

Alleston Solar Farm, Pembrokeshire

Planning Statement

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Alleston Solar Farm, Pembrokeshire **Planning Statement**

On behalf of **Alleston Clean Energy Limited**

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Executive Summary

This Planning Statement has been prepared by Stantec on behalf of Alleston Clean Energy Limited, in support of a Development of National Significance application for the construction, temporary operation and decommissioning of a solar photovoltaic (PV) installation and associated equipment on Land at Alleston Farm, Lower Lamphey Road, Lamphey, Pembrokeshire.

There is a recognised need for energy developments of this nature in order to support Welsh Government's target to reduce greenhouse gas emissions by 95% by 2050. To achieve this goal, the energy system is undergoing major transformation within Wales by integrating renewable energy generation, storage and energy efficiency measures.

Welsh Government Planning Policy sets out the expectation that renewable energy generation will play a major role in the transition to decarbonising the energy system. The development will provide approximately 30 MW of clean electricity to the grid, thereby playing an important role in addressing the challenge of decreasing reliability on fossil fuels and other high emission energy sources.

At the local level, Pembrokeshire County Council have established goals in reducing energy system emissions, increasing resilience to climate change and creating sustainable developments. In line with these goals, the development has been designed to reduce and mitigate any potential impacts related to a range of considerations, including landscape, agricultural land, the historic environment and the local community, whilst simultaneously reducing energy system emissions.

This Planning Statement assesses the development against local and national planning policy and guidance and has regard to applicable material planning considerations. The development will make a critical and significant contribution to the transition to a renewable energy system necessary in reducing greenhouse gas emissions. It is ultimately concluded in the planning balance, that the benefits of the development significantly outweigh any harms and therefore, planning permission should be granted.

1 Introduction

1.1 Overview

1.1.1 This Planning Statement (PS) has been prepared by Stantec UK Ltd on behalf of Alleston Clean Energy Limited (a wholly owned subsidiary of Statkraft UK Limited – also referred to as (the ‘Applicant’)) in support of a full planning application for a Development of National Significance (DNS) solar photovoltaic (PV) farm (the Development) at land at Alleston Farm, Lower Lamphey Road, Lamphey, Pembrokeshire (the ‘Site’).

1.1.2 Planning consent is being sought for the following description of Development (the Development):

“Ground mounted photovoltaic solar farm together with associated equipment, infrastructure and ancillary works”.

1.1.3 The Development comprises the construction, operation and decommissioning of a grid connected solar farm. The solar farm has a generating capacity between 10 and 350 megawatts (MW) and therefore falls within the definition of a ‘Development of National Significance’ (DNS) under Section 4 (1) of the Developments of National Significance (Specified Criteria and Prescribed Secondary Consents) (Wales) Regulations 2016 (as amended), for the purpose of s62(D) of the Planning (Wales) act 2015 (‘the Wales Act’).

1.1.4 Section 62(D) of the Wales Act States that:

(3) “Development is of national significance for this purpose if it meets criteria specified regulations made by the Welsh Ministers for the purpose of this section”

1.1.5 The Development would contribute to local and national ‘Net Zero’ targets with an export capacity of approximately 30 Megawatts (MW) of renewable energy. The CO₂ displacement of the annual electricity production of the generating station is approximately 5,553 tCO_{2e} tonnes¹.

1.2 About the Applicant

1.2.1 The Applicant, Alleston Clean Energy Limited, is part of Statkraft UK Limited. Statkraft is one of Europe’s largest generators of renewable energy and a global company in energy market operations. Statkraft operates in 21 countries and produces hydropower, wind, solar, and supplies district heating. Statkraft has worked on renewable energy projects in the UK since 1998, with the first UK office being established in 2006.

1.2.2 To meet the increased need for renewable energy solutions, Statkraft is well positioned as a major international solar and wind developer. In 2022, Statkraft built or made investment decisions supporting the development of 3.6 GW of wind, solar and hydro generation capacity. By 2025, Statkraft aims to have an annual development rate of 2.5–3 GW and 4 GW per year from 2030.

1.3 Structure

1.3.1 This PS provides the background to the Development, demonstrates the planning merits and applies the planning balance, having regard to relevant national and local planning policy, as set out within PCC’s Local Development Plan. It confirms that planning permission should be granted for the Development.

1.3.2 The remainder of this PS is structured as follows:

- Chapter 2: The Application Site and the Development
- Chapter 3: The Need for Solar Energy and Alternative Sites Selection

- Chapter 4: Community Consultation
- Chapter 5: Planning Policy Context
- Chapter 6: Planning Assessment
- Chapter 7: Summary and Conclusions

1.3.3 Whilst the PS is set out to be read as a standalone document, it should be read in the context of the entire submission documentation to fully understand the Development, its potential impacts and planning merits. Tables 1.1 and 1.2 outline the accompanying documents and drawings, which includes an Environmental Statement (ES), to this planning application.

