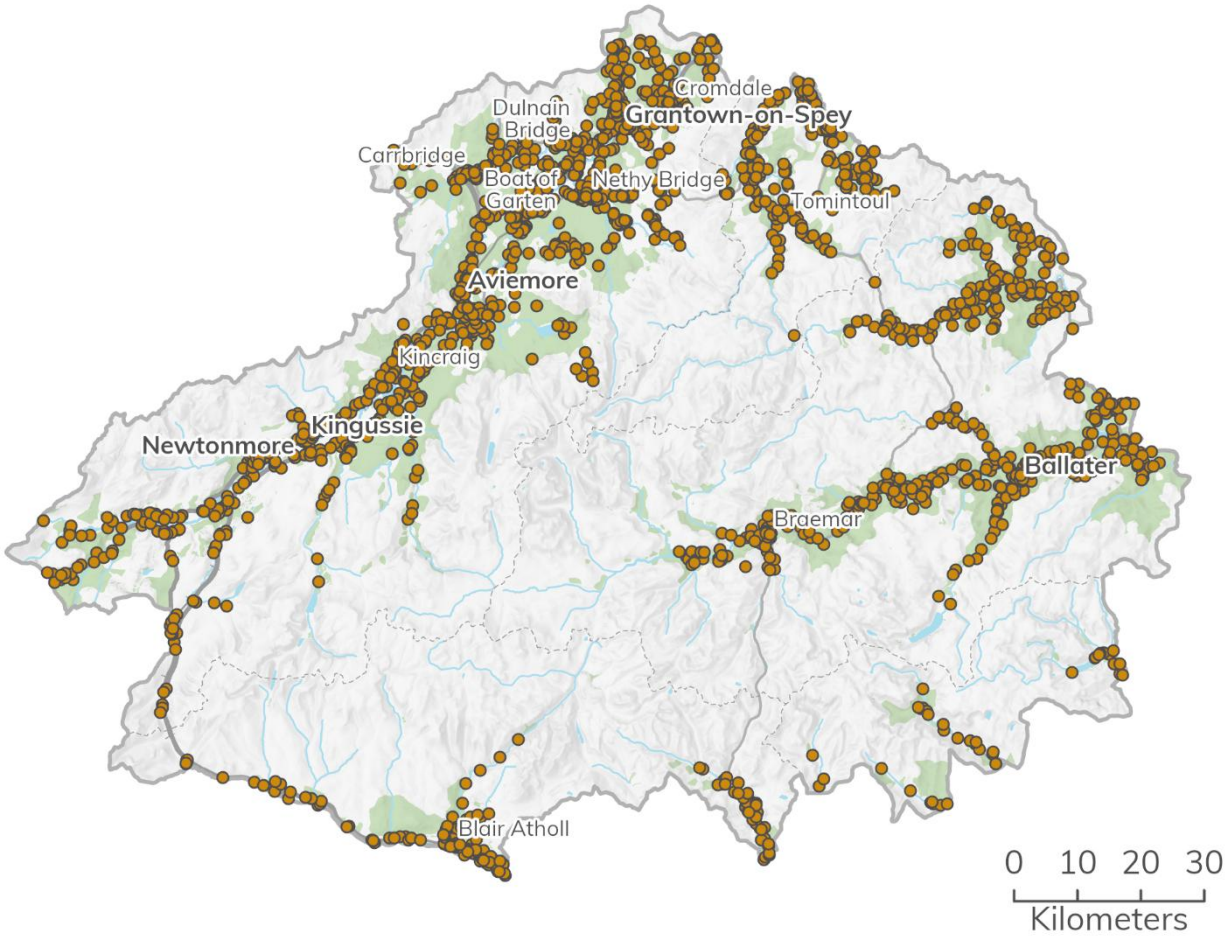


Figure 7 Map showing all SSEN Distribution substations (including Primary Substations) in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2026 Ordnance Survey AC0000821810. Contains data © SSEN Distribution, 2026

During the preparation of the Proposed Plan, the Park Authority will engage with SSEN Distribution and SSEN Transmission as part of the site assessment process. This will help identify any constraints and / or opportunities that may exist in relation to potential site allocations and proposals.

Energy infrastructure implications for Proposed Plan

Electrical transmission

There are a number of large infrastructure projects that the Proposed Plan will need to take account of in its spatial strategy, namely:

- Beauly Denny overhead line upgrade (page 43) (CNPA998)
- Net Zero: Pathway to 2030 (page 47) (CNPA143)
- Earba pump hydro scheme grid connection (page 43) (CNPA1228)

- New Coire Mashie 400kV substation (page 43) (CNPA1228).

In line with National Planning Framework 4 Policy 11 (CNPA008), in the case of proposals for grid infrastructure, consideration should be given to underground connections where possible.

The Park Authority will continue to engage with SSEN Transmission during the preparation of the Proposed Plan to ensure any emerging implications are identified and taken account of in the spatial strategy.

Electrical distribution

The evidence indicates that most of the National Park's distribution network is unconstrained and that there are no barriers to growth. However, there areas of the National Park in which capacity is constrained, which affects the Aberdeenshire and Perth and Kinross areas of the National Park, which have an indicative housing land requirement of around 170 and 39 dwellings respectively[3].

SSEN Distribution has a programme of works to address capacity issues, namely:

- A reinforcement project at Braemar to deliver a new substation that will establish a new twin 6.3MVA primary substation in the Braemar area.
- A project to replace the single 2.5MVA transformer with a 6.3MVA unit at the Calvine substation.

The Park Authority does not therefore consider that there is a barrier to delivering the indicative housing land requirement in these areas. The Park Authority will continue to engage with SSEN Distribution in the preparation of the Proposed Plan to ensure that, in accordance with infrastructure first principles, sufficient distribution capacity is available to deliver the indicative housing land requirement and establish a pipeline for housing delivery to be managed through the Delivery Programme.

The Park Authority will also need to consider the location of distribution and transmission assets in the assessment of potential development sites and will engage with SSEN Distribution during the site assessment process.

[3] See Schedule 13: Housing, Table 53 for further information on the indicative housing land requirement.

Energy generation and storage

In order to safeguard the special landscape qualities of the Cairngorms National Park, the Scottish Planning Policy has historically implemented restrictive policies on large scale renewable energy development in the National Park. This policy approach has been carried forward by National Planning Framework 4. As a result, developments of energy generating infrastructure have been relatively minor in scale and number.

At a national level the Scottish Energy Statistics Hub (CNPA141) sets out the national targets for renewable energy generation. One of the headline targets in Scotland's Energy Strategy (CNPA109) is for the equivalent of 50% of the energy for Scotland's heat, transport and electricity use to come from renewable sources. This is also one of Scotland's 81 indicators in the National Performance Framework (CNPA007).

Scotland's renewable energy target is calculated by the sum of renewable electricity generation and biofuel use, divided by Scotland's total final energy consumption. Progress towards this target comes from both increasing renewable generation and falling energy consumption.

Final electricity consumption in Scotland also continues to fall, with 21.8TWh consumed in 2023 (CNPA1000). Electricity consumption in Scotland is now 74% of 2005 consumption (29.5TWh). A record 38.4TWh of renewable electricity was generated in Scotland in 2024 – a 13.2% increase compared from 33.9TWh in 2023. Scotland continues to generate more electricity than it needs. In 2024, there was 19.7TWh of net electricity exports to other UK nations.

