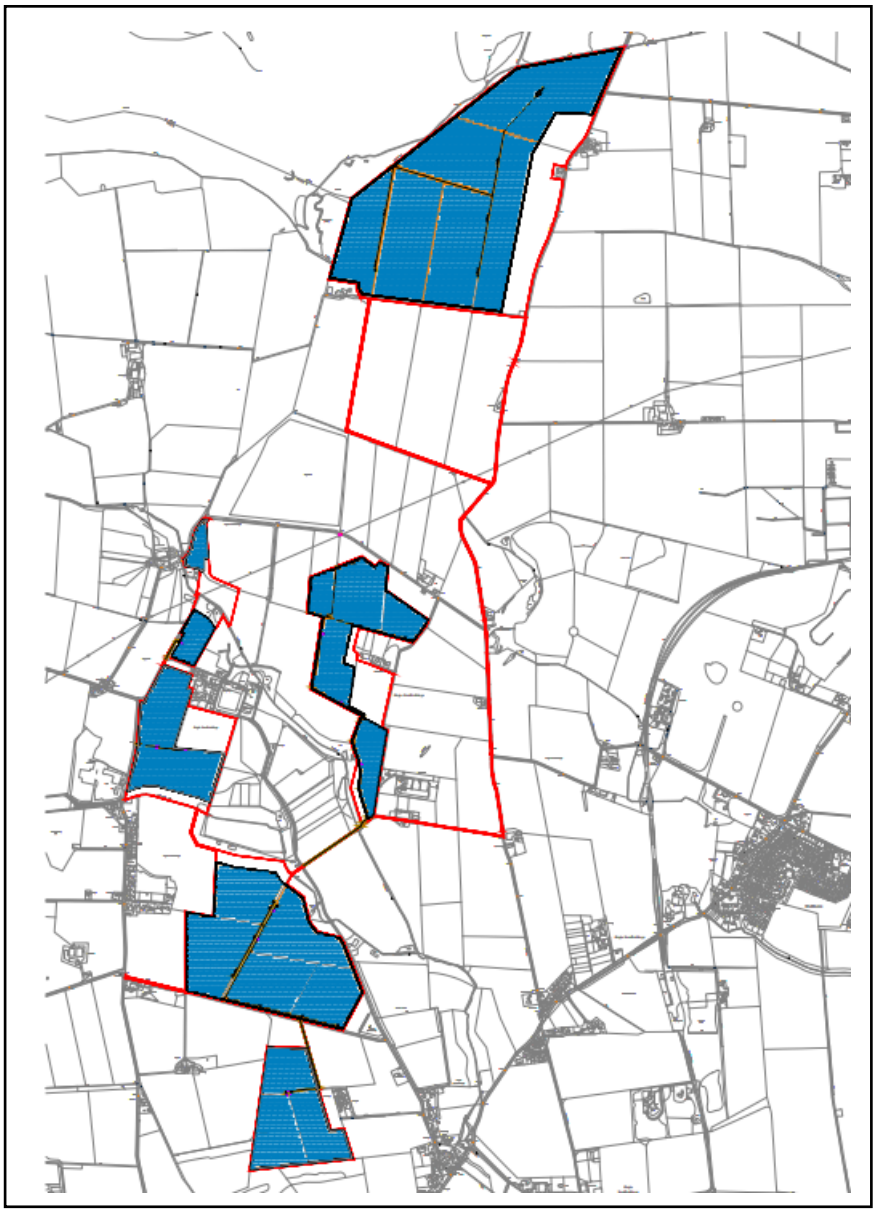
SUPPORTING STATEMENT

PROPOSED TEALING SOLAR ENERGY PARK AND ASSOCIATED INFRASTRUCTURE, NEAR DUNTRUNE, DD4 0PR



EXECUTIVE SUMMARY

The Scottish Government have issued updated Policy in 2023 with the Draft Energy Strategy and Just Transition Plan in January 2023 stating:

The evidence has never been stronger on the need for transformation of our energy system.

The imperative is clear: in this decisive decade, we must deliver an energy system that meets the challenge of becoming a net zero nation by 2045, supplies safe and secure energy for all, generates economic opportunities, and builds a just transition. The current uncertainty in our energy sector, with global market volatility and high energy prices, is impacting Scotland's people, communities and businesses. This energy crisis has demonstrated how vulnerable our energy system is to international price shocks, as well as laying bare the need for structural reform of our energy system to ensure affordability for consumers.

It is also clear that as part of our response to the climate crisis we must reduce our dependence on oil and gas, and that Scotland is well positioned to do so in a way that ensures we have sufficient, secure and affordable energy to meet our needs, to support economic growth and to capture sustainable export opportunities.

The purpose of the foregoing supporting statement and accompanying plans, studies and reports, is to clearly demonstrate that the development, to construct and operate a Solar Energy Park, to be located by Duntrune, Angus, DD4 0PR, is of significant importance and can be undertaken within the national levels of acceptable effect. The Solar Energy Park will be a vital component in the production of clean, reliable, renewable, electricity. It is clearly demonstrated that the proposed development is of significant importance in safeguarding the supply to the region and reducing the reliance on carbon heavy alternatives. The development brings major benefits to the electricity network and can be carried out whilst in compliance with all national and local policies.

In summary the development:

- There are no overriding impediments to the development being granted planning permission on the grounds of:
    - ecological impacts.
    - noise impact
    - cultural or historic impact
    - construction traffic.
- There are no significant risk of surface water, groundwater or infrastructure flooding.
- No designated sites were identified within the redline boundary of the site.
- There will be an increase in the biodiversity in the area.
- There will be an increase in green corridors areas by introducing public walks and cycle paths.

1. INTRODUCTION

1.1 The Applicant

Sirius EcoDev (Tealing) Ltd ("the Applicant") is proposing to develop a 110MW Solar Energy Park with associated infrastructure which will supply 119,570,000 kWh (units) of electricity per year of renewable generation. In renewable generation terms this equates to 33,847 metric tonnes of CO2 saved annually and the availability to provide electricity to over 34,163 homes every year.

The solar park, will consist of:

- 244,232 Solar Panels (Tip height 2.4m-3.0m)
- 339 Frames 12x2
- 4752 Frames 24x2
- 25 Inverter/Transformers
- 25 Ring main units
- 3m Paladin Fencing
- 2 x storage Facilities
- 3m Infra-Red CCTV

The initial design of the development has evolved throughout a two year process. This has seen areas of land initially chosen for development removed, areas relocated, positioning of panels pushed back and additional areas surveyed for development at the suggestion of local residents. The opinions and recommendations of local residents has been considered at each stage of the proposed development and where possible, their recommendations for amendments have been implemented. The most recent amendment to the design of the development has seen the removal of the area of development proposed that lies between Carrott Hill and Dodds Hill. Whilst this area has been removed from the Solar Park design it has still been considered within the submitted assessments for reference purposes only. The application follows on from the Phase 1 application for an 80MW BESS Battery Energy Storage System) site.

("The Application") will encompass bi-facial (two sided) solar panels on mountings, cabling, DC and AC converters, switchgear and controllers and substation as well as internal roadways, infra-red (invisible) CCTV for security and fencing. A high level of biodiversity net gains will be implemented with meadow mix grass and wild flower seeding, the improvement and increase in hedgerows which will also serve to mitigate visual impact. A 3m wide walkway between the hedgerows and the fencing of the developed area will be incorporated as safe and secure corridors, away from traffic that can be used by pedestrians and cyclists.

Sirius EcoDev (Tealing) Ltd is committed to working to achieve sustainable, ecologically aligned developments. The owners of Sirius EcoDev (Tealing) Ltd, have over two decades of experience in the renewable energy sector, Solar, Reserve Power and BESS, and have an excellent understanding of how sustainable developments can be achieved within the right environments. With a strong ethos and

dedicated charter Sirius EcoDev (Tealing) Ltd are committed to minimising environmental impact, enhance biodiversity and contribute to a cleaner, greener economy.

1.2 The Development

This application has been prepared and submitted under section 36 of the Electricity Act 1989 ('the Electricity Act') to construct and operate the 110MW Solar Energy Park, to be located on land near Duntrune, DD4 0PR; in the planning authority area of Angus Council ('the proposed development') and also asks that Scottish Ministers give a direction under section 57(2) of the Town and Country Planning (Scotland) Act 1997 that planning permission for the development be deemed to be granted. The development area is to be positioned on land located within the vicinity of the small settlements of Gagie, Kellas and Duntrune, the city of Dundee lies in the region of 6 miles to the south, with the A90 approximately 600m to the west, the village of Wellbank lies 1.58km to the east, within the planning authority area of Angus Council.

The development is made up of parcels of land dispersed throughout the local field networks. This will serve to retain the agricultural nature of the landscape, so as not to dominate through one large block of solar development. The land to be leased from four separate landowners allows for a form of diversification for the farming enterprises securing a continuance of family and estate business. This will allow future planning and survival of agricultural enterprises whilst still allowing the remainder of the farming agricultural land to be designated to existing agricultural uses or the improvement of areas. This will safeguard and promote viable and sustainable agricultural businesses and provide a stable future income. The design of separate parcels of land is due to the desire to ensure that as a whole, the character of the agricultural landscape is retained and the area remains one of a rural environment. The development is of a passive nature, once constructed. The scale of the development is of a manageable level and will be environmentally acceptable.

The land, generally of Grade 3 (1) and Grade 3 (2) by the James Hutton Institute, is currently used for grazing and agricultural purposes. All components and infrastructure will be contained within the red line boundary.

The development will be fenced and extensively screened with hedging and planting which will also significantly increase the biodiversity. This implementation of hedgerows will provide additional habitats and will assist in setting the site within the green landscape.

A 3m wide track will be created allowing for safe walking and cycling. This track will create in the region of 8km of additional walks and cycle paths in the area.

Infra-red (invisible) security cameras will be located around the site. No other permanent lighting is proposed and the site will not be illuminated or cause any light pollution.

A glint and glare report has been submitted to illustrate that there will be no detrimental effect to residents, road users or any wildlife.

The solar PV panels are fixed and the fixtures are often used as habitats for species and this will be encouraged.

Planting of native species to encourage an increase in the biodiversity of the site and also to screen further the development from view will provide habitats in the immediate vicinity adding to and enhancing the green environment.

The site would be unmanned during operation and would be operated remotely with only rare maintenance visits. Given the compound is unmanned there is no requirement for permanent lighting; the only lighting would be Infra Red invisible) for night vision for the security cameras.

It is anticipated that the development site would be in operation for up to 40 years. When it ceases to be operational, all elements can be removed, and the site reinstated to its former condition. The reinstatement will be for agricultural purposes and therefore the land is not being permanently removed from agricultural use.

The use of land for energy production will be temporary with the land restored to its current use after the lifetime of the development. Grazing of sheep will be encouraged and the absence of typical farming activities means that the removal of heavy machinery crossing the land will aid the reduction of long-term soil compaction. The process will allow soils to become more naturally aeriated which in turn improves the soil quality. Therefore when it is returned to agricultural use it will be of a higher grade and liable to be more productive. There is a fine balance between removing agricultural land from food production and using that land to produce energy, however food production relies on electricity and with rising demands, large scale production of electricity is required. This in turn demands larger areas of land for use in electricity production.