Table 1.1: Submission Reports and Documents

Supporting Document	Author
Consultation Report	Grasshopper
Secondary Consent Application	Stantec
Planning Statement	Stantec
Design and Access Statement	Stantec
Alternative Site Assessment	Stantec
Collaborative Benefits Statement	Stantec
Transport Assessment	Pell Frischmann
Environmental Noise Assessment	TNEI
Arboricultural Impact Assessment	Stantec
Flood Consequences Assessment	Stantec
Glint and Glare Assessment	Pager Power
Environmental Statement: Volume 1	Stantec Kernon Countryside Consultants Clarkson & Woods Ltd
Environmental Statement: Volume 2	Stantec Kernon Countryside Consultants Clarkson & Woods Ltd
Non-Technical Summary	Stantec

Table 1.2: Submission Drawings

Drawings	Author	Ref:
Site Location Plan	Statkraft	N/A
General PV Layout	Statkraft	SKUKX-ALLES-000-PVL-100.01K
Monitoring Cabin	Statkraft	SCUKX-ALLES-000-HVG-104(A)
HVG Building	Statkraft	SCUKX-ALLES-000-HVG-465(A)
HVG Building	Statkraft	SCUKX-ALLES-000-HVG-466(A)
Internal Track Section Detail	Statkraft	SCUKX-ALLES-000-MCS-201
Fence Elevation	Statkraft	SCUKX-ALLES-000-MCS-203(-)
Gate Elevation	Statkraft	SCUKX-ALLES-000-MCS-204(A)
Framework Elevation	Statkraft	SCUKX-ALLES-000-MCS-205

Drawings	Author	Ref:
CCTV Elevation	Statkraft	SCUKX-ALLES-000-MCS-206(A)
LV Trench Section Details	Statkraft	SCUKX-ALLES-000-MCS-208
MV Trench Section Details	Statkraft	SCUKX-ALLES-000-MCS-209
MV Station Elevation	Statkraft	SCUKX-ALLES-000-MCS-217
Edge of Park Switchgear Station Elevation	Statkraft	SCUKX-ALLES-000-MCS-218(A)
Weather Station Elevation	Statkraft	SCUKX-ALLES-000-MCS-240
Compound Layout	Statkraft	SCUKX-ALLES-000-PVL-119K
PRoW Diversion Routing SP/3251 Plan	Statkraft	SKUKX-ALLES-000-ADD-001-revC

2 The Application Site and the Development

2.1 Site Context

- 2.1.1 The Site is located on land at Alleston Farm, Lower Lamphey Road, Lamphey, Pembrokeshire. Its northern boundary broadly follows the alignment of the Lower Lamphey Road. Watery Lane forms the western and south-western boundaries of the Site. The southern boundary follows an existing area of woodland in a south-easterly direction. There are a small number of residential properties located adjacent to the north and west of the Site boundary.
- 2.1.2 The residential dwellings of Pembroke are 190m north-west of the Site whilst the village of Lamphey is located 370m to the north-eastern corner of the Site.
- 2.1.3 Land use in the surrounding area of the Site is predominantly agricultural, with scattered farmhouses as well as residential developments associated with Pembroke and Lamphey. The West Wales railway line, which connects Pembroke and Lamphey, runs approximately 40m north of the Site. Pembroke train station is located 680m north-east of the Site and Lamphey train station is located 415m east of the Site.