Figure 8 shows the total kW of renewable energy generation development granted permission in the Cairngorms National Park, according to the available data from planning permissions granted by the Park Authority and the five local authorities covering the National Park's area. It should be noted that this may not reflect the amount actually generated, due to some permissions not being implemented and also variations in predicted and actual generation once built. Furthermore, due to the small population size in the National Park and its rural nature, larger developments can skew the annual total figures.

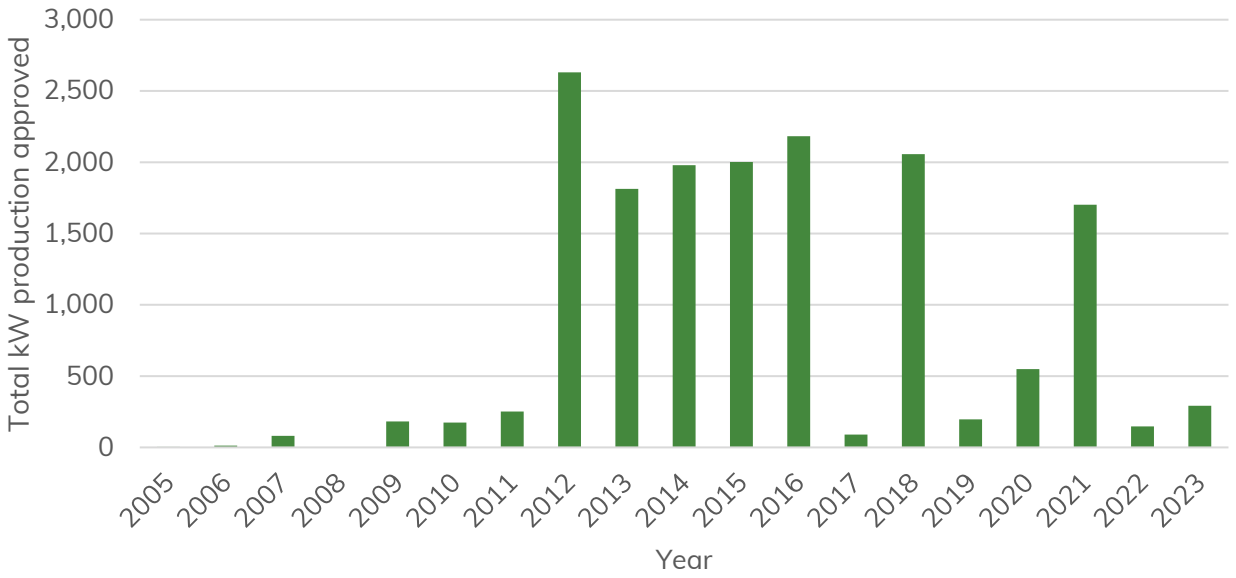


Figure 8 The total annual kW of installed renewable energy generation delivered through planning permissions in the National Park, 2005 – 2023 (Data available through planning applications submitted to Cairngorms National Park Authority and local authorities).

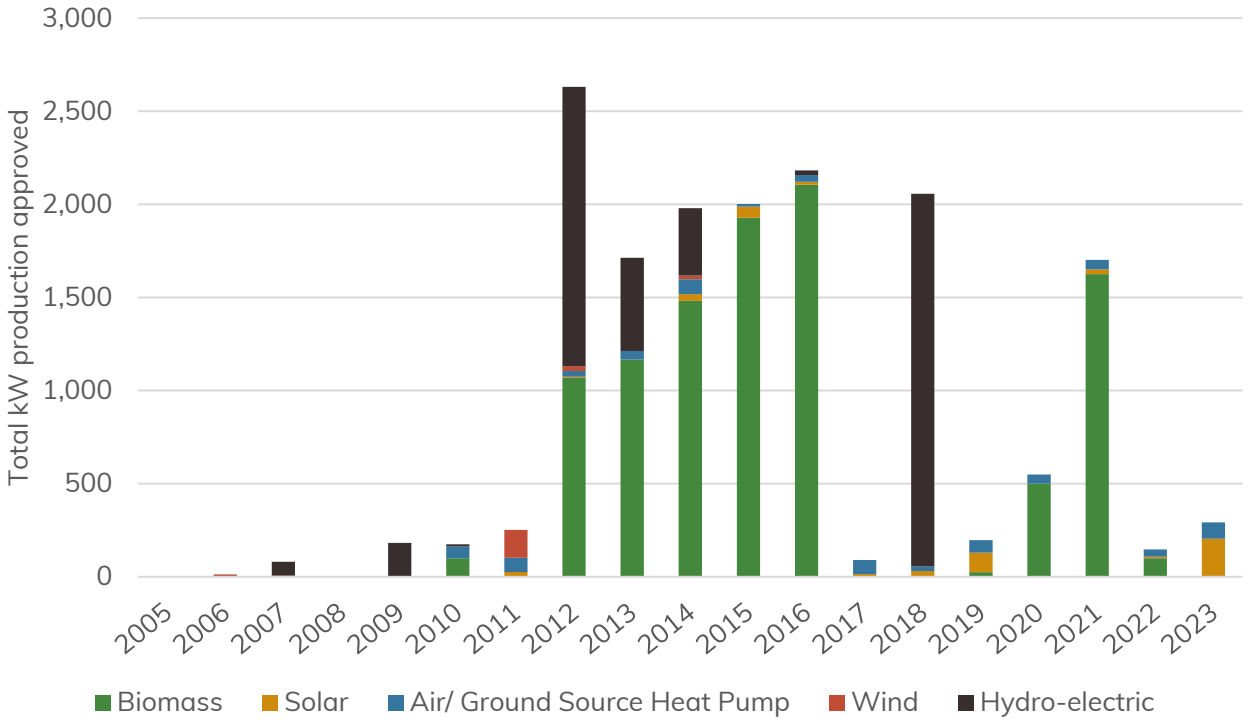


Figure 9 Total kW of renewable energy production approved via planning applications per type per year from 2005 - 2023. (Data available through planning applications submitted to Cairngorms National Park Authority and local authorities).