There is a firm commitment to increase biodiversity, enhance wildlife habitats, grow green infrastructure and take a conscientious approach to minimising any potential visual impact to residents and visitors as well as businesses.

As we strive to meet critical targets to achieve a carbon neutral economy, as we experience the ever increasing effects of climate change, the need to be able to produce, balance and control flows of power is crucial. To be able to produce and provide electricity locally, to use and utilise it to the optimum is essential to reduce the dependence on imported power, fossil fuels, and to benefit from having the control of energy produced. It is critical to act now and to develop facilities where grid infrastructure and capacity allow. The development will reduce the reliance on external energy, bolstering Scotland's energy security and providing the opportunity to control the fluctuation of markets from outside influences.

The highest levels of development design is ensured in order to give the best environmental protection in order to protect residential, landscape and visual amenity and the natural and cultural environment.

Solar Parks facilities cannot be developed in any location and development sites are limited. There are certain site specifics that are required for such facilities principally in relation to grid capacity and points of connection onto the electricity transmission network. If the development of such specialised sites is denied then this will in turn limit the potential to reach Net Zero and reduce the UK's potential to generate and power in a sustainable and affordable manner.

1.2.1. Community Consultation

Over a two year period four community consultation meetings were held with regard to the development, inclusive of Phase 1 for a battery energy storage facility. A separate report detailing all meeting responses and community involvement throughout the process is submitted for reference. In summary, two meetings where held by ZOOM as these events were under Covid restrictions and public meetings could not be undertaken. The first meeting introduced Phase 1and Phase 2 of the energy proposals. The 2nd meeting also covered the Phase 1 and Phase 2 solar park. The third meeting, for Phase 2 solar park was held in public at the local community hall and was well attended. Suggestion of amendments to layout and land take where made by the public and amendments where undertaken.. The fourth meeting, for Phase 2 solar park was again held in public and was once more well attended. Further suggestions were made and moving forward were investigated. In the intervals between the meetings contact was made via emails with representatives from the local community and a local group Protect Rural Angus. Questions received from the group where responded to and information sent. Notice of the meetings were given by a mail drop to local residents, adverts appeared in The Courier, at least seven days prior to the meeting and email notification was sent to local Councillors, MSP and MP as well as The Community Council.

Various forms of community benefit were discussed including an initial proposal that a children's playpark and a dog walking area could be developed for the benefit of the community. However the local residents at Duntrune clearly indicated at a community consultation meeting that there was no wish for a playpark. It has further been proposed, after noting that the Local primary school (Murroes Primary School, which lies adjacent to a T Junction) has very little parking facilities for drop off and pick up of school children. The junction and around the school becomes very congested at times. It is therefore proposed that an area of the field, opposite the school, is appointed as an overflow parking area for the lifetime of the development. A community fund will be established which may offer the potential to employ crossing personnel to ensure the safety of the children.

A dedicated website has also been established www.Tealingsolar.com

1.3 Need for Development

Developments of this nature are an essential component in the fight against climate change and in increasing energy independence and hence security of supply. This development is situated where essential infrastructure can support the development and the development can support the grid network within acceptable levels and compliance with local and national policies.

In October 2021, the UK Government launched Its Net Zero Strategy: Build Back Greener which includes the target for decarbonising the electricity grid by 2035. The overall electricity demand is expected to Increase by between 40 and 60% by 2035, to deliver the strategy all this increase in demand must be met from low carbon sources. In order to optimise and balance the existing levels and be able to cope with the increase there is an urgent and real need to be able to produce, supply, store and balance electricity across the network as a whole.

The Scottish Government have issued updated Policy in 2023 with the Draft Energy Strategy and Just Transition Plan in January 2023 stating:

The evidence has never been stronger on the need for transformation of our energy system.

The imperative is clear: in this decisive decade, we must deliver an energy system that meets the challenge of becoming a net zero nation by 2045, supplies safe and secure energy for all, generates economic opportunities, and builds a just transition. The current uncertainty in our energy sector, with global market volatility and high energy prices, is impacting Scotland's people, communities and businesses. This energy crisis has demonstrated how vulnerable our energy system is to international price shocks, as well as laying bare the need for structural reform of our energy system to ensure affordability for consumers.

It is also clear that as part of our response to the climate crisis we must reduce our dependence on oil and gas, and that Scotland is well positioned to do so in a way that ensures we have sufficient, secure and affordable energy to meet our needs, to support economic growth and to capture sustainable export opportunities.

Furthermore, the Scottish Parliament on 11th January 2023, approved the Revised Draft NPF4 and this has been adopted and published by the Scottish Ministers on 13th February 2023. This replaces National Planning Framework 3 and Scottish Planning Policy.

Within the adopted policy it clearly states that:

The world is facing unprecedented challenges. The global climate emergency means that we need to reduce greenhouse gas emissions and adapt to the future impacts of climate change.

Additional electricity generation from renewables and electricity transmission capacity of scale is fundamental to achieving a net zero economy and supports improved network resilience in rural and island areas.

This national development supports renewable electricity generation, repowering, and expansion of the electricity grid. A large and rapid increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets. Generation is for domestic consumption as well as for export to the UK and beyond, with new capacity helping to decarbonise heat, transport and industrial energy demand. This has the potential to support jobs and business investment, with wider economic benefits.

The is an urgent need to significantly scale up renewable energy production, including solar, on- and offshore wind power, renewable hydrogen, marine energy and hydro.

This development represents an important opportunity to contribute towards delivering a low carbon, low cost, secure supply of renewable energy for many years to come. Like other renewable energies, solar power represents a 'clean' source of renewable energy as it doesn't release any harmful emissions or pollutants. It is largely silent and is unobtrusive to the landscape when compared to some other renewable technologies.

Solar energy is one of the most economic forms of new renewable power generation in the UK, and consequently can contribute to controlling consumer's energy bills into the future. Solar power generated in the UK reduces the need to import electricity from abroad. This not only creates energy industry jobs in the UK, but makes our energy supply and prices more secure, since foreign energy can vary in price as supply and demand changes. This makes Scotland and the UK as a whole less vulnerable to world events causing spike prices and less liable to facing fuel poverty.

The solar energy park can sustainably provide, as a stand alone development, 119,570,000kWh of electricity per year of renewable electricity generation. In renewable generation terms this equates to 33,847 metric tonnes of CO2 saved annually and the availability to provide electricity to over 34,163 homes every year.

In conjunction with Phase 1, the BESS, which, as a minimum stores and supplies 116,800,000 kWh of electricity per year as an enabling technology for renewable generation. In renewable generation terms this equates to 33,000 CO2 metric tonnes saved annually and the availability to provide electricity to over 33,000 homes every year over a 40 year period.

Combining both technologies, from Phase 1, 80MW BESS development and Phase 2, 110MW Solar Park, the significant contributions by this development equate to 236,370,,000KWh of generation, supply and storage per annum which is enough electricity for 67,163 homes. A reduction of 66,847 metric tonnes of CO2 will be saved annually.

This combination allows multiple streams for ensuring the viability of the development over a 40 year period.

1.3.1 Electricity Market Reform

EMR brought about in the Energy Act 2013, was a major change to the UK's energy policy to make sure that the UK can generate enough electricity for everyone in the future through cleaner sources of generation. Coal powered facilities and aged nuclear facilities are being brought to end of life and a rise in renewable energy technologies bring on line a power source that can be unpredictable in levels of generation.

The UK is generating more electricity from renewable, low carbon sources to meet climate change commitments.

With all the necessary investment and progressive developments, electricity can remain affordable for UK households and businesses.

It is estimated that over the next decade, the UK will need around £100 billion of capital investment in its electricity infrastructure to accommodate projected future increases in electricity demand and to prevent electricity blackouts.

The Development is proposed in response to the requirement for the generation of 'clean' electricity in conjunction with the continuity of supply of electricity, particularly during periods of peak demand.

The UK's electricity grid has historically relied on large, centralised power plants such as coal or nuclear. However, old coal power plants are in the process of reducing capacity with a view to long term closure and existing nuclear power plants are reaching the end of their design lives, again with a view to long term closure.

In order to maintain the level of energy requirements and meet rising demands including long term forecasts with net zero targets, there is an obligation to meet this by means of renewable energy sources. These technologies, such as solar and wind, are intrinsically difficult to predict, which in turn makes it more difficult to balance and predict the production and flow of energy onto and off the network. However by combining technologies, allows for a more predictable and manageable flow.

Through the Energy Act 2013 the Capacity Market (CM) mechanism was introduced to ensure security of electricity supply at the least cost to the consumer. This Development will be able to participate in the Capacity Market and a number of balancing mechanisms for the National Grid.

1.3.2 The Capacity Market

To deliver a supply of secure, sustainable, and affordable electricity, the UK needs not only investment in new generation projects and innovative technologies but to get the best out of existing assets on the network. The Capacity Market aims to deal with both these issues.

The Capacity Market aims to balance the difference between demand and supply and to bring forward investment in new generation projects and innovative technologies, in parallel to maximising the utilisation of the existing generation capacity. The Capacity Market operates alongside the electricity market, which is where most participants will continue to earn the majority of their revenues. The Capacity Market revenues are decided by auctions. In order to qualify for the auctions planning permissions need to be secured in advance of sites being entered into the auctions.

1.4 Benefits of the Development

1.4.1 Clean, Efficient Energy Source

The solar park will provide a supply of electricity to the grid without any emissions of Carbon Dioxide to the air or detrimental impact to the environment.

It is anticipated that local contractors will be employed throughout the construction phase, brining employment to the area. Post construction, a maintenance contract will be awarded locally.

1.4.2 Embedded Distributed Power

The Development has been specifically sited to ensure a viable and sustainable connection. The infrastructure can support the development without unacceptable impact and detriment to the environment.

The Development constitutes Embedded Distributed Power (EDP) as it supplies power to the local distribution network at or near the point of use. By doing so it results in lower transmission losses which occur when power is transmitted over long distances; national level transmission losses can amount to up to 14% dependant on the region.

Local small-scale embedded distribution is less susceptible to widespread power failure because should a generating plant fail to operate, the net effect is that less generation is lost from an isolated small-scale plant failure because other similarly sized plants should remain operational. In contrast, when a large power station goes 'off line' and all of its output is lost, the effect is far greater.

However, local networks have many constraints, and with an ageing infrastructure requiring continual upgrade and maintenance, it can be difficult to identify suitable connection points with necessary capacity and 'fault headroom' for embedded distributed power.

The Applicant, after in-depth consultation with the Distribution Network Operator (DNO), was able to assess the local distribution networks and identify a site where the network could accept embedded distributed power and where there was a benefit to the network by the inclusion of the development within the network frame. It is advised that there is a confirmed connection which ensures a viable development post construction.