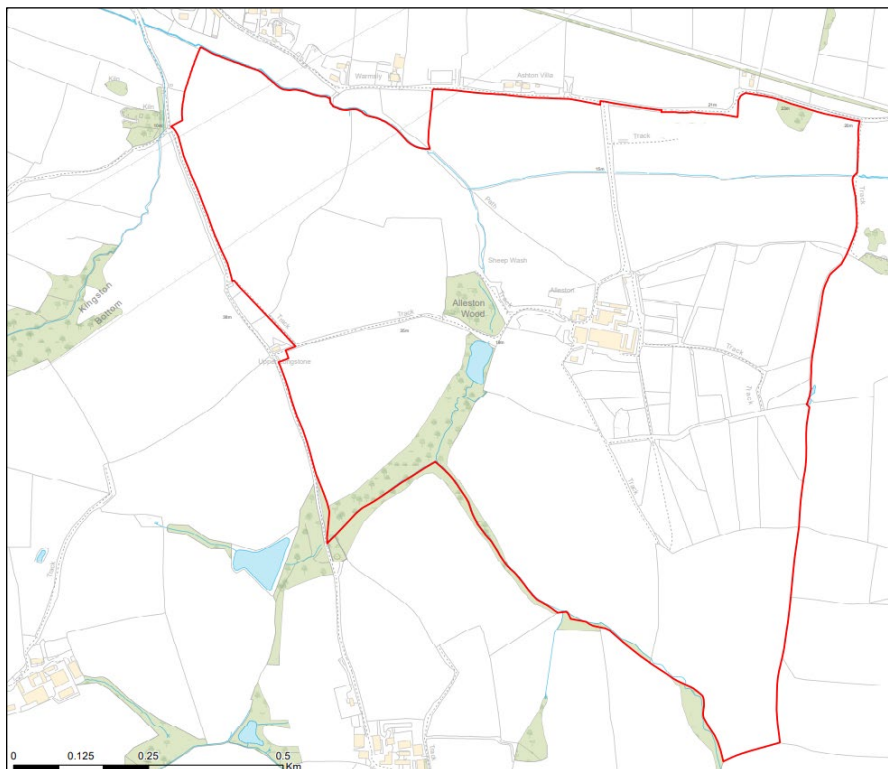


Figure 2.1: Site Location Plan

2.2 Site Description

- 2.2.1 The Site encompasses approximately 96 hectares (ha) and comprises of several agricultural fields (as shown in Figure 2.2) separated by rows of mature hedgerows. A Field Numbering Plan (Figure 2.2) identifies the 14 fields within the Site.

- 2.2.2 Alleston Farmhouse, a Grade II Listed building, together with its associated buildings is located within the centre of the Site and is accessed from the north along Lower Lamphey Road and the west along Watery Lane, both unnamed tracks. It is proposed to use the existing northern access from Lower Lamphey Road as the access to the Site.
- 2.2.3 Some of the eastern fields within the Site are currently used for equestrian activities, which can continue throughout the lifespan of the solar farm. An area of mature trees and vegetation is located within the south-western region of the Site and run into the central region of the Site, this collection of trees is known as Alleston Wood, there are no plans to remove any of these trees.
- 2.2.4 In terms of topography, the Site slopes from highpoints in south and west towards the north and east. There are two unnamed watercourses located in the north of the Site, as well as a watercourse running alongside the southwestern boundary.
- 2.2.5 There are two Public Right of Ways (PRoW) which cross and meet in the centre of the Site. The first PRoW (SP32/52) runs to the western boundary of the Site and is accessible via Watery Lane. This PRoW connects to a bridleway (SP32/68) which borders the west of the site and runs in a north-south direction, on Watery Lane. The second PRoW (SP32/51) runs in a north-south direction across the northern and southern area of the Site. This PRoW will be diverted to the southwestern edge of the farm's boundary via a Secondary Consent submitted alongside the main application.