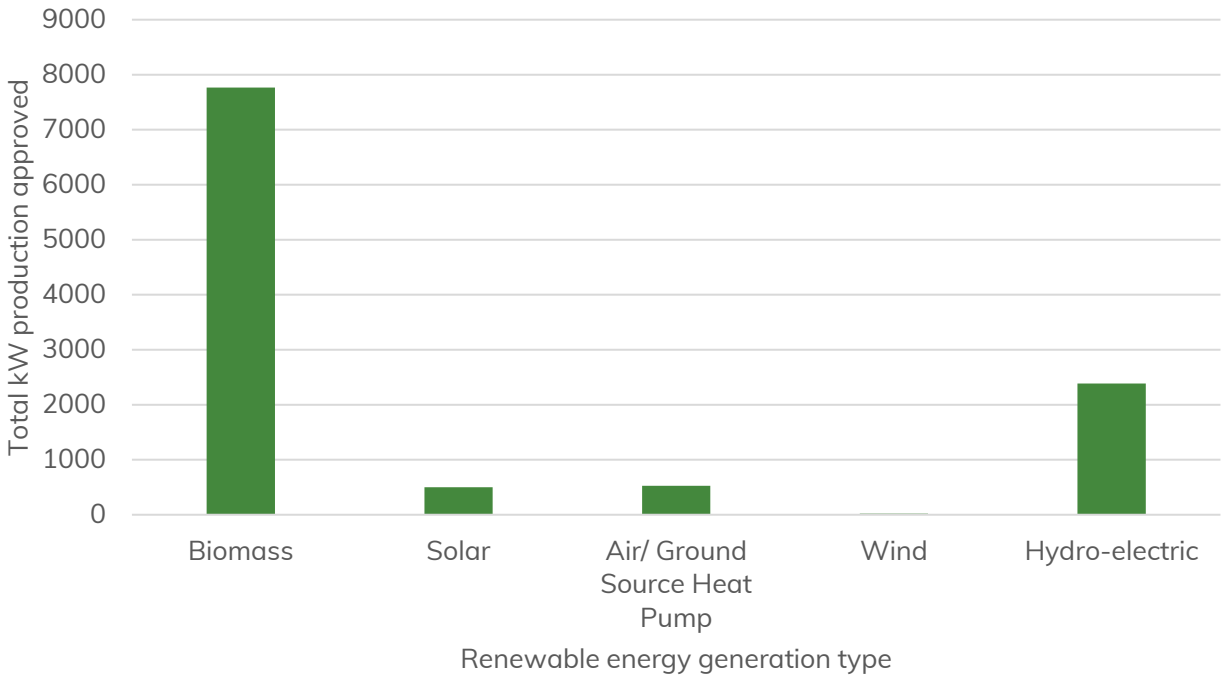


Figure 10 The total annual kW of planned renewable energy installation (all types) by year 2014 – 2023 reflecting planning permissions. (Data available through planning applications submitted to the National Park Authority and local authorities).

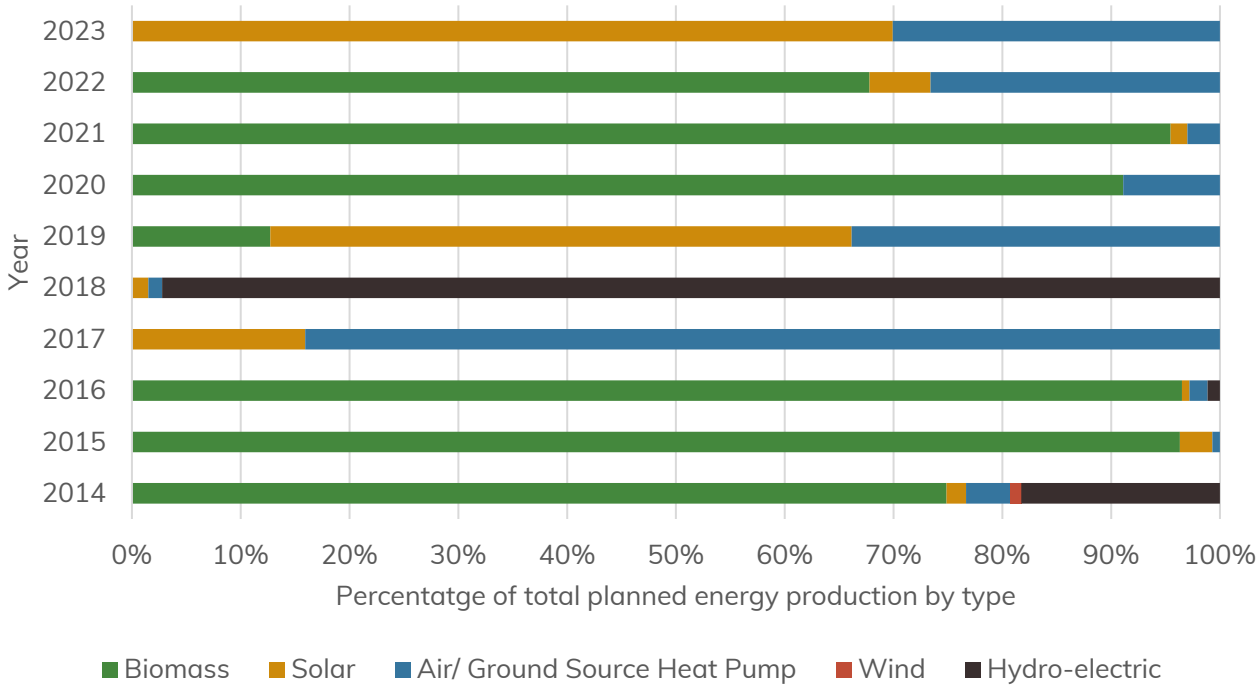


Figure 11 Proportion of energy production mix by type per year of approved planning applications from 2014 – 2023. (Data available through planning applications submitted to the National Park Authority and local authorities).

Installing certain renewable energy technologies, such as solar panels and biomass boilers, is within the permitted development rights of most householders and businesses provided certain conditions are met. This means that no data is available on energy generation installed under permitted development rights as it is not recorded officially. Therefore, this data does not offer a comprehensive indication of the amount of energy generated within the Cairngorms National Park – the figures are likely to be higher. Guidance on micro-renewable energy developments, which is not limited to those developed under permitted development rights, is available from a range of sources, including NatureScot (CNPA148) and Historic Environment Scotland (CNPA149).

Solar

There are no large or medium scale solar farms in the National Park. The majority of the applications are small scale residential energy generation serving the immediate buildings with excess sold back to the National Grid. In terms of overall numbers there are relatively few applications submitted which include solar energy production (Figure 13).

With respect to approved planning applications within the National Park for solar energy production development between 2016 and 2019 this was increasing. During 2020 no applications were submitted or approved, likely reflecting the development environment imposed by the Covid-19 Pandemic. However, post pandemic, further solar energy development has been approved and 2023 saw a significant increase in the combined kW of solar energy generation applications being approved at 204.4kW.