The Application Site meets the DNO's technical requirements as there is sufficient fault level head room and capacity to accept a connection.

1.4.3 Economic/ Employment Benefits

Potential social and economic effects can be divided into:

- Direct effects: for example, employment opportunities during construction and decommissioning of the Development.
- Indirect effects: such as employment opportunities created down the supply chain by those companies providing services to the Development during construction and decommissioning; and
- Induced effects: for instance, employment created by the additional spend of wages into the local economy.

The Development will result in contract opportunities for local and regional contractors' both for construction activities themselves and throughout the supply chain. These ideally would be sourced locally where possible, subject to professional competency and competitive tendering. The investment in the Development has the potential to generate a range of economic opportunities for local businesses, most notably employment opportunities and local spending.

Direct opportunities for local business' and contractors may include:

- Earth Excavation and ground works
- Cabling procurement and installation;

- Fencing;
- Quarry Products;
- Ready Mixed Concrete;
- Civil Engineering;
- Surveying;
- Plant;
- Haulage;
- Landscape and Renovation;
- Mechanical, Electrical and Supervisory Services;
- Security;
- Accommodation.

It is envisaged that there may be the potential for approximately 20 jobs generated in the local area through the construction period alone.

1.5 Site Selection

There are a number of factors which lead to the selection of a site which will be progressed for development. Solar sites are primarily chosen for their access to the local electricity distribution network, which must be capable of accepting the export at an acceptable cost. The availability of suitable land which will have the ability to host solar panels and provide an acceptable level of generation and the interest of landowners form part of the site selection. Another key component is the level of environment impact and what mitigation can be offered. Other factors include proximity to residential, sites of sensitivity or designated areas, ecological impact, archaeological or heritage impact, noise impact as well as flood risk and visual impacts. Further considerations are whether the site has safe ingress and access, whether there is sufficient road network and infrastructures to support the development.

The site was also selected for its proximity to the infrastructure in the area where access to the local electricity distribution network is a viable option without having to travel large distances or cross major infrastructure, minimising transmission losses as well as having minimal impact to the local environs. The interest and availability of land by three landowners indicated that there was a strong interest in renewable energy projects that will provide a stable opportunity for securing the diversification of farming activities ensuring the viability of the wider agricultural holding for the future. Furthermore, whilst it is acknowledged that there will be a level of impact to local residents, there are means of mitigation that will be fully implemented in order to lessen impact and increase biodiversity and encourage wildlife and habitats in the area. The recent removal of an area of development which lay within a more sensitive locale further lessens levels of impact.

The Application Site, is well situated in relation to potential noise impact and, as shown within the site specific noise survey undertaken, will have no adverse impact on receptors in the local area. The framework of the Development will have a visual presence in the area, however a high level of screening planting is proposed so that this visual impact will be greatly reduced over time. Ecologically, the site has undergone an ecological appraisal which conclude that the proposed development will have a negligible impact. By virtue of the installation of screen planting in areas, the sewing of wild flower

meadows, new habitats will be introduced and the biodiversity encouraged and increased. A Biodiversity Net Gain Plan is submitted which will deliver quantifiable biodiversity improvements to the area. No designated or non-designated heritage assets are located within the extent of the Application Site, while no internal features of archaeological interest were identified through the site visit or analysis of historic maps, aerial imagery and lidar data. As such, the Development will not result in any direct impacts to known archaeology and heritage assets and will not require any mitigation measures.

Alternate areas of land had been considered for the development and consideration was given to the potential for connectivity to The Grid, flooding and surface water impacts, impact to residential amenity the historic and archaeological environment and also the current use of the land, including land quality. It is considered that the chosen land will meet all required criteria and that, especially given the essential nature of the development, that no prime agricultural land has been removed from food production without due justification and that the land can and will be restored to its current condition. The development is not a permanent change of use. There are no available brownfield sites or land of lower agricultural value within proximity that was available for use. Within a 3km area, there is approximately 10,000 acres of available agricultural land upon which a mix of grazing and food production takes place. The footprint of the development and associates works covers an area of 400 acres. The partial loss (grazing will be retained) of such a small proportion of land, which is made up of areas which have low use for arable, will have no significant adverse impact and the benefits of producing essential renewable energy can be considered as a valuable alternative for the use of land.

The essential infrastructure and significant benefits of the development, with the low level loss of agricultural land of viable productivity, give valid justification for removing agricultural land from food production.

These aforementioned factors clearly illustrate the suitability of the site to accommodate the proposed development.

1.6 Design Evolution

The final design has been achieved following a number of key layout alterations, considering specific onsite constraints. Principally this has involved:

- Consideration of residential amenity;
- Consideration of ecological habitats & biodiversity;
- Consideration of archaeological & cultural assets;
- Consideration of buried services and any requisite buffer zones;
- Consideration of neighbouring use;
- Consideration of existing access of existing points;
- Consideration of surface water/flooding restrictions;
- Consideration of existing infrastructure.

Refinements to design were undertaken throughout the pre-application surveys and discussions as site specific details dictated, along with feed back and comments from members of the community.

The development has undergone a number of alterations, including land area changes and layout, in order to reflect results from surveys and feedback from local residents and business through the consultation process. Initial land to the west, at Leyshade Farm, was removed from the design in order to reduce the spread of the development over a wider area and potential impact to watercourses. An area to the North at Dodds Farm was included to contribute to the sustainability of the solar farm. This area also saw changes to the layout with two design alterations moving panels further away from residential properties. To allow for more pushback at the suggestion of some local residents, an area of land used as rough grazing on Fothringham Estate has been explored and initially included within the design. This area has subsequently been removed from the design as the higher sensitivity of the lands habitats and visual impact raised the level overall of potential impact across the site. Details of the findings of the assessments has been retained within the reporting to illustrate for reference only. It is confirmed that the area of land at Fothringham estate is not within the development boundary. Removal of areas and push back from residential has also been undertaken in and around the more populated areas in Duntrune. This, it is felt, has contributed to a development with a level of impact that can, with mitigation, meet all standards and legislation and provide a vitally important component in providing a source of supplying essential energy and make large contributions to reducing.

1.7 The Planning Application Submission

The following plans and drawings are submitted with the planning application:

- Site Location Plan; and Site Layout,
- In addition, the following elevation drawings are also submitted:
- Bi-Facial solar panels and mountings
- IR Security Camera
- Security Fencing
- The following information is appended to this Supporting & Planning Statement:
- Landscape & Visual Impact Assessments
- Cultural & Heritage Assessments
- Flood Risk/Drainage Impact Assessments
- Ecological Study
- Biodiversity Net Gain assessment
- Access and Transport Statements
- Pre Application Community Consultation
- Site Specific Noise Reports
- Glint & Glare Assessment

2. THE DEVELOPMENT

2.1 Technology

The Solar PV manufacturing industry is continuously evolving with the recent introduction of Bifacial (double sided) panels that make use of both direct and ground reflected light. The final selection of

technology will be chosen prior to installation, to fit within the maximum dimensions assessed in this planning application.

2.2 Landscape Planting

The existing site benefits from an excellent level of mature tree and hedgerow planting. There are areas however where a full screening programme will be undertaken with the introduction of hedgerows to not only screen the development but also increase the biodiversity and habitats for wildlife. In areas where supplementary hedgerows would benefit the screening process and compliment biodiversity and habitats, native species will be chosen in keeping with the current variety mix to compliment the green nature of the area. There is no requirement to remove existing trees and hedgerows. A security fence will be established within the site boundaries and the screening situated out with the fence. A LEMP (Landscape and economic management plan) along with a planting scheme has been devised and with the benefit of the biodiversity net gain assessment, will be utilised to ensure that the highest level of enhancements are delivered.

2.3 Access

Access to the Application Site will be taken from a number of points. A full transport and access study has been undertaken to ensure the safe transport of materials in order to ensure the least impact to residents and road users. Transport and Access reports are submitted in support of the application which shows worst case scenarios. A survey of the road condition will be undertaken prior to commencement and any upgrades will be approved and carried out. Similarly, a survey after construction will be undertaken and any repairs carried out as required.

During the operational phase of the Development traffic would be restricted to occasional maintenance visits. Further information of anticipated vehicle numbers is provided in the full access and transport statement submitted. Ground and vegetation maintenance will be carried out by suitably appointed staff.

Construction traffic will consist of a small number of heavy goods vehicles (HGVs), light good vehicles (LGVs) and cars. The site and access roads including public roads and highways leading to the access points have historically been utilised by heavy machinery and HGV's and no abnormal loads are predicted.

Construction and operational traffic would not have a significant adverse impact on the safe operation of the highway network or cause unacceptable environmental effects The economic opportunities for local and regional contractors during construction activities and opportunities throughout the supply chain would provide some minor employment/economic benefits.

Maintenance would be overseen by suitably qualified contractors who would visit the Development as required but typically less than twice per month. Online monitoring of performance and identification of issues would be provided on a 24 hour basis.

Ongoing track maintenance would generally be undertaken in the summer months when tracks are dry. Safe access would be maintained all year round.

2.4 Drainage and Surface Water

The solar park has undergone a Flood Risk and Drainage Impact Assessment which included:

- An examination of the current and historical drainage patterns, including the soil classification of the site;
- Review of baseline flood risk, hydrological and hydrogeological conditions;
- Mapping of known surface water features and drainage structures;
- Level 3 flood risk assessment including estimation of design flows for the watercourses on site using industry standard methodologies and 2D modelling using Flood Modeller and publicly available LiDAR topographic data;
- Drainage strategy for the site; and
- Flood Risk and Drainage Assessment report compliant with Local Authority and SEPA Guidance.

Following a questions and answer request from Protect Rural Angus, further exploration was carried out and reported to the group to share within the wider community. For full details please refer to the Flood Risk and Drainage Impact Assessment and the two Gavia responses to the questions. The findings of the studies assisted in the final design of the development.

This report took into account the effect of climate change and the potential to increase flood risk in other areas. No adverse risk is associated with the development nor is there potential for contamination or interference of public water supplies or public health.

There are no foul drainage requirements for the development.

2.5 Development – Construction, Operation and Decommissioning

2.5.1 Construction

The construction process would consist of the following principal activities:

- Assess existing access tracks, construction as required and site preparation;
- Delivery of components;
- Cable routing, laying and connection;
- Testing and commissioning; and,
- Site restoration.

Most of these operations would be carried out concurrently, although predominantly in the order identified, in order to minimise the overall length of the construction programme. Site restoration would be programmed and carried out to allow restoration of disturbed areas as early as possible and in a progressive manner.

A construction and environmental management plan, to be completed by the developer prior to commencement on site, will include the final details of temporary toilets, washing facilities, supply of drinking water, means of heating and preparing food and accommodation for rest breaks and meals will be provided. The welfare facilities will be kept clean and tidy by all persons using them. Smoking will not be permitted on site, except within designated areas.

It is envisaged that there may be the potential for approximately 20 jobs generated in the local area through the construction period alone.