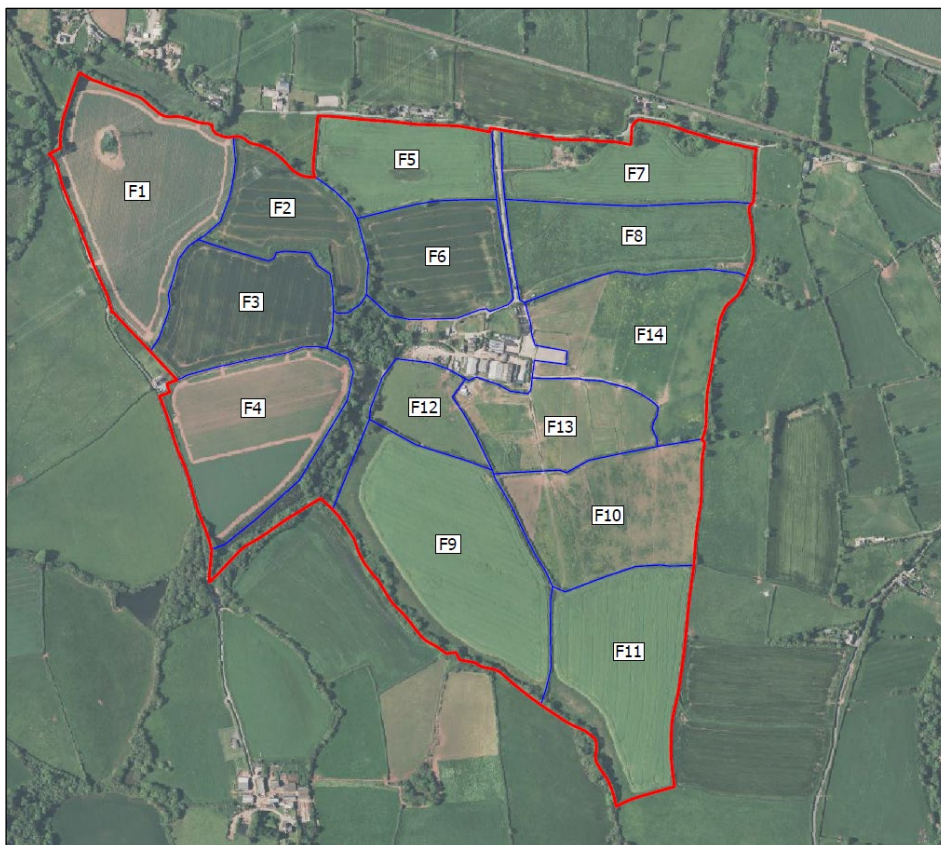


Figure 2.2: Field Numbering Plan

2.3 Environmental Baseline Conditions

Heritage

- 2.3.1 There are no World Heritage Sites or Scheduled Monuments within or adjacent to the Site, and the Site is not located within a Conservation Area.

2.3.2 Alleston Farmhouse, a Grade II Listed building, together with its associated buildings is located within the centre of the Site.

2.3.3 Lamphey and Bishop's Palace & Lamphey Court, a Grade II* Registered Historic Park and Garden, is located approximately 230m north of the Site. Additionally, Bishop's Palace, Lamphey, a Scheduled Monument is located approximately 630m north of the Site and the Lamphey Bishop's Palace & Lamphey Court, Grade II* Listed Building, is located approximately 640m north of the Site. An additional Grade II* Listed Building, Kingston Farm is located approximately 1.2km south-west of the Site.

Biodiversity

2.3.4 The Site is not covered by any international or national ecological, landscape or heritage designations. Pembrokeshire Coast National Park is located approximately 300m east of the Site, beyond the B4584.

2.3.5 Statutory ecological designations within 2km of the Site include:

- Freshwater East Local Nature Reserve (LNR), 1.4km south-east of the Site;
- Freshwater East Cliffs to Skrinkle Haven Site of Special Scientific Interest (SSSI), 1.4km south-east;
- Pembroke Mill Ponds LNR, 1.5km north-west;
- Stackpole Quay-Trewent Point SSSI, 1.5km south;
- Milford Haven Waterway SSSI, 1.9km north-west;
- Pembrokeshire Marine Special Area of Conservation (SAC), 1.4km south-east; and
- Bristol Channel Approaches SAC, 1.5km south-east.

2.3.6 Internationally designated ecological Sites within 10km of the Site include:

- Pembrokeshire Bat Sites and Bosherton Lakes SAC, 3.8km south-west and comprising five SSSIs within 5km;
- Skomer, Skokholm and the Seas of Pembrokeshire Special Protection Area (SPA), 4km south;
- Limestone Coast of South West Wales SAC, 4.2km south-west; and
- Castlemartin Coast SPA, 4.2km south-west.

Drainage and Flood Risk

2.3.7 There are two unnamed watercourses located in the northern region of the Site. Areas in close proximity to the watercourses have elevated food risk categorised as high and medium on the Natural Resources Wales Flood and Coastal Erosion Risk Mapsⁱⁱ.

Agricultural Land

2.3.8 An Agricultural Land Classification (ALC) survey of the Site was conducted in April 2023 and January 2024 by Amet Property to carry out a site specific assessment of the agricultural quality of the Site. The detailed survey found the Site to comprise of 7.4 ha of Grade 2 land, 35.3 ha of Grade 3a land, 46.8 ha of Grade 3b land and 6.5 ha of non-agricultural land. The areas considered to be Grade 2 are exclusively

within the northern region of the Site. Both Grade 2 and 3a are identified as Best and Most Versatile (BMV) land. Therefore, the Site has been assessed to contain 42.7 ha of BMV land.

Air Quality

2.3.9 The Site is not located within or in close proximity to an Air Quality Management Area (AQMA). The nearest AQMA is 'AQMA NO.2 2012' declared by PCC in 2012 for exceedances of Nitrogen Dioxide. AQMA No. 2 2012 covers part of Westgate Hill, Pembroke, located approximately 1.4km to the northwest of the Site.