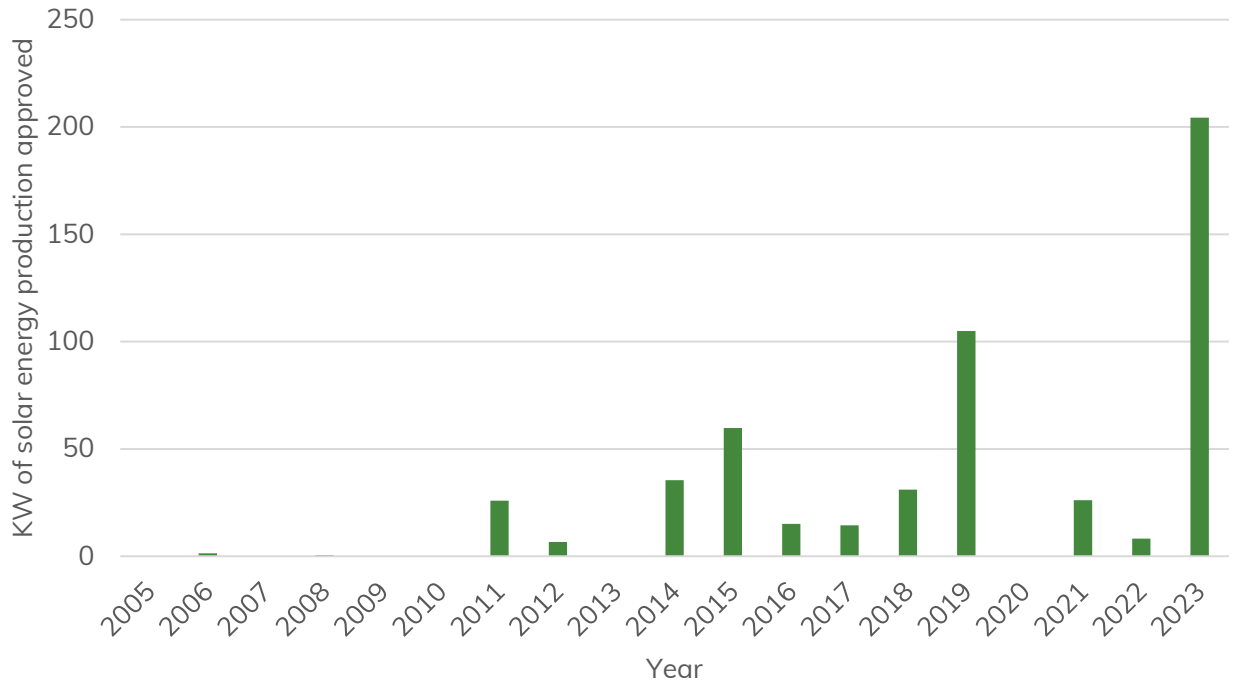


Figure 12 Annual solar kW capacity in terms of planning applications approved for solar energy development in the Cairngorms National Park, 2005 – 2023. (Data available through planning applications submitted to the National Park Authority and local authorities).

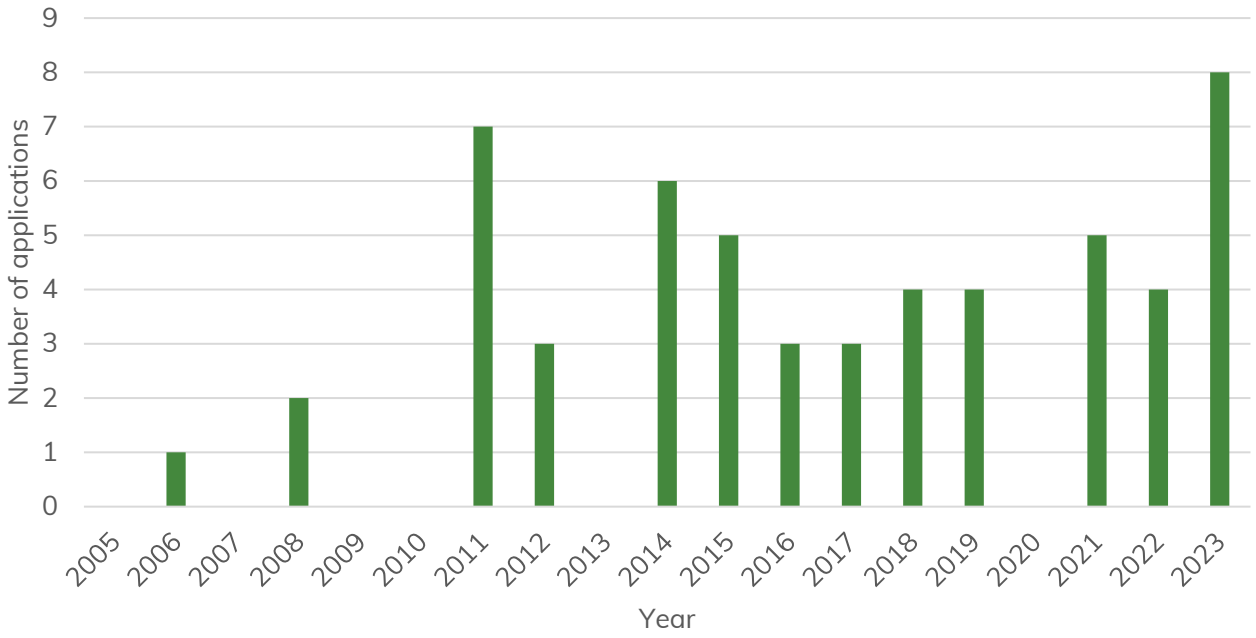


Figure 13 Number of individual applications submitted annually for solar energy generation. (Data available through planning applications submitted to the National Park Authority and local authorities).

NatureScot provide general pre-application and scoping advice for solar farms (CNPA151), and proposed developments within the National Park will need to consider a range of environmental considerations, factors, including:

- Protected sites and their qualifying features, including Sites of Special Scientific Interest, Special Areas of Conservation, Special Protection Areas and Ramsar sites.
- Protected species, such as bats.
- The special landscape qualities of the National Park.
- Wild land designations.
- Carbon rich soils, such as peatlands.

Matters relating to protected sites and species are considered in Schedule 5: Natural heritage, landscape are considered in Schedule 6: Landscape, and carbon rich soils are covered in Schedule 8: Land use, soil and resources.

Wind

National Planning Framework 4's Policy 11 (b) (CNPA008) states 'Development proposals for wind farms in National Parks and National Scenic Areas will not be supported'. This policy approach is reflected in the adopted Local Development Plan 2021 (CNPA016), which states that, 'Large-scale commercial wind turbines are not compatible with the landscape character or special landscape qualities of the National Park and will not be supported'. Large scale is defined as 'more than one turbine and more than 30m height'. This approach is supported by Policy C2 of the National Park Partnership Plan 2022 (CNPA010).

The development for small-scale wind energy could be acceptable under the current policy framework if it meets the following criteria: to minimise impacts from noise and shadow flicker and minimises impact on all aviation interests. The Proposed Plan will reflect the existing policy framework for wind energy development in the National Park, limiting the size and scale of such development.

Matters relating to the landscape impact of wind farm and wind turbine development are covered within Schedule 6: Landscape.

In terms of planning applications for wind energy development there has not been any submitted or granted since 2014 (which was a single application for a 20kW wind turbine in Grantown-on-Spey). The last significant (in terms of production capacity within the National Park context) wind energy generation application was granted in 2011 for a 150kW wind turbine at the Lecht ski Resort (Figure 9).

Hydroelectric

Hydroelectric energy generation make up some of the largest individual energy (kW) producing developments in the Cairngorms National Park. The largest schemes are located at Glen Muick where there is a 2,000kW hydroelectric development, and Blair Atholl where there is a 1,500kW generating hydroelectric scheme. There are also a number of small scale private and community hydroelectric schemes (Table 4).

Table 4 List of planning permissions for hydroelectric schemes in the National Park from 2005 – 2023. (Data available through planning applications submitted to the National Park Authority and local authorities).

Location	Power	Year approved	Planning reference
Strathdon	75kW	2007	06/456/CP
Strathdon	11kW	2010	09/014/CP
Glen Clova	180kW	2009	09/0117/CP0
Dalwhinnie	99kW	2013	2011/0411/DET
Kingussie	700kW	2014	2011/0281/DET
Blair Atholl	1,500kW	2012	2012/0055/DET
Kingussie	20kW	2014	2013/0376/DET
Braemar	100kW	2013	2013/0261/DET
Glenfernate	100kW	2013	2013/0192/DET
Glen Prosen	100kW	2013	2013/0125/DET
Balmoral	100kW	2013	2013/0067/DET
Braemar	100kW	2013	2013/0261/DET
Glen Isla	100kW	2014	2013/0409/DET
Glen Esk	57.5kW	2014	2014/0205/DET
Glen Esk	84.1kW	2014	2014/0207/DET
Glen Esk	100kW	2014	2014/0206/DET
Laggan	9MV	2015	2015/0339/DET
Glen Muick, Ballater	25kW	2016	2016/0134/DET
Glen Muick, Ballater	2,000kW	2018	2018/0063/DET

Ballater, Laggan, and Newtonmore community action plans, specifically mentioned the desire to explore the future possibility of developing community hydroelectric schemes.