Emergency procedures regarding fire precautions during and after the construction phase will be written and will be detailed in a Fire Risk Assessment. Fire points will be set up at various locations around the site. These will consist of appropriate fire extinguishers and an air horn or fire bell with which to raise the alarm. A fire muster point will be located immediately outside the main entrance. A fire action plan for the project will be displayed on a site noticeboard, detailing the locations of fire points, fire routes, first aid provisions and the emergency muster point as well as the site address for emergency services. This fire action plan is to be regularly updated by the Site Manager to reflect current conditions on site. The procedure to be followed in the event of an emergency will be made known to all persons as part of the site induction training.

it is standard, but essential, that insurance and protection is in place for the development.

2.5.2 Operation

Maintenance would be overseen by suitably qualified contractors who would visit the Development as required but typically twice per year. Online monitoring of performance and identification of issues would be provided on a 24 hour basis.

Ongoing track maintenance would generally be undertaken in the summer months when tracks are dry. Safe access would be maintained all year round.

2.5.3 Decommissioning

Decommissioning will take account of the environmental legislation and technology available at the time of decommissioning. Notice will be given to the Council in advance of commencement of the decommissioning works, with all necessary licenses or permits being acquired. Decommissioning will be timed to minimise its environmental impact.

The Applicant will develop a decommissioning plan, and the works will be undertaken in accordance with a statement of operations, covering safety and environmental issues during decommissioning. This will be submitted for approval at least 6 months prior to full decommissioning of the site.

The site will be returned to regular farming use.

3. SITE & SURROUNDINGS

3.1 Description of Application Site

The development will utilise in the region of 400 acres of land within the ownership of four farming enterprises. The development will consist of approximately 232,000 bifacial solar panels with a tip height between 3m – 3.3m, with mountings, cabling, and associated infrastructure components, such as transformers, Inverters, DC and AC converters, switchgear and controllers, as well as requisite substations which will be housed within units of approximate dimensions of 2.45m wide x 2.9m high and 6m long. Paladin deer Fencing will be to a 3m height. The development land already benefits from an excellent level of vegetation screening and this will be encouraged in order to increase biodiversity at the site. It is proposed that screening/planting will be undertaken in areas, with native species, to support the establishment of natural habitats, to increase biodiversity. This planting will aid the continuance of a 'green' agricultural and countryside environment. No pathways or rights of access will be affected by the development.

The Site encompasses four discrete parcels of land, broadly extending north – south between Carrot Hill in the north and Glack Hill in the south.

A full Phase 1 ecological appraisal has been undertaken in order to safeguard wildlife and habitat considerations. There are no indications that the proposed development would result in any significant environmental effects.

A full Landscape & Visual Impact Assessment has been undertaken and shows, as such, the majority of the Site is void of landscape features, other than the occasional stone walls and other boundary treatments that demarcate the local field pattern. In general, the field boundaries are of low height. This contributes to a landscape that is relatively open in places. However, the blocks of woodland, shelterbelt and tree cover interspersed throughout this agricultural landscape result in increased visual containment and a greater sense of enclosure, particularly in lower lying areas.

In order to protect any potential historical or cultural heritage of the area a Heritage Impact assessment has been undertaken across the whole of the development area. Please refer to the survey report for full details.

Other built form comprises isolated farmsteads and clusters of residential dwellings linked by minor roads. In addition, an overhead power line extends southwest-northeast through the Area, extending in close proximity to the Site in the vicinity of Big Latch Wood. The B978 and B961 extend north and northeast from Dundee respectively and represent the main transport routes.

3.2 Land Use Surrounding Application Site

The Application Site comprises undulating, farmland, steadily rising to the north, towards the summits of Lorns Hill (243m AOD), Dodd Hill (255m AOD), and Carrot Hill (259m AOD) and to the south Glack Hill represents the most elevated point, rising to 132m AOD. The land is predominantly arable in use, with

localised parcels of woodland and tree cover. Fields are generally of medium scale and are typically demarcated by drystone walls, as well as post-and-wire fencing and hedgerows.

Existing settlement within the local area is primarily limited to small villages and hamlets, including Westhall Terrace (70m to the west of the Proposed Development), Kellas (340m to the east), Bucklerheads (650m to the east), Burnside of Duntrune (1.0km to the south) and Wellbank (1.5km to the east). Ballumbie, on the northern edge of Dundee, is located 1.0km to the south of the Site at the closest point.

Planting of trees and hedgerows also improve the green environment and increases biodiversity and habitats. No trees will be removed due to the development. It is the intention to utilise existing field access and roadways where possible and safe to do so in order to preserve the existing setting and framework.

4. LOCAL & DEVELOPMENT POLICY AND NATIONAL SUPPORT

4.1 Introduction

On 1 May 2019 an Environmental and Climate Change Emergency was declared following the finding of the Intergovernmental Panel on Climate Change. In order to avoid more than 1.5°C rise in global warming, global emissions would need to fall by around 45 per cent from 2010 levels by 2030, reaching net zero by around 2050.

In June 2019 the UK became the first major economy in the world to pass laws to end its contribution to global warming by 2050.

In January 2023 The Scottish Government issued the Draft Energy Strategy and Just Transition Plan.

On the 13th February The Scottish Government adopted and published National Planning Framework 4 which replaces National Planning Framework 3 and Scottish Planning Policy.

4.2 Local Policies relative to the development

Angus Council Local Policies

Whilst the application will be determined by The Energy Consents Unit, Angus Council will have a major role in deciding the application and as such the proposed development has been considered against Local as well as National policies.

On the 5th September 2019, Angus Council declared a Climate Emergency, recognising 'the impact this will have on our quality of life now and for future generations.'

The Sustainable Energy and Climate Action Plan (SECAP) was approved on 4 November 2021 to support Angus in its commitment to sustainable development, environmental management, and the transition to a low-carbon economy.

This plan provides a roadmap, highlighting key opportunity areas where Angus can reduce Green House Gas emissions, create potential adaptation actions in response to climate change and measures to provide sustainable, affordable, and secure access to energy.

Vision:

"By 2030, Angus will be a major contributor to achieving Scotland's national climate change goals, and a leader in clean growth, environmental stewardship and sustainable communities."

Think global, act local – Climate change is a global challenge that affects everyone, everywhere. Underpinning all meaningful climate action is the recognition that citizens of a particular region are also citizens of the world. Climate actions can often have local environmental, economic or social benefits. However, limiting the framework of action to local considerations ultimately runs the risk of being restrictive and misdirected.

Green infrastructure

"Together with delivering Green Health Initiatives, Angus Council's aim is to protect and enhance the functionality and connectivity of existing Green Networks within settlements and across Angus (see action L7). Green Networks are composed of green infrastructure. Green infrastructure can contribute to both climate change mitigation and adaptation and, if designed correctly, can perform many different functions including protection against flooding and erosion, strengthening habitat networks, enhancing biodiversity and improving air quality."

ALDP Renewable and Low Carbon Energy Development Supplementary Guidance

"Solar farms can contribute to biodiversity and maintenance of land fertility through environmental management programmes, such as planting species that encourage and foster bee populations and allowing hive placement; contribute to the green network and interconnectivity of habitat and foster soil fertility. Solar farms may be located on good quality agricultural land and where possible grazing options should be considered."

Local Development Plan

The policies of relevance to climate change and electricity infrastructure within the LDP are as follows;

- Carbon Energy Development of Angus LDP and Policies 33 Renewable and Low-Carbon Energy.
- Angus' Policy PV9 supporting renewable energy/low carbon developments subject to meeting criteria.
- Emerging Local Development Plan

Angus Council are in the early stages of preparing their next LDP, titled AngusPlan. AngusPlan will be prepared under the new legislative requirements of the Planning (Scotland) Act 2019 and therefore due to current timescales for implementation of the Act, Angus Council anticipate the adoption of their plan in 2024.

Angus Sustainable Energy and Climate Plan

In response the evolving climate emergency, and in order to support Scotland's national climate change targets, Angus Council has developed this Sustainable Energy and Climate Action Plan.

Angus Council proposed developing a SECAP in the Council's 2019 Summary Report in accordance with the Climate Change (Duties of Public Bodies: Reporting Requirements) Scotland Order 2015. This was agreed and approved by Angus Council on 17th October 2019.

The purpose of the SECAP is to support Angus Council in its commitment to sustainable development, environmental management and the transition to a low carbon economy. It provides a roadmap demonstrating how Angus can both reduce its carbon emissions and increase the resilience of the region to the potential impacts of climate change through concrete, deliverable actions

ALDP Renewable & Low Carbon Energy Development Supplementary Guidance

This Supplementary Guidance was prepared to support the use and implementation of the Angus Local Development Plan (ALDP) Policy PV9: Renewable and Low Carbon Energy Development.

It establishes a Spatial Framework for onshore wind energy and detailed criteria to assist the preparation and assessment of proposals for renewable and low carbon energy development, facilitating consistent interpretation and application of the policy by:-

- Providing advice on the interpretation of ALDP Policy PV9 to develop a consistent approach to decision-making for all renewable and low carbon energy development;
- Guiding new development to appropriate and sustainable locations where impact, including on landscape quality, amenity, and natural and built heritage can be minimised;

And

- Develop policy guidance from the Scottish Government on development management considerations for renewable and low carbon energy development

In consideration of this supplementary guidance, it is considered that the development meets the requisite criteria.

TAYplan Strategic Development Plan (2017)

The TAYplan Strategic Development Plan (TSDP) sets out the overall planning vision for the region over the a twenty years period covering both Angus and Perth and Kinross Council areas in addition to Fife and Dundee City Councils. TSDP looks to identify key areas for growth and sets out an overarching spatial strategy for the region.

The policy of most relevant to the Proposed Development is 'Policy 7 – Energy, Waste and Resources' which aims to deliver a low/zero carbon future and contribute to meeting Scottish Government energy targets.

Policy 7 of the TSPD the Proposed Development is identified as a strategically significant development as it will significantly affect the operation and capacity of energy infrastructure including the regional grid connection and storage networks.

Policy 9: Managing TAYplan's Assets states that land should be identified through Local Development Plans to ensure responsible management of TAYplan's environmental and historical assets. With regard to the Proposed Development, following the implementation of mitigation no significant adverse impacts are predicted to natural or historical assets.

The Proposed Development is considered to comply with Policy 9.

The Proposed Development can draw significant support from the policies and objectives of the TSDP.

Angus LDP Policy Schedule

Natural Heritage

Policy PV1 Green Infrastructure and Green Networks

Angus Council will seek to protect, enhance and extend the wildlife, recreational, amenity, landscape, access and flood management value of the Green Network. Development proposals that are likely to erode or have a damaging effect on the connectivity and functionality of the Green Network will not be permitted unless appropriate mitigation or replacement can be secured. In some cases a developer contribution towards enhancement of the wider Green Network may be appropriate.

Green infrastructure (including open space) will require to be provided as part of new development. Proposals should identify the location and nature of the green network in the area and seek to enhance linkages wherever possible.