2.4 Planning History

2.4.1 There is no relevant planning history for the Site itself.

2.4.2 Solar farm developments in the surrounding area of relevance are summarised in Table 2.1 below.

Table 2.1: Relevant Planning Applications

Application reference	Address	Description	Current Status	Distance to and from Site
14/0129/PA	Land East of Mylett's Hill, Golden Hill, Pembroke, Pembrokeshire	New solar park and associated works	Operational	1.6km north
12/0050/PA	Land a West Farm, Coheston, Pembroke Dock, Pembrokeshire	Construction of a solar photovoltaic park with attendant infrastructure	Operational	3.5km north
14/0148/PA	Land East of Chapel Hill, Orielton, Pembroke, Pembrokeshire, SA71 5HY	Installation of a solar photovoltaic panels (8 megawatts)	Operational	4.1km south east
12/0906/PA	Wogaston, Rhoscrowther, Pembroke, SA71 5AA	Solar farm and attendant infrastructure	Operational	8.57km west

2.5 The Development

2.5.1 A DNS application is proposed for the construction, temporary operation, and decommissioning of a 30 MW solar farm and associated equipment such as inverters, transformer stations, substation, fencing, CCTV, weather monitoring stations and cabling (see Figure 2.3). The solar farm will connect to the grid via a 132kV overhead wooden pole, located within the site. The solar farm Development will have an operational lifespan of 40 years from the date of first export of electricity, after which it will be decommissioned.

2.5.2 The solar PV panels will have an anti-reflective coating. They will be ground mounted to a piled frame made of galvanized steel or aluminium. The PV panels will be crystalline silicon. Either monofacial or bifacial modules will be used.

2.5.3 The PV modules will be installed on a fixed tilt structure, facing south. Key features of the installation which should be noted, and which arise from the topography of the Site, are illustrated on the Figures below. Attention is drawn to the following key points:

- The fixed tilt range is 10-25 degrees from the horizontal.
- The spacing between the rows will range from 2.5-5 metres.

- The lowest part of the structure will be about 0.8 metres above ground level.
 - The highest point of the structure will range from about 3 metres to a maximum of 3.4 metres above ground level. However, at topographical high points within the site the highest point of the structure will not be more than 3 metres above ground level.
- 2.5.4 The variations just described will not be noticeable to viewers looking into the Site.
- 2.5.5 The mounting posts for the support structure are pile driven into the ground at a depth of 0.5–4.5 metres below ground level, depending on the ground condition, the optimum pile depth will be determined by a survey to be carried out prior to construction.
- 2.5.6 CCTV cameras will be mounted on posts up to 5m high, and positioned at appropriate intervals to ensure that the entire perimeter fence is monitored. Up to 3 weather stations will be installed to measure performance and these will be up to 5m in height.
- 2.5.7 The perimeter fencing for the development will consist of deer type fencing and gates of up to 2m in height. The fence will be offset by 100mm from the ground to allow passage of small animals and will include mammal gates at appropriate intervals.
- 2.5.8 Internal tracks to allow vehicular access between fields will be constructed of compacted crushed stone, utilising existing internal gateways/gaps where possible. For single tracks, the width typically ranges between 3.5-4 metres whereas a 2-way track would be up to 6 metres wide.