There is also a small (2.5MV) hydroelectric scheme at Cuaich Power Station at Loch Cuaich by Dalwhinnie. The plant is owned and operated by Scottish and Southern Energy and has been operating since 1959.

Pumped hydro storage is one of the national developments identified for the north region in National Planning Framework 4 (CNPA008). NatureScot provide guidance on the natural heritage considerations relating to hydroelectric developments (CNPA150), and proposed developments within the National Park will need to consider a range of environmental factors, including:

- Protected sites and their qualifying features, including Sites of Special Scientific Interest, Special Areas of Conservation, Special Protection Areas, and Ramsar sites.
- The special landscape qualities of the National Park.
- National Scenic Areas.
- Wild land designations.
- Flood risk (CNPA097), water quality and river flow rates.

These matters are considered in more detail in Schedule 5: Natural heritage, Schedule 6: Landscape and Schedule 19: Flood risk and water management.

Battery storage

In terms of National Planning Framework 4 Policy 11 (CNPA008), battery storage is regarded as a green technology and considered a form of energy generation. Battery Energy Storage Systems (BESS) allow excess energy generated through renewable means to be stored at low demand periods for use when generation cannot meet demand at a later point.

In the Cairngorms National Park, only one application for battery storage development has been submitted and approval was granted in September 2022. The development was for the construction of a battery energy storage facility (49.9 MW), control building, switch room, battery storage containers, inverter containers, landscaping and associated works near Boat of Garten. Conditions attached to the approval notice included (but not limited to) a decommissioning and restoration plan, landscaping plan and noise impact assessments to ensure noise does not exceed 30Db. Policy surrounding future developments for battery storage may need to reflect the conditions set out in this application. The application and its determining form the only evidence of prior Battery Storage applications in the National Park.

Moray Council has informed the Park Authority (CNPA1340) that they have noticed increasing pressure for battery energy storage and a particular issue with these being proposed on designated employment sites. This is now starting to come through in their annual Local Development Plan monitoring.

Bioenergy

The majority of applications for biomass in the National Park to date have been for systems that utilise a woodchip or pellet burning system.

Biogas technology represents a potential future development opportunity for farm diversification in the National Park, however, to date no application pertaining to this type of energy generation have been forthcoming. It is expected that the emerging Bioenergy Policy (CNPA113), once adopted, will set out the emerging role for bioenergy with carbon capture and storage in Scotland.

Depending on the scale of expansion of the bioenergy industry in Scotland, there may be implications (positive or negative) for land use and the natural heritage. At a National level, NatureScot highlight the need to monitor the demand for bioenergy feedstocks, quantities produced, trade flows, changes in land use and seek to understand the potential impacts on biodiversity (CNPA152 and CNPA153).

Hydrogen

The UK Government will take decisions on the role of hydrogen in the Great Britain gas network from 2026. Given the Scottish Government's proposed hydrogen use hierarchy and the absence of a gas network in the National Park, hydrogen is not currently considered as a significant potential energy resource in the Cairngorms National Park. There are no planned hydrogen projects identified on Scottish Government's Hydrogen Asset Map in the Cairngorms National Park (CNPA1001).

Hydrogen does have the potential to help decarbonise the energy used in distilleries, of which there are many in the National Park.

Energy from waste

Waste management within the National Park is the responsibility of the local authorities that cover its area. Matters and implications relating to the local development plan are considered in Schedule 10: Zero waste.

There are no energy from waste plants within the Cairngorms National Park and there are no proposals for developing one. Due to the location and scale of waste management facilities in the National Park, there are unlikely to be any opportunities for such facilities to operate viably.

Figure 14 shows the location and types of energy from waste plants within local authorities covering and surrounding the National Park. The Highland Council have a five year contract that commenced 1 January 2023 to deliver residual waste to Viridor Dunbar Waste Services Limited's energy from waste facility in Dunbar, East Lothian, which is not shown on the map.

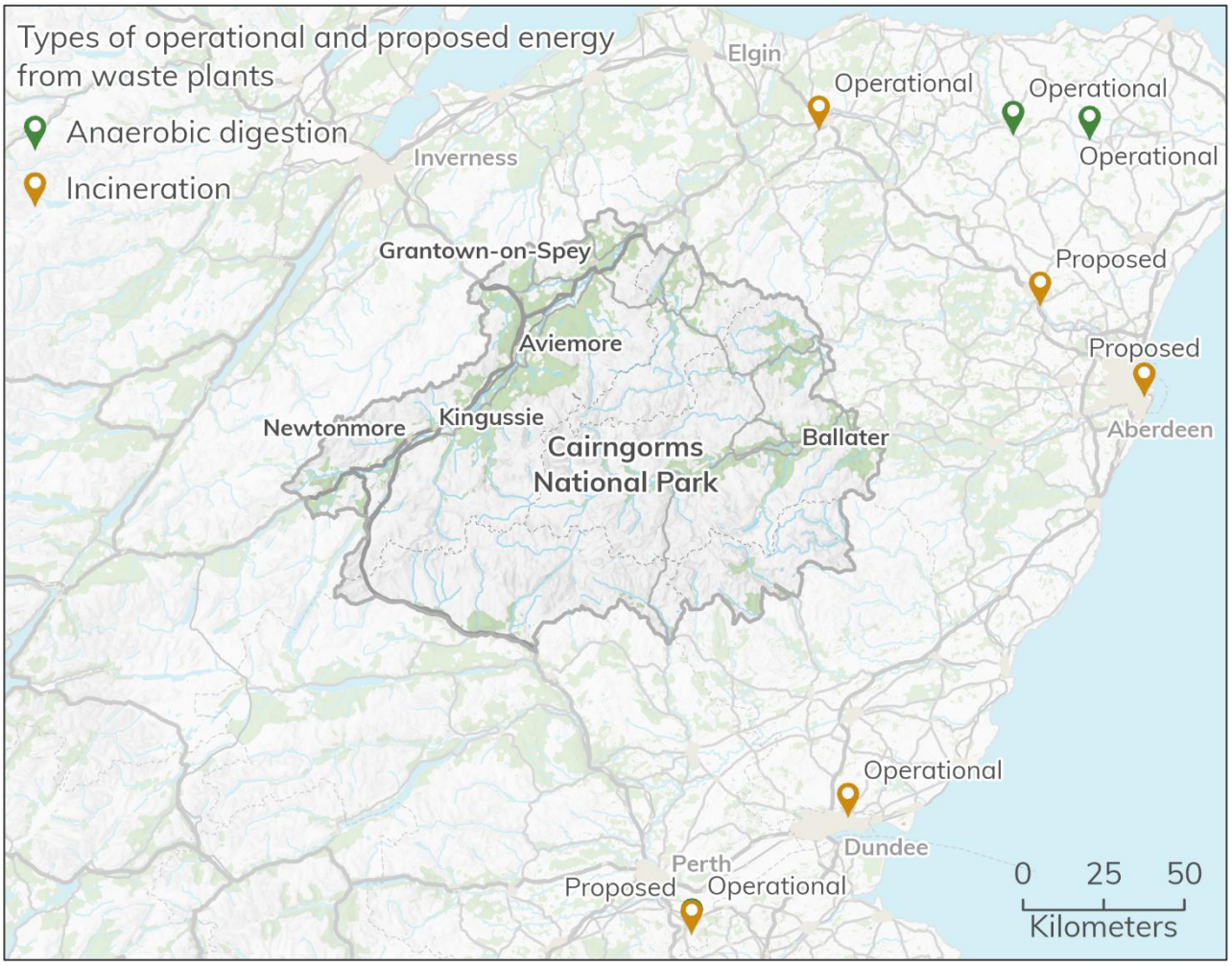


Figure 14 Location and type of operational and proposed energy from waste plants surrounding the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2026 Ordnance Survey AC0000821810. Contains data © Greenspace Scotland, 2026

Heat from renewable, low carbon and zero emission sources

Matters and implications relating to heat are covered in Schedule 15: Heating and cooling.