The proposal can draw support in that it incorporates high standards of environmental design which seeks to protect and minimise impacts to the local environment. Given the nature of the Proposed Development, access by means of a dedicated foot and cycle path around parts of the development will be formed. This will be 3m in width and have the security fencing on one side and the hedging screening on the other. The development will not impact on existing green networks It is noted that there is a foot, cycle and bridlepath to the north of the site. Any disruption to paths is not anticipated as there is no need to divert or stop access, however should a temporary stoppage during construction be required, this would be signposted and, if appropriate, a safe diversion would be put in place and discussed with Angus Council. A full Construction Environmental Management Plan will contain an Outdoor Access Plan, which would identify where any public and private accesses would be impacted by the construction works and set out appropriate mitigation, such as appropriate signage and detailing diversion routes. No likely significant effects are anticipated.

Full screening of the development will be undertaken with native species of vegetation that will be designed to fully screen the development when mature.

Policy PV4 Sites Designated for Natural Heritage & Biodiversity Value

Angus Council will work with partner agencies and developers to protect and enhance habitats of natural heritage value. Development proposals which are likely to affect protected sites will be assessed to ensure compatibility with the appropriate regulatory regime.

After careful consideration and study it has been shown that there is no impact to Natural Heritage and by the addition of planting around the area, offering habitats and shelter, the biodiversity of the area will improve.

International Designations

Development proposals or land use change which alone or in combination with other proposals could have a significant effect on a Ramsar site or a site designated or proposed under the Birds or Habitats Directive (Special Areas for Conservation and Special Protection Areas) and which is not directly connected with or necessary to the management of the site, will only be permitted where:

- an appropriate assessment demonstrates the proposal will not adversely affect the integrity of the site; or
- there are no alternative solutions; and
- there are imperative reasons of overriding public interest, including those of social or economic nature; and
- compensatory measures are provided to ensure that the overall coherence of the Natura Network is protected.

National Designations

Development proposals which affect Sites of Special Scientific Interest will only be permitted where:

- the proposed development will not adversely affect the integrity of the area or the reasons for which it was designated either individually or in combination with other proposals; or
- any adverse effects on the qualities of any designated site are outweighed by social, environmental or economic benefits of national significance; and
- mitigation and restoration measures are provided.

After careful consideration and study it has been shown that there is no impact to International or National designated sites from the development.

Policy PV5 Protected Species

Angus Council will work with partner agencies and developers to protect and enhance all wildlife including its habitats, important roost or nesting places. Development proposals which are likely to affect protected species will be assessed to ensure compatibility with the appropriate regulatory regime.

European Protected Species

Development proposals that would, either individually or cumulatively, be likely to have an unacceptable adverse impact on European protected species as defined by Annex 1V of the Habitats Directive (Directive 92/24/EEC) will only be permitted where it can be demonstrated to the satisfaction of Angus Council as planning authority that:

there is no satisfactory alternative; and

- there are imperative reasons of overriding public health and/or safety, nature, social or economic interest and beneficial consequences for the environment, and
- the development would not be detrimental to the maintenance of the population of a European protected species at a favourable conservation status in its natural range.

Other Protected Species

After careful consideration and study, it has been shown that there are no adverse impacts due to the development.

In order to ascertain whether the proposed development meets and is in accordance with the LDP policy V1, PV4 and PV5 an ecological appraisal was undertaken by a fully qualified ecologist. The full report is annexed for reference. The conclusion from the survey results being that The Development is situated within areas of low ecological value. No protected habitats were recorded within the site boundaries; however, dry heath, an Annex 1 habitat, is present to the northwest of Area B within the 100m buffer. No designated sites were identified within the site boundaries; however, there are two designated sites of Special Scientific Interest (SSSI); Gagie Marsh Site SSSI which is located adjacent to the redline boundary of Area A, and Carrot Hill Meadow SSSI which is located c.0.4km east of Area B. The main habitat recorded across all site survey areas was arable land (c. 85% of the total site area) followed by broadleaved woodland, coniferous and broadleaved plantation (combined c. 6.45%), dry heath (c. 2.5%) and improved grassland (c. 1.2%). All other habitats represented <1% of the site total area each. These areas will be protected to ensure that no impact will be caused due to the development.

A range of mitigation and enhancement measures have also been recommended to safeguard local wildlife and increase local biodiversity.

Landscape

Policy PV6 Development in the Landscape

Angus Council will seek to protect and enhance the quality of the landscape in Angus, its diversity (including coastal, agricultural lowlands, the foothills and mountains), its distinctive local characteristics, and its important views and landmarks.

Capacity to accept new development will be considered within the context of the Tayside Landscape Character Assessment, relevant landscape capacity studies, any formal designations and special landscape areas to be identified within Angus. Within the areas shown on the proposals map as being part of 'wild land', as identified in maps published by Scottish Natural Heritage in 2014, development proposals will be considered in the context of Scottish Planning Policy's provisions in relation to safeguarding the character of wild land. Development which has an adverse effect on landscape will only be permitted where:

- the site selected is capable of accommodating the proposed development;
- the siting and design integrate with the landscape context and minimise adverse impacts on the local landscape;
- potential cumulative effects with any other relevant proposal are considered to be acceptable; and
- mitigation measures and/or reinstatement are proposed where appropriate.

A full Landscape and Visual Impact Assessment has been undertake and discussions held between Angus Council to determine and agree viewpoints and levels of study. The report, annexes and photomontages have been included in support of the application.

Built Heritage

Policy PV8 Built and Cultural Heritage

Angus Council will work with partner agencies and developers to protect and enhance areas designated for their built and cultural heritage value. Development proposals which are likely to affect protected sites, their setting or the integrity of their designation will be assessed within the context of the appropriate regulatory regime.

National Sites

Development proposals which affect Scheduled Monuments, Listed Buildings and Inventory Gardens and Designed Landscapes will only be supported where:

- the proposed development will not adversely affect the integrity of the site or the reasons for which it was designated;
- any significant adverse effects on the site or its setting are significantly outweighed by social, environmental and/or economic benefits; and
- appropriate measures are provided to mitigate any identified adverse impacts.
- Regional and Local Sites
- Development proposals which affect local historic environment sites as identified by Angus Council (such as Conservation Areas, sites of archaeological interest) will only be permitted where:
- supporting information commensurate with the site's status demonstrates that the integrity of the historic environment value of the site will not be compromised; or
- the economic and social benefits significantly outweigh the historic environment value of the site.

After careful consideration and survey, it has been shown that the development will have no unacceptable impact on Built and Cultural Heritage.

Hydrology

Policy PV12 Managing Flood Risk

To reduce potential risk from flooding there will be a general presumption against built development proposals:

- on the functional floodplain;
- which involve land raising resulting in the loss of the functional flood plain; or
- which would materially increase the probability of flooding to existing or planned development.

A full Flood Risk Assessment has been undertaken and submitted in support of the application. Furthermore, two questions and Answers documents for a local group has been submitted for further information.

Policy PV13 Resilience and Adaptation

Development should not require an increase in the provision and / or maintenance of flood defences.

To increase resilience to the effects of climate change such as flood and drought, extreme weather events and rising sea levels Angus Council may require development proposals to incorporate adaptation measures.

It has been shown that there will be no increase in the potential risk of flooding.

Policy PV14 Water Quality

To protect and enhance the quality of the water environment, development proposals will be assessed within the context of:

- the National Marine Plan;
- the Scotland River Basin Management Plan and associated Area Management Plans;
- relevant guidance on controlling the impact of development and associated works;
- relevant guidance on engineering works affecting water courses; and
- potential mitigation measures.

Development proposals which do not maintain or enhance the water environment will not be supported.

Mitigation measures must be agreed with SEPA and Angus Council.

Development proposals must not pollute surface or underground water including water supply catchment areas due to discharge, leachates or disturbance of contaminated land.

All new development (except single dwelling and developments that discharge directly to coastal waters) will be required to provide Sustainable Drainage Systems (SUDs) to accommodate surface water drainage and long term maintenance must be agreed with the local authority. SUDs schemes can contribute to local green networks, biodiversity and provision of amenity open space and should form an integral part of the design process.

Policy PV20 Soils and Geodiversity

Development proposals on prime agricultural land will only be supported where they:

- support delivery of the development strategy and policies in this local plan;
- are small scale and directly related to a rural business or mineral extraction; or
- constitute renewable energy development and are supported by a commitment to a bond commensurate with site restoration requirements.

Design and layout should minimise land required for development proposals on agricultural land and should not render any farm unit unviable.

The proposal constitutes a renewable energy development and will be supported by a commitment to restoration requirements. The development will not make the farm units unviable.

Resources

Policy PV7 Woodland Trees and Hedges

Ancient semi-natural woodland is an irreplaceable resource and should be protected from removal and potential adverse impacts of development. The council will identify and seek to enhance woodlands of high nature conservation value. Individual trees, especially veteran trees or small groups of trees which contribute to landscape and townscape settings may be protected through the application of Tree Preservation Orders (TPO).

Woodland, trees and hedges that contribute to the nature conservation, heritage, amenity, townscape or landscape value of Angus will be protected and enhanced. Development and planting proposals should: protect and retain woodland, trees and hedges to avoid fragmentation of existing provision;

- be considered within the context of the Angus Woodland and Forestry Framework where woodland planting and management is planned;
- ensure new planting enhances biodiversity and landscape value through integration with and contribution to improving connectivity with existing and proposed green infrastructure and use appropriate species;
- ensure new woodland is established in advance of major developments;
- undertake a Tree Survey where appropriate; and
- identify and agree appropriate mitigation, implementation of an approved woodland management plan and re-instatement or alternative planting.

Angus Council will follow the Scottish Government Control of Woodland Removal Policy when considering proposals for the felling of woodland.

Tree and hedge planting will be undertaken to screen the development and increase the biodiversity.

Climate Change

Policy PV9 Renewable and Low Carbon Energy Development

Proposals for renewable and low carbon energy development will be supported in principle where they meet the following criteria:

- the location, siting and appearance of apparatus, and any associated works and infrastructure have been chosen and/or designed to minimise impact on amenity, landscape and environment, while respecting operational efficiency;
- access for construction and maintenance traffic can be achieved without compromising road safety or causing unacceptable change to the environment and landscape;
- the site has been designed to make links to the national grid and/or other users of renewable energy and heat generated on site;
- there will be no unacceptable impact on existing or proposed aviation, defence, seismological or telecommunications facilities;
- there will be no unacceptable adverse impact individually or cumulatively with other existing or proposed development on:
- landscape character, setting within the immediate and wider landscape (including cross boundary or regional features and landscapes), sensitive viewpoints and public access routes;

- sites designated for natural heritage (including birds), scientific, historic, cultural or archaeological reasons;
- any populations of protected species; and
- the amenity of communities or individual dwellings including visual impact, noise, shadow flicker.
- during construction, operation and decommissioning of the energy plant there will be no unacceptable impacts on:
- groundwater;
- surface water resources; or
- carbon rich soils, deep peat and priority peatland habitat or geodiversity.