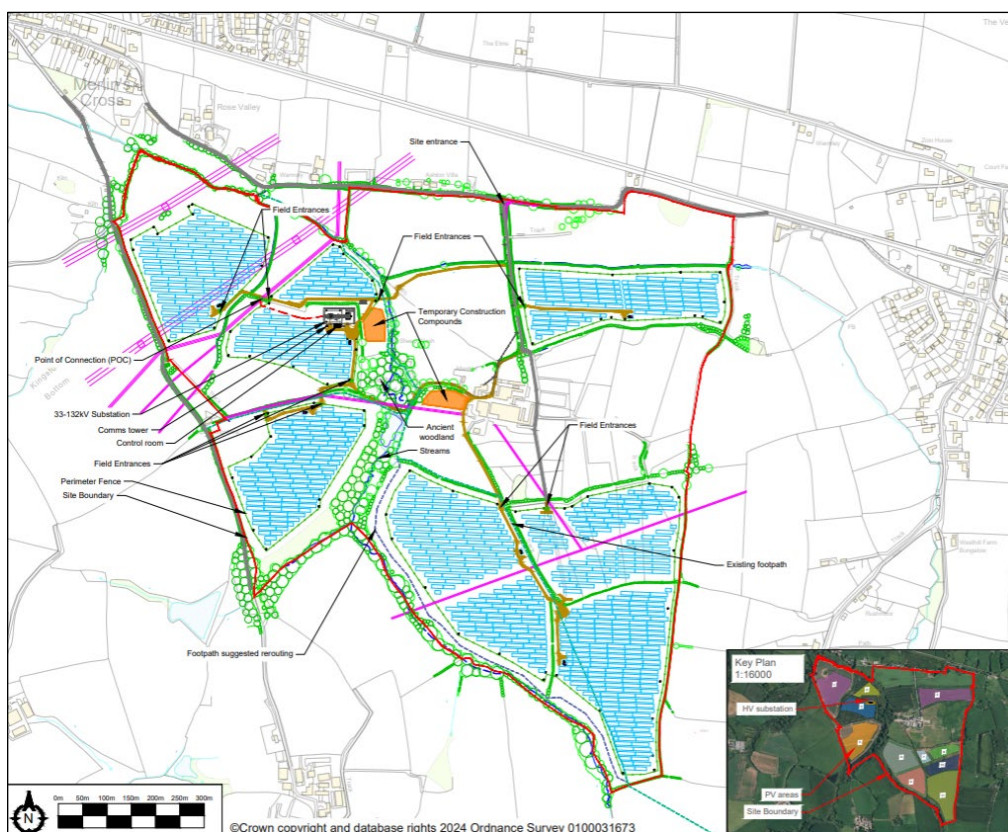


Figure 2.3 General PV Layout

Substation/HV Compound

- 2.5.9 An HV substation compound will be located in the centre (~51.665721, -4.8916358) of the Site and will provide the infrastructure to connect the solar farm to the electrical grid via an underground cable to the

132kV overhead line within the Site area. The substation/HV compound, will be surrounded by a palisade fence with an electric fence and additional stock fence. Furthermore, a communication mast is potentially required to service the substation. The mast would not be a prominent feature and details can be provided prior to development commencing, if necessary.

MV Switchgear Room/Edge of Park Switchgear Station

- 2.5.10 The MV switchgear room accommodates the switchgear panels to protect the equipment and allow safe isolation of the MV electrical circuits.

Monitoring / Control Building

- 2.5.11 A monitoring cabin/building will be located next to the HV Compound. The cabin will house the telecommunications/control/SCADA and security system equipment (CCTV), to enable 24-hour remote monitoring of the Site to identify any faults and to relay CCTV footage to an external security company.

Temporary construction compound

- 2.5.12 There are two construction compounds proposed within the Site, providing an area for temporary storage, unloading of trucks and the necessary parking and welfare facilities for the workers onsite will be installed and subsequently removed once the construction has been completed. One of which will predominantly be used for the substation infrastructure and the other for the whole site, more centrally located.
- 2.5.13 The road layout would allow sufficient room for delivery vehicles to manoeuvre, unload their cargoes and exit in a forward gear. The compound would provide parking for light vehicles and HGVs undertaking deliveries to unload. A temporary permeable stone surface will be used for the compound.

Storage containers

- 2.5.14 Two 40ft shipping containers will be installed to provide storage space for the solar farm.

Grid connection

- 2.5.15 Onsite grid connection will be achieved via a underground cable which connects to the 132kV overhead line (OHL). Alleston Farm will connect to the Pembroke Grid Supply Point (GSP) via a tee-in arrangement at or near pole 82 of the Pembroke to Golden Hill 132kV circuit located within the site. A new 132kV circuit, underground cable (UGC), will be constructed between this point of connection and Alleston Farm.

Landscaping and Biodiversity Proposals

- 2.5.16 Chapter 7 (Landscape and Visual Effects) of the Environmental Statement (ES) which accompanies the application, outlines the proposed planting and the ecological enhancement measures that are proposed as part of the Development. A Landscape Strategy Plan forms part of ES.
- 2.5.17 The Landscape Strategy Plan for the Development includes the following measures:
- Retention of existing structure of hedgerows surrounding the Site to enhance habitat connectivity and reinstate field boundaries;
 - Approximately 2.66ha of native woodland planting to enhance existing landscape character and provide visual screening of the Development;
 - Orchard planting to provide biodiversity benefits and protect the historic character of Grade II Listed Building Alleston Farmhouse;

- Incorporating adequate buffers between the Development and the property on Upper Longstone, Alleston Farmhouse and the northern Site boundary; and
- Planting a range of grassland types enabling the Site to benefit from less intense grazing and encourage species diversity.

Access

- 2.5.18 Main access to the Site will be from the existing access on Lower Lamphey Road, which borders the Site to the north. Internal tracks to allow vehicular access between fields will be constructed of compacted crushed stone, utilising existing internal gateways/gaps where possible. For single tracks, the width typically ranges between 3.5-4 metres whereas a 2-way track would be up to 6 metres wide.

Construction Methodology

- 2.5.19 The Construction Environment Management Plan (CEMP) will set out how mitigation measures to reduce effects of construction on the environment will be implemented. The document will include a broad work programme, construction activities and arrangements for environmental monitoring. Currently an outline CEMP (oCEMP) has been drafted and the full CEMP will be secured via a planning condition.
- 2.5.20 Construction is estimated to be approximately 9 months and based on anticipated timescales for determination, is expected commence in 2027. The specific works order and sequencing will be developed further by the appointed contractor following the grant of planning permission. However, the construction works will comprise five key activities: Site preparation, construction of the substation, solar array installation, associated infrastructure installation, and completion works.