Landscape

Landscape matters relating to all development in the National Park, including renewable energy, have been considered in Schedule 6: Landscape.

Energy generation capacity

To understand the potential for further energy generation in the National Park, it is necessary to understand the capacity of the existing network. SSEN Distribution provide generation availability and demand maps for the Scottish Hydro Electric Power Distribution licence area. The maps provide an indication of the network's capability to connect large-scale developments to major substations. Accompanying the maps, SSEN Distribution also provide data on Grid Supply Point (GSP) details, Grid Supply Points and substation transformer ratings, fault level information, and contracted and quoted generation projects at each Grid Supply Point. Data pertaining to the SSEN Distribution assets within or serving the National Park geography have been included in this report.

SSEN Distribution provide detailed breakdown of circuit information at Grid Supply Points and substation locations such as voltage, constraint levels and contracted generation (Figure 15 and Table 5).

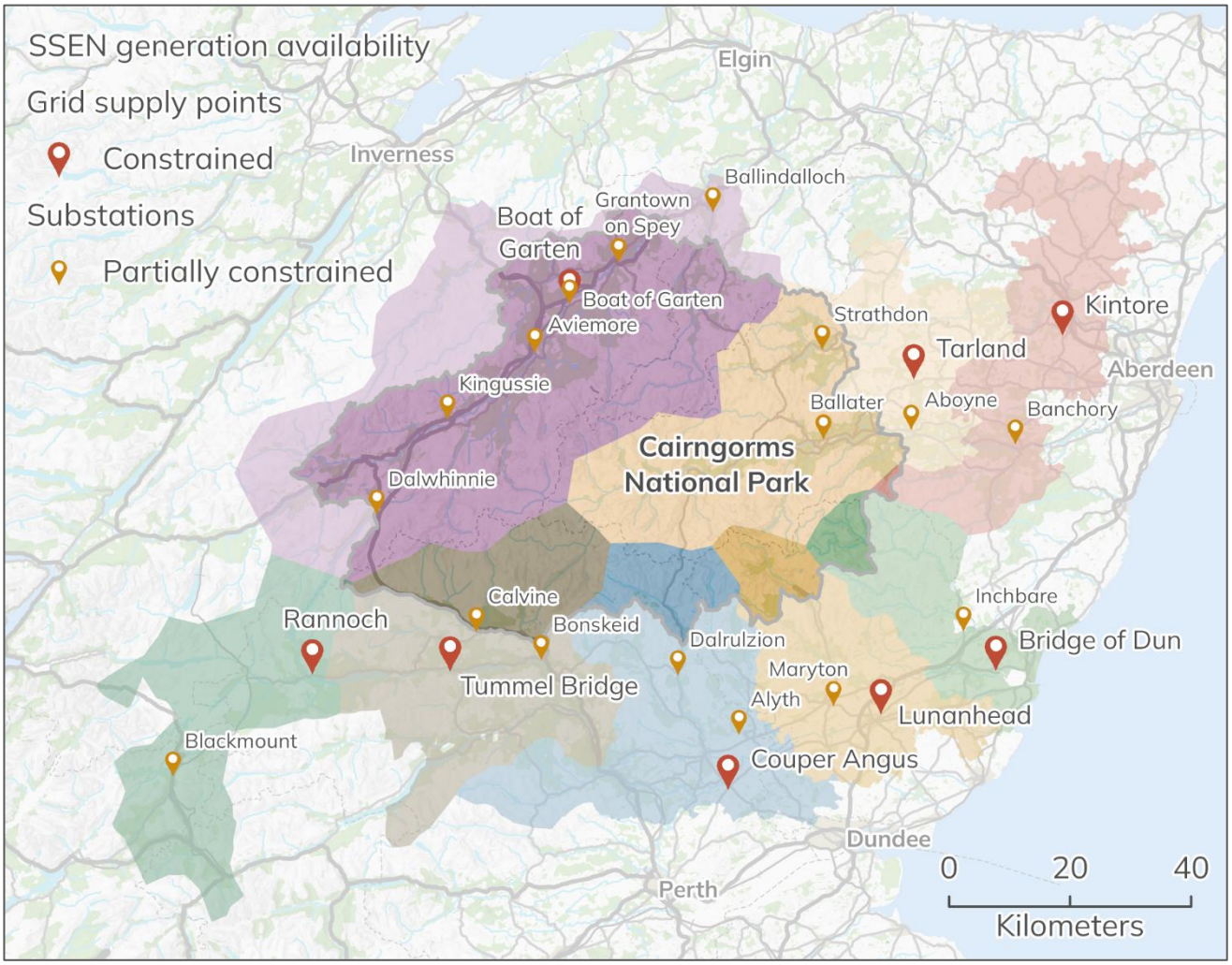


Figure 15 Map of SSEN Distribution Generation availability at Grid Supply Points and substations in the Cairngorms National Park. Cairngorms National Park Authority © Crown copyright and database rights 2026 Ordnance Survey AC0000821810. Contains data © SSEN Distribution, 2026.

Table 5 SSEN Distribution generation availability at Grid Supply Points and substations in and serving the Cairngorms National Park. Data from SSEN Distribution, 2026 (CNPA137).

Location	Asset type	Site Classification	Contracted generation (MVA[4])	Reverse power flow capacity	Break fault level rating
Boat of Garten	Grid Supply Point	Constrained	85.90		9.22 / 25
Dalwhinnie	Substation	Partially Constrained	0	100%	0.68 / 13.1
Kingussie	Substation	Partially Constrained	0	50%	4.54 / 13.1
Aviemore	Substation	Partially Constrained	0	50%	7.14 / 13.1
Boat of Garten	Substation	Partially Constrained	0	50%	7.39 / 13.1
Grantown on Spey	Substation	Partially Constrained	0	50%	5.84 / 13.1
Ballindalloch	Substation	Partially Constrained	0	50%	3.02 / 20
Tummel Bridge	Grid Supply Point	Constrained	6.46		2.386 / 18.2
Calvine	Substation	Partially Constrained	0	100%	No information available
Tarland	Grid Supply Point	Constrained	122.30		6.86 / 25
Strathdon	Substation	Partially Constrained	0	100%	1.28 / 13.1
Ballater	Substation	Partially Constrained	0	50%	4.38 / 16

[4] MVA stands for megavolt-amperes, and it is equivalent to one million volt-amperes. MVA is used to measure the electrical load of a system.