Where appropriate mitigation measures must be supported by commitment to a bond commensurate with site restoration requirements.

The development will contribute to national targets for energy generation and further assist the stabilising of essential network infrastructure and services without causing unacceptable levels of impact.

Miscellaneous

Policy DS4 Amenity

All proposed development must have full regard to opportunities for maintaining and improving environmental quality. Development will not be permitted where there is an unacceptable adverse impact on the surrounding area or the environment or amenity of existing or future occupiers of adjoining or nearby properties.

Angus Council will consider the impacts of development on:

- Air quality;
- Noise and vibration levels and times when such disturbances are likely to occur;
- Levels of light pollution;
- Levels of odours, fumes and dust;
- Suitable provision for refuse collection / storage and recycling;
- The effect and timing of traffic movement to, from and within the site, car parking and impacts on highway safety; and
- Residential amenity in relation to overlooking and loss of privacy, outlook, sunlight, daylight xxx

Full survey and studies have been undertaken in order to confirm that all potential impacts have been carefully considered in order to ensure compliance of the development. Where appropriate mitigation has been implemented to safeguard amenity.

Tayside Local Biodiversity Action Plan 2016-2026

The Tayside Local Biodiversity Action Plan (LBAP) 2016-2026 incorporates the local authority areas of Angus, and Perth and Kinross.

Legislative Framework

- Natural Heritage (Scotland) Act 1991
    - Establishes NatureScot (formerly Scottish Natural Heritage) as the main body responsible for securing and promoting the conservation of Scotland's natural scenery, flora and fauna. Environment Act 1995
    - Under this Act, the Scottish Environmental Protection Agency (SEPA) and the Environment Agency are established as the regulatory bodies for contaminated land, control of pollution, conservation and enhancement of the environment and fisheries.
- The Planning (Scotland) Act 2019
    - This Act sets six outcomes for planning in Scotland, one of which is securing positive effects for biodiversity. Conservation (Natural Habitats &c.) Regulations 1994 (as amended) (Habitats Regulations)
    - The Habitats Regulations 1994 (as amended in Scotland) provide the protection given to European protected species of animals and plants.
- Wildlife and Countryside Act 1981 (as amended)
    - Protected birds, animals and plants are listed in Schedules 1, 5 and 8 respectively of the Wildlife and Countryside Act 1981 (as amended) (WCA).
- The Protection of Badgers Act (1992)
    - The Act defines a badger sett as 'any structure or place, which displays signs indicating the current use by a badger' and NatureScot takes this definition to include, 'the presence of field signs such as bedding, fresh spoil heaps, signs of recent digging, hair, latrines, or footprints in or around the potential sett or evidence of badgers entering or exiting the structure or place in question would indicate current use of the structure/ place by a badger'
- In Scotland the Wildlife And Natural Environment (Scotland) Act (2011) has made amendments to the Act; see below.
- Wildlife And Natural Environment (Scotland) Act (2011)
    - In Scotland, the Wildlife and Natural Environment (Scotland) Act (2011) (WANE) makes amendments to previous legislation.
- Nature Conservation (Scotland) Act 2004
    - Certain habitats have protection under the Nature Conservation (Scotland) Act 2004.
    - The Act requires Scottish Ministers to produce a Scottish Biodiversity Strategy, including providing a published list of habitats considered to be of principal importance for the conservation of biodiversity (referred to as the Scottish Biodiversity List). This list is to be used to assist public bodies to meet section 1 of the Act.
    - Environmental Liability (Scotland) Regulations 2009
    - Brings into force rules to force polluters to prevent and repair damage to water systems, land quality, species and their habitats and protected sites.
- Deer (Scotland) Act 1996
    - This Act sets out NatureScot's role to further the conservation of deer native to Scotland, and perform functions as set out by the Act. It makes provisions for the conservation, control and sustainable management of deer; details what constitutes an offence in relation to deer; sets out details of enforcement of the Act, and miscellaneous provisions of the Act. It consolidates legislation in respect of deer in Scotland.

In order to ensure full compliance of all natural heritage and biodiversity an ecological study has been undertaken with the full report submitted in support of the application. The proposal complies will all requisite legislation.

TAYplan Strategic Development Plan (2017)

The TAYplan Strategic Development Plan (TSDP) sets out the overall planning vision for the region over a twenty years period covering Fife Council, Perth and Kinross Council and Angus areas in addition to Dundee City Council. TSDP looks to identify key areas for growth and sets out an overarching spatial strategy for the region.

Policy 1 sets out a spatial strategy to deliver a sustainable pattern of development and directs that most development will be built in principal settlements. Local Development Plans identify appropriate land within the boundaries of principal settlements that is capable of delivering this sustainable pattern of development. Policy 1C considers development outside principal settlements such as the proposed development and balances supporting the needs of rural areas against potential outward growth of urban development which may engulf surrounding villages and towns.

The policy of most relevance to the Proposed Development is 'Policy 7 – Energy, Waste and Resources' which aims to deliver a low/zero carbon future and contribute to meeting Scottish Government energy targets.

Policy 7 of the TSPD look to ensure that new energy infrastructure is delivered in appropriate and sustainable locations, therefore they should be justified and illustrate that due consideration has been given to land take requirements and safety exclusion zones or buffer areas. That the potential effects of the development on residential amenity, habitats, landscape, noise, the water environment including drainage and waste disposal, biodiversity, heritage resources, tourism and recreational pursuits and carbon emissions, are all careful considered and reported. That the proximity of grid connections and distribution networks are appropriate to ensure viable and essential resources are protected in the locale and on a wider network area. That operational safety measures have been considered and that restoration measure have been considered for implementation after the lifetime of the development.

Justified consideration of all aspects of the development have been undertaken to ensure compliance.

Policy 9: Managing TAYplan's Assets states that land should be identified through Local Development Plans to ensure responsible management of TAYplan's environmental and historical assets. With regard to the Proposed Development, following the implementation of mitigation no significant adverse impacts are predicted to natural or historical assets.

The Proposed Development can draw significant support from the policies and objectives of the TSDP.

4.3 Planning Policy

National Planning Policy

The applicable National Planning Policies are:

- Scottish National Planning Framework 4 (NPF4); and
- Scottish Planning Policy 2014.

The NPF4 states that:

3. Strategic Renewable Electricity Generation and Transmission Infrastructure
This national development supports renewable electricity generation, repowering, and expansion of the electricity grid. A large and rapid increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets. Certain types of renewable electricity generation will also be required, which will include energy storage technology and capacity, to provide the vital services, including flexible response, that a zero-carbon network will require. Generation is for domestic consumption as well as for export to the UK and beyond, with new capacity helping to decarbonise heat, transport and industrial energy demand. This has the potential to support jobs and business investment, with wider economic benefits.

Scotland 2045

The world is facing unprecedented challenges. The global climate emergency means that we need to reduce greenhouse gas emissions and adapt to the future impacts of climate change. We will need to respond to a growing nature crisis, and to work together to enable development that addresses the social and economic legacy of the coronavirus pandemic, the cost crisis and longstanding inequality.

National spatial strategy

Scotland's future places will be net zero, nature-positive places that are designed to reduce emissions and adapt to the impacts of climate change, whilst protecting, recovering and restoring our environment.

Meeting our climate ambition will require a rapid transformation across all sectors of our economy and society. This means ensuring the right development happens in the right place. Every decision on our future development must contribute to making Scotland a more sustainable place. We will encourage low and zero carbon design and energy efficiency, development that is accessible by sustainable travel, and expansion of renewable energy generation.

The Scottish Government expresses its planning policies through: The National Planning Frameworks, the Scottish Planning Policy (SPP), Planning Advice Notes (PAN).

4.3.1 National Planning Framework (NPF)

NPF4 is a long-term strategy for Scotland and is a spatial expression of the Government's Economic Strategy and plans for development and investment in infrastructure. This is now a statutory document and a material consideration in any planning application. It provides a national context for development plans and planning decisions as well as informing the on-going programmes of the Scottish Government, public agencies, and local authorities.

4.3.2 Scottish Planning Policy (SPP) 2014

Scottish Planning Policy (SPP) was published on 23rd June 2014.. The changes relate to sustainable development and housing land supply.

SPP sets out national planning policies which reflect Scottish Government Ministers' priorities for the operation of the planning system and for the development and use of land. SPP is relevant to understanding the national context, the standard duties under Schedule 9 to the 1989 Act and is a material consideration in the decision-making process.

Presumption in Favour of Sustainable Development

SPP "introduces a presumption in favour of sustainable development" and states that:

"the planning system should support economically, environmentally and socially sustainable places by enabling development that balances the cost and benefits of the proposal over the longer term.

The Proposed Development forms part of a strategically important category of national development which is recognised in NPF4. It is a national priority which will contribute to the Scottish Government's central purpose and national outcomes.

'Energy Policy Principles: 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 (CCUS).

Policy Outcomes: • Expansion of renewable, low-carbon and zero emissions technologies.

Local Development Plans: LDPs 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.

Energy

Policy 11

A. Development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported.

These include:

i. wind farms including repowering, extending, expanding and extending the life of existing wind farms;
ii. enabling works, such as grid transmission and distribution infrastructure;
iii. energy storage, such as battery storage and pumped storage hydro;
iv. small scale renewable energy generation technology;
v. solar arrays;
vi. proposals associated with negative emissions technologies and carbon capture; and
vii. proposals including co-location of these technologies.

B. Development proposals for wind farms in National Parks and National Scenic Areas will not be supported.
C. Development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities.
D. Development proposals that impact on international or national designations will be assessed in relation to Policy 4.
E. In addition, project design and mitigation will demonstrate how the following impacts are addressed:

i. impacts on communities and individual dwellings, including, residential amenity, visual impact, noise and shadow flicker;
ii. significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable;

iii. public access, including impact on long distance walking and cycling routes and scenic routes;
iv. impacts on aviation and defence interests including seismological recording;
v. impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised;
vi. impacts on road traffic and on adjacent trunk roads, including during construction;
vii. impacts on historic environment;
viii. effects on hydrology, the water environment and flood risk;
ix. biodiversity including impacts on birds; x. impacts on trees, woods and forests;
x. proposals for the decommissioning of developments, including ancillary infrastructure, and site restoration;
xi. the quality of site restoration plans including the measures in place to safeguard or guarantee availability of finances to effectively implement those plans; and
xii. cumulative impacts.

In considering these impacts, significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets. 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. f) Consents for development proposals may be time-limited. Areas identified for wind farms are, however, expected to be suitable for use in perpetuity.

SPP notes that the planning system should support the transformational change to a low carbon economy and support the development of a diverse range of electricity generation from renewable energy technologies – including the expansion of renewable energy generation capacity. The Proposed Development would contribute to this aim.