Operational Phase

- 2.5.21 The Development has a proposed operational lifespan of 40 years. During the operational phase maintenance activities, including servicing of plant and equipment and vegetation management, will be undertaken. The operational phase will also comprise cleaning of the solar panels as part of the general maintenance and occasional visits to the substation by the Distribution Network Operator (DNO).
- 2.5.22 Vegetation will grow under the solar panels and around the field margins, which will require ground maintenance. A Landscape and Ecological Management Plan (LEMP) will be conditioned to any planning consent and set out how the land would be managed and monitored throughout the Development's operational lifetime. An outline LEMP (oLEMP) is appended to Chapter 7 of ES. The land between the panels within the fenced area can continue to be made available for farm operation to continue alongside the operation of the solar farm.

Decommissioning

- 2.5.23 At the end of the proposed 40-year operational period, the solar farm and its ancillary equipment will be decommissioned, dismantled and removed and the Site reinstated to its current agricultural use.
- 2.5.24 All solar array infrastructure including modules, mounting structures, cabling, inverters and transformers would be removed and reused, recycled or disposed of in accordance with best practice requirements at the time of decommissioning. The future of the electrical compound such as the substation would be discussed with the DNO and agreed with the landowner and PCC prior to commencement of decommissioning.
- 2.5.25 The traffic management and reinstatement work of the decommissioning phase will be addressed in the Decommissioning Environmental Management Plan (DEMP). An outline DEMP (oDEMP) forms part of the planning application, and a detailed DEMP will be secured via a planning condition. The detailed DEMP will be prepared closer to the point of decommissioning will be able to take into account and respond to policy and legislative requirements in place at that time.

3 The Need for Solar Energy and Alternative Sites Assessment

3.1 Overview

3.1.1 The UK electricity network faces exceptional challenges to meet the government's target of reducing carbon emissions. This will largely be achieved through decommissioning carbon intensive energy plants which relies heavily on rapid and timely increasing of low carbon generation capacity such as solar. The Planning Statement sets out the justification for the Development and its location, taking into account statutory requirements, national and local policy requirements, as well as any other relevant material considerations.

3.2 The Need for the Development

3.2.1 Climate change is a global threat that has evolved from decades of emitting greenhouse gases. From the substantial and constant use of fossil fuels, the greenhouse gases in the atmosphere have heavily increased over time. This increase can lead to catastrophic events such as devastating and frequent storms and extreme heat events, sea level rise, habitat degradation, species extinction and an aggressive decline in the health and wellbeing of populations.

3.2.2 Specifically in Wales, climate change is projected to intensify rainfall, increase flooding and cause temperatures to rise. This has led to various mechanisms being put forth by the Welsh government to decrease the probability of the mentioned projections. Wales has legally committed to reducing carbon emissions to net zero by 2050 and established 10-year targets as well as 5-year carbon budgets. These targets include steps toward decarbonising the energy system.

3.2.3 The Welsh Government has committed to transforming the energy system in Wales to predominantly rely on renewable energy sources, such as wind and solar PV, instead of fossil fuel power. This transformation is underpinned by a goal to reduce emissions by 63% by 2030, and by 100% by 2050, as well as a plan to source 100% of its electricity requirements from renewable sources by 2035. This requires a significant increase in renewable energy capacity to be permitted and operational within a very short timeframe. South West Wales constructed a model of the future energy system which concluded that a total of 840 MW of ground mounted solar must be in use by 2035.

3.2.4 To reach the target number, a significant number of additional solar farms still need to be identified, permitted and developed in South West Wales. The Development will make a significant and critical contribution of 30 MW of the 840 MW South West Wales goal. There is clearly a need for the Development to reach net zero goals locally and nationally, as well as to fight against the detrimental impacts of climate change. Furthermore, limitations in available grid capacity locally means that there will be no opportunities for securing further or alternative grid connections before 2035. The consequence of this is that, should this DNS application be refused, the associated grid connection will also be lost and the 30MW capacity that this proposal can provide, will not be available to contribute to meeting the national and local targets.

3.3 Overview

3.3.1 The site selection exercise has been undertaken with regard to a number of different planning policy, environmental and technical criteria including:

- The availability of utilities and viability of a grid connection;

- Proximity to local population;
- Topography;
- Field Size;
- Access to Site for Construction;
- Non-BMV Land;
- Flood Risk; and
- Commercial Agreement with the Landowner.