Location	Asset type	Site Classification	Contracted generation (MVA[4])	Reverse power flow capacity	Break fault level rating
Bridge of Dun	Grid Supply Point	Constrained	275.28		8.11 / 31.5
Rannoch	Grid Supply Point	Constrained	62.79		No information available
Kintore	Grid Supply Point	Constrained	233.04		17.27 / 25
Lunanhead	Grid Supply Point	Constrained	514.26		10.75 / 25
Couper Angus	Grid Supply Point	Constrained	520.50		12.76 / 25
Bonskeid	Substation	Partially Constrained	0	50%	2.28 / 13.1
Dalrulzion	Substation	Partially Constrained	0	50%	2.43 / 25
Banchory	Substation	Partially Constrained	0	50%	5.55 / 25
Aboyne	Substation	Partially Constrained	0.21	50%	5.06 / 25
Maryton	Substation	Partially Constrained	0	50%	6.44 / 13.1
Alyth	Substation	Partially Constrained	0	50%	4.7 / 13.1
Blackmount	Substation	Partially Constrained	0	50%	No information available
Inchbare	Substation	Partially Constrained	0	100%	1.24 / 7.9

Energy generation and storage implications for Proposed Plan

Due to the Cairngorms National Park's special natural heritage[5] and landscape qualities[6], identifying specific geographical locations for energy development in the local development plan is considered inappropriate. Furthermore, National Planning Framework 4 (CNPA008) specifically forbids windfarm development within the National Park.

Micro-scale and small scale energy developments may be supported by the statutory Development Plan, and these are best managed through the policy framework set out by National Planning Framework 4 (CNPA008), including policies 4, 11 and 19, with any specific requirements identified in the Cairngorms National Park Local Development Plan.

In infrastructure capacity terms, all of SSEN energy assets are either constrained or partially constrained in terms of being able to accommodate energy generation. This is not expected to raise significant implications for the Proposed Plan as National Planning Framework 4 (CNPA008) prohibits commercial wind farm development within the National Park.

SSEN Distribution have identified the constraints on the network and are in the process of addressing them (in some cases subject to further assessments). The Strategic Development Plans published by SSEN Distribution (page 17) also detail interventions to address constraints to meet demand up to 2035 and 2050. The Park Authority will continue to engage with SSEN Distribution during the preparation of the Proposed Plan to ensure the most up to date information on planned interventions to address capacity constraints is taken into consideration.

The constraints, however, should not constrain renewable energy development as National Planning Framework 4's Policy 11 is clear in its statement, that:

'Grid capacity should not constrain renewable energy development. It is for developers to agree connections to the grid with the relevant network operator. In the case of proposals for grid infrastructure, consideration should be given to underground connections where possible.'

[5] See Schedule 5: Natural heritage for further information.
[6] See Schedule 6 Landscape for further information.

Evidence gaps

No outstanding evidence gaps have been identified.

Summary of stakeholder engagement

During the preparation of this schedule the Park Authority has engaged with both SSEN Transmission and SSEN Distribution in collating data, and ensuring the evidence is representative of the current capacity of the energy infrastructure in the National Park. Statements of agreement from both SSEN Transmission (C058) and SSEN Distribution (C057) on the final draft of this schedule are detailed in the relevant section below.

Engagement with Gypsy and Traveller communities reported a reliance on petrol generators for power at temporary and permanent sites. A key recommendation was the installation of renewable energy stations near recognised stopping places to reduce fuel dependency and support more sustainable living (CNPA028).

Engagement with children and young persons referenced electric vehicle charging facilities in Newtonmore, recognising the importance of expanding such infrastructure across the National Park to encourage sustainable transport use (CNPA834, CNPA833, CNPA835 and CNPA027).

The introduction of buses capable of carrying electric bikes, supporting integrated low carbon transport options and improving connectivity between rural settlements was also suggested.

Participants expressed the desire to see the current fleet of buses converted to an electric bus fleet as this would not only improve the environmental emissions released through public transportation but also allow for quieter methods of transportation.

Engagement with the Aviemore and Cairngorms 2030 planning power game players (CNPA1105 and CNPA1104) supported renewable energy development in principle, especially when framed as a tool to reduce emissions and support Scotland's climate commitments. Several discussions emphasised the need for renewables to deliver tangible local advantages. Participants welcomed wind and solar development if projects brought jobs, lower energy bills, or reinvestment into the local area.

Despite support in theory, participants consistently raised concerns about the visual and ecological impacts of large-scale infrastructure (for example wind turbines, solar farms) in scenic or sensitive areas like the Cairngorms National Park.

Public engagement on the schedule (see CNPA149 for engagement version) was carried out from 18 November 2024 – 6 January 2025. Thirteen completed responses were received (CNPA1340).

Summary of implications for Proposed Plan

Based on the available evidence and engagement with key agencies and other interested parties, the Park Authority consider this schedule to provide a sufficient evidence base on which to prepare the Proposed Plan.

The proposed plan needs to be prepared in accordance with:

- The four aims of the National Park as set out in The National Parks (Scotland) Act 2000) (CNPA004), in particular the first aim 'to conserve and enhance the area's natural and cultural heritage' and the fourth aim 'to promote sustainable economic, social and cultural development of the area's communities'.
- Section 9(6) of the 2000 Act, which states that while the aims are to be pursued collectively, if there is conflict between the first aim and any of the others, greater weight is given to the first aim.
- The spatial strategy and principles of National Planning Framework 4 (CNPA008).

The Park Authority will continue to engage with SSEN Transmission on the development of the Proposed Plan's spatial strategy and the allocation of development sites in line with National Planning Framework 4's infrastructure first principles (CNPA008). This will ensure that the following projects are taken account of in the spatial strategy:

- Beauly Denny upgrade (page 43) (CNPA998)
- Net Zero: Pathway to 2030 (page 31) (CNPA143).
- Earba Pump Hydro Scheme grid connection (page 43) (CNPA1228).
- New Coire Mashie 400kV Substation (page 43) (CNPA1228).

The Park Authority will continue to engage with SSEN Distribution on the development of the Proposed Plan's spatial strategy and the allocation of development sites in line with National Planning Framework 4's infrastructure first principles (CNPA008). This will ensure that sufficient distribution capacity is available to deliver the indicative housing land requirement and establish a pipeline for housing delivery to be managed through the Delivery Programme (CNPA334). This will account for currently understood capacity issues within the Aberdeenshire and Perth and Kinross areas of the National Park.

The Strategic Development Plans from SSEN Distribution identify current and future constraints on the energy network, which include assets supplying the National Park. The Strategic Development Plans propose interventions to address constrains in supply up to 2035 and 2050. These plans are updated annually and along with further engagement with SSEN Distribution, the information will inform the preparation of the proposed plan.

One key new development mentioned in the Persley 132kV Supply Area Strategic Development Plan (CNPA1145) is the plan to establish a new primary substation at Braemar by repurposing an existing 11kV overhead line from Ballater Primary Substation to 33kV, and the addition of a new 33kV underground cable. The Proposed Plan will seek to support SSEN Distribution's planned interventions to address energy infrastructure constraints in the National Park as outlined in the Strategic Development Plans.

In its preparation the Proposed Plan should seek to:

- Support development that incorporates onsite renewable energy development.
- Support community led renewable energy generation projects.
- Support development for battery storage with robust mitigation plans in place.
- Ensure siting and design of energy infrastructure, for example, substations and renewable energy developments, do not have significant negative impacts on existing or proposed neighbouring residential areas, or the natural, historic and cultural heritage of the area, including the National Park's special landscape qualities.
- Define what constitutes large-scale and commercial windfarm development within the National Park context.
- Ensure mitigation for noise and shadow flickering pollution is considered at the onset of any new energy development proposals.
- Support development of a hydrogen economy.
- Support development that supports the outcomes of SSEN's Strategic Development Plans for addressing constraints on the existing energy assets supplying the National Park area.