Scottish Planning Policy (SPP) June 2014 aligns itself with NPF4 and one of its policy principles states that "This SPP introduces a presumption in favour of development that contributes to sustainable development". At paragraph 28, SPP states that "the planning system should support economically, environmentally and socially sustainable places by enabling development that balances the costs and benefits of a proposal over the longer term. The aim is to achieve the right development in the right place; it is not to allow development at any cost." The SPP also identifies a number of considerations to be taken into account when determining energy infrastructure developments including net economic benefit, the contribution to renewable energy targets, cumulative impacts, visual impacts, residential amenity, and landscape and visual impacts (paragraph169).

SPP paragraph 154 states that the planning system should:

"Support the transformational change to a low carbon economy, consistent with national objections and targets including delivering 30% of overall energy demand from renewable sources by 2020, 11% of heat demand from renewable sources by 2020, and the equivalent of 100% of electricity demand from renewable sources by 2020."

The Development is in line with the principles set out in Paragraph 154, as it will contribute to energy generation, (as per the directive from The Scottish Governments Chief Planner) and it will make a direct contribution to the renewable energy targets and energy security for essential infrastructure.

It is therefore considered that, the principles of the development accords with National Policy.

4.3.3 National Planning Framework 4

NPF4 has a focus on green energy and provides a spatial planning response to the Global climate emergency. This is indicative of the growing national investment in renewable energy, which must filter through to local level and consent suitable and sustainable renewable energy developments.

NPPF4 supports 'renewable energy developments, including the re-powering and extension of existing wind farms, new and replacement grid infrastructure, carbon capture and storage and hydrogen networks.'

Working in collaboration with grid operators allows for the upgrading and new infrastructure to enable connection of clean energy production where it is needed. The stabilisation of grid networks in not only towns and cities but in rural environments plays an essential role in stabilising supply to all and to allow the development of local networks. Development such as the proposed plays an essential part in this level of development. Without developments of varying scale, coupled with a mixed use of technologies that help support and improve network function, targets and goals will be missed.

'We want our places to support continued expansion of low-carbon and net zero energy technologies as a key contributor to net zero emissions by 2045.'

'Scotland's energy sector has a significant role to play in reducing carbon emissions and contributing to a green, fair and resilient economic recovery. A wide range of renewable technologies are capable of delivering these benefits, although it is likely that the onshore wind sector will play the greatest role in the coming years. The planning system should support all forms of renewable energy development and energy storage, together with new and replacement transmission and distribution infrastructure. It should also support new and emerging technology including hydrogen and carbon capture utilisation and storage (CCUS).'

'Policy 19: Green Energy'

'Development proposals for all forms of renewable energy and low-carbon fuels, together with enabling works such as transmission and distribution infrastructure, and energy storage such as battery storage, should be supported in principle.'

The infrastructure and capability of networks to provide reliable power and grid support to charging points requires the development of sustainable energy production and reliable transference and storage of power on an, as and when required basis. Rural areas, especially, suffer from poor infrastructure that requires repair or upgrading. Renewable energy developments, coupled with battery storage allow for the production of clean energy locally, a safe and secure supply and demand basis and for upgrading works to be completed. The proposed development allows for upgrading works and a balancing of power supply over the grid network of the area.

'We expect that NPF4 will confirm our view that the Global Climate Emergency should be a material consideration in considering applications for appropriately located renewable energy developments.'

'As a priority, our strategy will need to facilitate the roll-out of renewable electricity and renewable and zero emissions heat technologies. We will need to switch to low and zero carbon fuel sources, and support the delivery of associated infrastructure, such as grid networks and gas pipelines.'

'Introducing new policies that address a wider range of energy generation technologies for example for electrical and thermal storage, and hydrogen.'

Developments of the proposed scale allow for locally produced renewable energy to be used and stored at source or alternatively to be fed down the network to larger towns and cities as required. The nature of cities makes it more difficult for renewable, sustainable energy to be produced at source at scale and therefore a dependence on renewable energy out with large towns and cities is a necessity requiring many more decentralised generation facilities.

A flexible battery energy storage solution provides the opportunity to grow and establish a solid, reliable network, feeding to a local network whilst supporting a national grid and stabilising power provision to all. Establishing infrastructure and improving accessibility to it requires a clean, sustainable source, one to which this development can contribute on a substantive level.

'Strategic Renewable Electricity Generation and Transmission Infrastructure'

'This national development supports renewable electricity generation, repowering, and expansion of the electricity grid.'

'A large increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets. Certain types of renewable electricity generation will also be required, alongside developments and increases in storage technology and capacity, to provide the vital services, including flexible response, that a zero carbon network will require. Generation is for consumption domestically as well as for export to the UK and beyond, with new capacity helping to decarbonise heat, transport and industrial energy demand. This has the potential to support jobs and business investment, with wider economic benefits.'

'The electricity transmission grid will need substantial reinforcement including the addition of new infrastructure to connect and transmit the output from new on and offshore capacity to consumers in Scotland, the rest of the UK and beyond. Delivery of this national development will be informed by market, policy and regulatory developments and decisions.'

'Additional electricity generation from renewables and electricity transmission capacity of scale is fundamental to achieving a net zero economy and supports improved network resilience in rural and island areas.'

Localised production of renewable energy, with capacity for wider distribution, is an essential component in the provision of facilities and structure that can and will stabilise consumer supply. A development, such as that proposed, allows for the provision and stabilisation of supply to local residents and business and providing an infrastructure support to the electrical grid infrastructure.

NPP3 is also very supportive of green energy development but NPPF4 goes a step further to actively encouraging and promoting developments which can contribute and support infrastructure and aid Scotland's progression to Net Zero and meeting essential targets to combat climate change.

It is important to note that NPF4 is not approved policy, therefore, NPF3 and SPP will remain in force as the extant policy guidance until NPF4 is formally adopted by Scottish Ministers which is expected in 2022.

4.4 National Planning & Energy Policy

4.4.1 Town and Country Planning (Scotland) Act 1997

The principal planning statute in Scotland is the Town and Country Planning Act (Scotland) 1997 (the Planning Act) as amended by The Planning etc. (Scotland) Act 2006 and now the Planning (Scotland) Act 2019. Section 57(2) of the 1997 Act provides:

Section 25 of the Planning Act states that: "Where, in making any determination under the planning Acts, regard is to be had to the development plan, the determination shall be made in accordance with the plan unless material considerations indicate otherwise".

4.4.2 Routemap for Renewable Energy in Scotland

Securing low carbon energy supplies is a key element in achieving the target of reducing emissions by 80% by 2050 with an interim milestone of 42% by 2020. In recognition of this the Scottish Government set targets which include producing 100% of the country's demand for electricity from renewable sources by 2020, first detailed within the 2020 Routemap for Renewable Energy in Scotland. Although now superseded, the Development therefore draws significant support as a contributor to these and successive targets.

4.5 Scottish Energy Strategy

The Scottish Energy Strategy 2017: The Future of Energy in Scotland sets out the Scottish Government's vision for the future energy system in Scotland, to 2050. It articulates the priorities for an integrated system-wide approach that considers both the use and supply of energy for heat, power and transport. The Energy Strategy is designed to strengthen the development of local energy, protect and empower consumers, and support Scotland's climate change ambitions while tackling poor energy provision.

The Scottish Government published 'Scotland's Energy Strategy Position Statement' (2021 SES) in March 2021, which builds on the 2017 SES. The 2021 SES notes an objective to:

"Introduce a new framework of support for energy technology innovation, delivering a step change in emerging technologies funding to support the innovation and commercialisation of renewable energy generation, storage and supply."

The document's energy strategies of most relevance to the Proposed Development include system security and flexibility, and renewable and low carbon solutions.

The Energy Strategy notes that "Scotland should have the capacity, the connections, the flexibility and resilience necessary to maintain secure and reliable supplies of energy to all of our homes and businesses as our energy transition takes place". The Proposed Development will directly contribute towards this aim through supporting the generation of renewable electricity and enhancing the wider network, and therefore can draw significant support from the Scottish Energy Strategy.

4.6 National Developments

As part of the Low Carbon Place strategy the Scottish Government recognises the need for a range of infrastructure, including new developments and refurbishment or enhancement of existing facilities.

"these classes of development are needed to support the delivery of an enhanced high voltage electricity transmission grid which is vital in meeting national targets for electricity generation, statutory climate change targets, and security of energy supplies".

The Proposed Development has a direct relationship with achieving this aim and as such can draw significant support from NPF3.

5. INTERNATIONAL, EUROPEAN & UK POLICY CONTEXT INTERNATIONAL

5.1 COP 21 Paris Agreement

On 12 December 2015, 196 Parties to the UN Framework Convention on Climate Change (UNFCCC) adopted the Paris Agreement13, a legally-binding framework for an internationally coordinated effort to tackle climate change. The Paris Agreement's key aim is to strengthen the global response to climate change by keeping a global temperature rise this century below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. The UK is legally bound through commitment to the Paris Agreement.

5.1.1 COP26 Goals

- Secure global net zero by mid-century and keep 1.5 degrees within reach
- Countries were asked to come forward with ambitious 2030 emissions reductions targets that align with reaching net zero by the middle of the century.
- To deliver on these stretching targets, countries will need to:
- Accelerate the phase-out of coal
- Curtail deforestation
- Speed up the switch to electric vehicles
- Encourage investment in renewables.
- Adapt to protect communities and natural habitats
- The climate is already changing and it will continue to change even as we reduce emissions, with devastating effects.
- At COP26 it was agreed that we need to work together to enable and encourage countries affected by climate change to:
- protect and restore ecosystems
- build defences, warning systems and resilient infrastructure and agriculture to avoid loss of homes, livelihoods and even lives.
- Mobilise finance
- To deliver on our first two goals, developed countries must make good on their promise to mobilise at least $100bn in climate finance per year.
- International financial institutions must play their part and we need work towards unleashing the trillions in private and public sector finance required to secure global net zero.
- We can only rise to the challenges of the climate crisis by working together.

At COP26 steps were made to finalise the Paris Rulebook (the detailed rules that make the Paris Agreement operational) accelerate action to tackle the climate crisis through collaboration between governments, businesses and civil society.

COP26 saw the resolution to meet the aforementioned goals and to work together to achieve these.

5.2 Committee on Climate Change Net Zero Report May 2019

In May 2019, the Committee on Climate Change published Net Zero – The UK's Contribution to Stopping Global Warming15. This report responds to a request from the Governments of the UK, Wales and Scotland, asking the Committee to reassess the UK's long-term emissions targets. The report recommends a new emissions target for the UK: net zero gases by 2050, and recommends a 2045 net-zero target for Scotland to reflect Scotland's greater relative capacity to remove emissions than the UK as a whole. The Report highlights the falling cost of key renewable technologies, which are now generally comparable or lower in cost than power from fossil fuels, whilst bringing significant co-benefits such as reduced air pollution.

5.3 The Climate Change Act 2008 (2050 Target Amendment) Order 2019

On 27 June 2019, the Climate Change Act 2008 was amended to introduce a target for at least a 100% reduction in greenhouse gas emissions (compared to 1990 levels) in the UK17 by 2050. This 'net zero' target is likely to affect and increase future Government renewable and low carbon energy targets and create a more positive policy environment for renewable energy.

The Climate Change (Scotland) Act 2009 (the 2009 Climate Change Act) creates a long term framework for the current and successive administrations in Scotland to ensure a reduction in Scottish greenhouse gas emissions by 80% by 2050 with an interim milestone of 42% by 2020.

The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

The Scottish Government introduced the new Climate Change (Emissions Reduction Targets) (Scotland) Bill (the Climate Change Bill) to Parliament on 23rd May 2018, and was passed on 25th September 2019, and received Royal Assent on 31st October 2019, becoming the Climate Change (Emissions Reduction Targets) (Scotland) Act 201911 (the 2019 Climate Change Act).

The 2019 Climate Change Act amends the 2009 Climate Change Act and originally increased the 2050 target to 90%. In line with advice from the Committee on Climate Change (CCC) on 2nd May 2019, the Scottish Government amended the Climate Change Bill to set a target date of 2045 for reaching net-zero emissions, as per the resultant 2019 Climate Change Act.

The Climate Change Act 2008 (2050 Target Amendment) Order 2019 sets a legally binding target to bring all greenhouse gas emissions to net zero by 2050, compared with the previous target of at least 80% reduction from 1990 levels.

This has seen an increase in the development in renewable energy generation which in turn requires an increases in balancing services, such as the Proposed Development.

Traditional power stations in the UK are reaching the end of their operational lifespan with extensions and new operational stations being limited or actively discouraged. It is anticipated that existing power stations of traditional methods will end by 2030. As more renewable energy sources, such as wind and solar, are generating electricity the balancing of these sources versus demand to consumer is a critical issue for grid stability. Battery storage allows energy to be stored during peak renewable generation periods and allows it to be released when demand outstrips generation with no CO2 emissions on site. This increase and reliance on renewable energy generation equates to a system of high grid frequency volatility. There is therefore a critical need to address our future energy demands and ensure that a system that is fit for purpose is developed.

A flexible approach to energy generation is required in order to provide backup supply for renewable energy sources. “the more renewable generating capacity we have the more generation capacity we will require overall, to provide back-up at times when the availability of intermittent renewable sources is low.”

There is a need, by The Government, for new balancing services to come forward through the planning system to support low carbon electricity generation and to ensure energy security. The Proposed Development is considered consistent with these aims.

The Government seeks to ensure that, by 2030, the UK will have a flexible, smart and responsive electricity system, powered by a diverse and secure range of low-carbon sources of electricity with the majority being from a renewable source. In order to achieve this there is a need to decarbonise electricity generation and transform the UK into a low carbon economy. These actions will make great strides to meeting renewable energy targets. There is predicted to be an increased demand for electricity, likely to be double by 2050, this is despite improvements in energy efficiency from domestic and non-domestic sources. A critical component in attaining the goals of The Government is the responsive support of a sustainable infrastructure build to meet the future demands of the population.

5.4 Progress in Reducing Emissions – 2021 Committee on Climate Change

Progress Report to Parliament

The 2021 Committee on Climate Change (CCC) Progress Report to Parliament was published in June 2021 and provides a review of Government efforts over the previous 12 months with regards to Climate Change. While UK emissions fell by 13% in 2020, much of this decline was likely a result of the Covid-19 pandemic and as such, lasting changes are far from certain. The CCC report recommends taking action to transition to a fully decarbonised electricity system. Furthermore, it sets a target to phase out gas-fired electricity generation in the UK by 2035, subject to ensuring security of supply.

There has been significant progress in the transition to renewables, with emissions from electricity having decreased by 65% from 2009 to 2019. However, the CCC report notes that generation shares from renewable resources will need to increase to support the transition to electric vehicles. The International Energy Agency has identified solar power as producing some of the cheapest electricity in history and forecasts that if there is a rapid built-out of renewables (particularly solar and wind), net zero emissions for the power sector can be achieved by 2035 in advanced economies.

5.5 The Sixth Carbon Budget: The UK’s path to Net Zero

On 9 December 2020, The Sixth Carbon Budget (2022-2037) was released which updates intermediary targets for the UK’s progress to net zero.

“Our recommended pathway requires a 78% reduction in UK territorial emissions between 1990 and 2035. In effect, it brings forward the UK’s previous 80% target by nearly 15 years. There is no clearer indication of the increased ambition implied by the Net Zero target than this.”

In establishing intermediary targets towards net zero, the context exists for Local Authorities to recognise the action that must be taken sooner rather than later.

“The implication of this path is clear: the utmost focus is required from government over the next ten years. If policy is not scaled up across every sector; if business is not encouraged to invest; if the people of the UK are not engaged in this challenge – the UK will not deliver Net Zero by 2050.”

National Audit Office – Achieving Net Zero

Published on 2 December 2020, the National Audit Office report to the UK Government examined the main threats to achieving net zero effectively and efficiently. The report is forthright that most of the UK reductions in emissions has come from the switch away from coal in electricity generation. Whilst reducing emissions further will require wider changes to the UK economy, further investment in renewable electricity generation will be required.

The Department for Business, Energy and Industrial Strategy projects that the UK will not meet its targets for emissions reduction unless action is taken to reduce the shortfall in achieving the targets set in the fourth and fifth carbon budgets.

"Achieving net zero is a colossal challenge and significantly more challenging than the Government's previous target to reduce emissions by 80% by 2050."

The report confirmed that BEIS would launch a net zero strategy.

Net Zero Strategy: Build Back Greener

The strategy, published on October 2021, prior to COP26, sets out policies and proposals for decarbonising all sectors of the UK economy to meet our net zero target by 2050.

'This Strategy sets out the next steps we will take to cut our emissions, seize green economic opportunities, and leverage further private investment into net zero. The policies and spending brought forward in the Net Zero Strategy mean that since the Ten Point Plan we have mobilised over £26 billion of government capital investment for the green industrial revolution. Along with regulations, this will support 190,000 jobs by 2025, and 440,000 jobs by 2030, and leverage up to £90 billion of private investment by 2030. This will put us on an ambitious path to meet our Sixth Carbon Budget and our Nationally Determined Contribution, cutting emissions by at least 68% by 2030 on 1990 levels, and reaching net zero by 2050.

- We know economic growth and reducing emissions can go hand-in-hand. As we continue to build back better from the COVID-19 pandemic, we will fuel a Green Industrial Revolution, creating jobs and business growth opportunities, and establishing the UK as a global leader in the technologies to tackle climate change. We will deliver the commitments in the Prime Minister's Ten Point Plan and Build Back Better: our plan for growth, and go further to build a resilient economy and level up the UK.'

Foreward from The Secretary of State for Business, Energy and Industrial Strategy

'Key policies:

- By 2035 the UK will be powered entirely by clean electricity, subject to security of supply.
- Secure a final investment decision on a large-scale nuclear plant by the end of this Parliament, and launch a new £120 million Future Nuclear Enabling Fund, retaining options for future nuclear technologies, including Small Modular Reactors.
- 40GW of offshore wind by 2030, with more onshore, solar, and other renewables – with a new approach to onshore and offshore electricity networks to incorporate new low carbon generation and demand in the most efficient manner that takes account of the needs of local communities.

- Moving towards 1GW of floating offshore wind by 2030 to put us at the forefront of this new technology that can utilise our North and Celtic Seas – backed by £380 million overall funding for our world-leading offshore wind sector.
- Deployment of new flexibility measures including storage to help smooth out future price spikes'

5.6 HM Government Energy White Paper – Powering our Net Zero Future

On 14 December 2020, Alok Sharma MP, then Secretary of State for Business, Energy and Industrial Strategy announced the launch of the Energy White Paper. The White Paper set out the UK Governments strategy to put net zero into practice and for fighting climate change, following the Prime Ministers Ten Point Plan for a Green Industrial Revolution.

'Coronavirus has taken a heavy toll on our society and on our economy. But we will overcome COVID-19 and rebuild our economy, building back better and levelling up the country.

As we do so, we must address the inter-generational challenge of climate change. Unchecked, the impact of rising global temperatures represents an existential threat to the planet. So, building back better means building back greener.

The UK has set a world–leading net zero target, the first major economy to do so, but simply setting the target is not enough – we need to achieve it. Failing to act will result in natural catastrophes and changing weather patterns, as well as significant economic damage, supply chain disruption and displacement of populations.'

This white paper puts net zero and our effort to fight climate change at its core, following the Prime Minister's Ten Point Plan for a Green Industrial Revolution.

Alok Sharma MP, then Secretary of State for Business, Energy and Industrial Strategy

The White Paper sets out the measures that need to be put in place to achieve the carbon emission targets for the UK. These include a major shift in energy use from fossil fuels to clean electricity and hydrogen whilst retaining reliability, resilience and affordability.

5.7 Climate Change Plan

The Scottish Government published a Climate Change Plan update in December 2020 which reflects the increased ambition of the new targets set by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. To meet Scotland's targets, a rapid transformation across all sectors of our economy and society is required.

'Amid the enormous challenges of the global pandemic, the climate emergency has not gone away – far from it – and the Scottish Government remains absolutely committed to ending Scotland's contribution to climate change by 2045 in a just and fair way. Indeed, it is central to our recovery. We have the opportunity to design a better future and, coming out of the pandemic, put things back together differently.

That is why we have committed to a 'green recovery' from COVID-19, one which captures the opportunities of our just transition to net zero. That means creating green jobs, developing sustainable skills and nurturing wellbeing. This approach recognises climate change as a human rights issue and the transition to net zero as an opportunity to tackle inequalities. It is an approach that is fundamentally important to the future prosperity of our people and planet.

Put simply, a green recovery is our commitment to transition to net zero emissions in a way that is just, and that delivers a thriving, sustainable economy that works for all of us.'

Ministerial Foreword

Setting a 'carbon neutral', net-zero target of 2045 is 5 years ahead of the rest of the United Kingdom's target of 2050. The Government has set ambitious targets for reduction of carbon emissions and renewable energy projects, carbon neutral projects, such as the Development, play a key role in aiding the decarbonisation of the energy sector.

CONCLUSION

Through extensive review, study and reporting it has clearly been shown that the development is in full compliance with all International, National and Local policy. The Application is fully supported by a suite of technical and environmental documents and mitigation strategies to demonstrate full policy compliance and to show that there will be no unacceptable adverse impact as a result of the Development.

Taking the results of the reports and findings into deliberation it is considered that the development is not of significant impact and that any effects can be mitigated. Furthermore, the development will ensure that positive steps are taken in contributing to meeting targets to reach Net Zero and that the sustainable development can aid the infrastructure of the future to meet ever increasing demands.

There is no unacceptable adverse impacts from a landscape, visual impact or noise perspective and no unacceptable adverse impact to residential amenity, ecological, natural heritage, archaeological or historical heritage assets that cannot be reduced by mitigation. There will be no unacceptable adverse impact on the geological or hydrological environment.

There will be a large and positive increase in the biodiversity and green infrastructure in the area.

Given that it is clearly shown compliance with International, National as well as Local policy it is respectfully requested that the application is supported and passed in planning.