Statements of agreement

The following people / organisations agree that the evidence presented is sufficient to inform the preparation of the proposed Plan:

- Historic Environment Scotland (C002)
- NatureScot (C004)

- Highland and Islands Enterprise (C001)
- SSEN Transmission (C058)
- SSEN Distribution (C057)
- The Highland Council (C)
- Aberdeenshire Council (C017)
- Dan Walker (C076)

Historic Environment Scotland (C002)

Historic Environment Scotland agreed that the evidence correctly identifies the characteristics of the Cairngorms National Park. They did not know of any additional information that would help inform the preparation of the next Local Development Plan. They also agreed that the correct implications for the next Local Development Plan had been identified. Historic Environment Scotland welcomed 'the aim to ensure that the siting and design of energy infrastructure does not have a significant negative impact on the historic and cultural heritage of the National Park'.

NatureScot (C004)

NatureScot agreed that the evidence presented in this report correctly identifies the characteristics of the Cairngorms National Park and that it is sufficient to inform the preparation of the Proposed Plan. However, they also requested the schedule reference following Planning Framework 4 policies:

- Policy 1: Tackling the climate and nature crises
- Policy 3: Biodiversity
- Policy 4: Natural places
- Policy 5: Soils
- Policy 6: Forestry, woodland and trees.

Park Authority response

Changes to the schedule have been made to reflect NatureScot's comments.

Scottish Environment Protection Agency (C010)

Scottish Environment Protection Agency informed the Park Authority that they will not be providing a detailed response to this schedule.

Highlands and Islands Enterprise (C001)

Highlands and Islands Enterprise agree that the evidence correctly identifies the characteristics of the Cairngorms National Park and that it is sufficient to inform the preparation of the Proposed Plan. However, they also suggest the depth could be added by including data on current and projected electricity and heat demand, which may come from the LENZA tool, but interim modelling or proxy indicators could be used to bridge this gap.

They suggest the following additional information sources:

- Community energy readiness - a clearer picture of community capacity, governance structures, and funding access for renewable energy projects would help assess the feasibility of the community-led ambitions outlined in the action plans.
- Energy equity and vulnerability mapping - spatial data on energy poverty, building efficiency, and off-grid households would support more targeted interventions.
- Cross-boundary infrastructure impacts - given the Cairngorm National Park's reliance on infrastructure beyond its borders, a more detailed assessment of external grid pressures and interdependencies would be useful.
- Climate resilience of energy infrastructure - with increasing climate risks, understanding how energy systems within the National Park are vulnerable to extreme weather events would support more robust planning.

They agree that the correct implications have been identified.

Park Authority response

The Park Authority has access to the five local authority LENZA models. A request has also been made to SSEN to provide a model for the National Park geography. During the preparation of the Proposed Plan, significant developments will be assessed for projected electricity and heat demand to identify constraints. This will be undertaken alongside ongoing engagement with SSEN Transmission and SSEN Distribution.

Cross boundary infrastructure impacts have been considered through engagement SSEN Distribution and Transmission and will continue be informed by ongoing engagement with them and the local authorities.

Risks associated with Climate Change in relation to the energy sector are covered in Schedule 4: Climate change.

The Park Authority do not consider the following to be proportionate:

- Community energy readiness
- Energy equity and vulnerability mapping

Highlands and Islands Enterprise have confirmed that they are content with this approach (CNPA014).

Aberdeenshire Council (C017)

Aberdeenshire Council agreed that the evidence presented in this report correctly identifies the characteristics of the Cairngorms National Park and commented the paper appears to be comprehensive and as such they have no comments to make.

SSEN Transmission (C058)

SSEN Transmission agrees that the evidence presented in this report correctly identifies the characteristics of the Cairngorms National Park, stating that the 'finalised version [of the topic paper] largely reflects the draft version we had sight of before publication in public domain

They state that all information appears to be accurate and reasonable comment made on future developments at the future date, 'can't rule our new evidence coming forward in 2025 or beyond as changes in the national grid's holistic network design may require new interventions on the transmission network'.

They agree that the correct implications for the next Local Development Plan have been identified.

SSEN Distribution (C057)

SSEN Distribution agrees that the evidence presented in this report correctly identifies the characteristics of the Cairngorms National Park. They also suggested that additional information from Strategic Development Plans be included.

SSEN Distribution agreed that the correct implications for the next Local Development Plan have been identified.

Park Authority response

Reference to the Strategic Development Plans that cover areas within the National Park supplied by the relevant energy infrastructure and information relating to energy assets that serve the residents of the National Park has been included within this schedule to

reflect SSEN Distributions recommendation. SSEN have confirmed they are content with the changes (CNPA1388).

The Park Authority will continue to monitor the development and publication of the Strategic Development Plans and the these will inform the preparation of the Proposed Plan. The Park Authority is also committed to continuing engagement with SSEN Distribution during the preparation of the Proposed Plan.

The Highland Council (C019)

Highland Council agree that the evidence presented in this report correctly identifies the characteristics of the Cairngorms National Park and that the evidence is sufficient to prepare the Proposed Plan. However, they consider the following information to be currently missing:

- Specific detail relating to the current and projected future electricity and heat demand across the Cairngorm National Park area.
- Information on proposed / future projects outwith SSEN.

Although the Highland Council did agree that the correct implications for the next Local Development Plan have been identified, they commented that:

- Engagement underway / planned with SSEN to develop plans. Document notes the need to assess energy efficiency as part of this but needs some further detail and how policy impacts.

Email sent to Highland Council to clarify above statement on 11 March 2025, and a follow up email was sent on the 16 March 2025 however no response was received.

When asked if they knew of any additional information that would help inform the preparation of the next Local Development Plan, they responded yes:

- The report details historic planning applications but limited detail on proposed / future projects out with SSEN.

Park Authority response

The Park Authority engaged with SSEN Transmission and SSEN Distribution separately, during and after the creation of schedule and agreed that all relevant information pertaining to current and future projects in the National Park and cross boundary projects affecting the National Park had been included.

Reference to Social Housing Net Zero standard EESSH2 (due to be replaced with the new Social Housing Net Zero Standard (SHNZS) in 2025) is made in Schedule 15: Heating and Cooling.

The Park Authority accepts that more information may be required to prepare the Proposed Plan, in relation to current and predicted energy demand in the National Park. SSEN Distribution provides the Local Energy Net Zero Accelerator (LENZA) tool, once available for the National Park geography, will provide live capacity on the network data and predicted constraints. In terms of new energy infrastructure required to accommodate future demand, the Park Authority will refer to the information provided by SSEN Transmission and SSEN Distribution teams to inform the proposed Plan.

The Park Authority have engaged with SSEN and updated the schedule with information on the new proposed Coire Mashie 400kV Substation. No other proposed projects have been shared with the Park Authority at this time for inclusion in this schedule. The Park Authority therefore consider the information presented in this schedule to be sufficient.

Moray Council (C023)

Moray Council commented that they have noticed increasing pressure for battery energy storage, and a particular issue with these being proposed on designated employment sites.

Park Authority response
This information has been added to the schedule.

Dan Walker (C076)

Dan Walker agrees that the evidence presented in this report correctly identifies the characteristics of the Cairngorms National Park. They did not know of any additional information that would help inform the preparation of the next Local Development Plan. Furthermore, they agreed that the correct implications for the next Local Development Plan have been identified.

Statements of dispute

There are no statements of dispute outstanding for this schedule.