The Viability of a Grid Connection

- 3.3.2 An important aspect of a solar farm development is having access to the local distribution network, or 'grid'. To export energy generated by a solar farm there must be sufficient capacity in the network to accommodate the additional power from the Development.
- 3.3.3 The first stage of the site selection process was identifying a point of connection (POC). The Applicant acquired a Bilateral Connection Agreement which provides a suitable POC into the existing 132kV network, which is then fed from the Pembroke Grid Supply Point (GSP). The Pembroke GSP is part of National Grid Electricity Distribution's South Wales Network License area. Once the POC was identified, land was assessed within 3km of the 132 kV circuit which started at Pembroke Substation and stopped at Golden Hill Substation.

Proximity to Local Population

- 3.3.4 For any development, minimising potential impacts to residential receptors is key. In order to minimise any potential impacts to residential amenity, panels have been drawn further away from residential properties to reduce visual impacts.
- 3.3.5 Chapter 7 'Landscape and Visual Effects' of the ES expands on the visual impacts of the Development. Chapter 7 concludes that the Site is considered to have the capacity to accommodate the Development without undue or unacceptable effects on landscape character and visual amenity, and with the potential for considerable improvements to the landscape structure of the Site itself, which will in the long term provide a beneficial effect.

Irradiance and Site Topography

- 3.3.6 Flat or gently undulating land is preferred for solar farms as construction is more straightforward, shading between arrays is limited and more consistent and flat land is generally less visible than slopes, where the surrounding topography is also flat or has gentle gradients. The design of the Development will however respond to the terrain and physical features.
- 3.3.7 The Site slopes downwards from highpoints in south and west towards the north and east. The topography of the Site is therefore well suited to locate a large-scale solar development due to the large open area of undeveloped land which would provide uniform exposure to irradiance.
- 3.3.8 The Site receives high levels of irradiance, as displayed on the Solar Resource Map of the UKⁱⁱⁱ. The map demonstrates that the Site receives approximately 3.0 kwh/m² of global horizontal irradiation a day, which is seen as the highest group of irradiation in the UK. These levels have the potential to generate high levels of solar power.

Field Size

- 3.3.9 In the efficient deployment of solar, large open fields are preferable. However, smaller fields with established field boundaries will help to visually contain a solar proposal and be more sympathetic to local landscape character. Therefore, a balanced approach to field size and boundary treatment is needed.
- 3.3.10 The Site includes a range of field sizes (shown within Figure 2.2 Field Numbering Plan), and these are well connected and interrelated in delivering a substantial solar farm scheme while still leaving significant portions of the Site for landscape enhancements and mitigation.

Access to Site for Construction

- 3.3.11 Appropriate access to the solar development areas must be available for the construction and decommissioning phases to ensure that generated traffic does not cause significant adverse effects. The primary construction and decommissioning access route will be provided to the centre of the Site via a route off Lower Lamphey Road, which runs adjacent to the north of the Site. The Site is considered to be equipped with suitable access during the construction, operation and decommissioning phases of the Development.
- 3.3.12 A Construction Traffic Management Plan (CTMP) will be produced in support of the planning application which will ensure access routes are used suitably and unacceptable levels of traffic are not generated.

Agricultural Land Classification

- 3.3.13 National level guidance on the deployment of ground mounted solar expresses a preference to avoid 'Best and Most Versatile (BMV) Agricultural Land'. Grades 1, 2 and 3a of the Agricultural Land Classification (ALC) survey are considered to be BMV land, whilst 3b, 4 and 5 are not considered as BMV. The ALC Report submitted as part of this application demonstrates that 7.4ha of Grade 2 land, 35.3ha of Grade 3 land, 46.8ha of Grade 3b land and 6.5ha of non-agricultural land are present on Site. As such, the Development has been designed to reduce the temporary loss of BMV agricultural land. The panels will only occupy approximately 1.6ha of Grade 2 and 7.0ha of Grade 3a agricultural land.
- 3.3.14 To further address this potential impact, the land between the panels within the fenced area can continue to be made available for sheep grazing, allowing for on-going farming operations to take place alongside the operation of the solar farm. The construction and decommissioning of the solar farm will have little impact on the land quality as the fields can be returned to BMV agricultural land following removal of the panels and associated infrastructure. Mechanisms to ensure BMV is restored will be established through the Construction Environmental Management Plan (CEMP), Decommissioning Environmental Management Plan (DEMP) and outline Soil Resource Management Plan (oSRMP).

Flood Risk

- 3.3.15 There are areas on Site within close proximity to two unnamed watercourses that have elevated flood risk categorised as high and medium. However, the Flood Consequences Assessment and Drainage Strategy concludes that the Development is predominantly at low risk of flooding and will not increase flood risk elsewhere.

4 Community Consultation

4.1 Overview

- 4.1.1 The Applicant is committed to meaningful engagement with local residents and stakeholders. The Applicant recognises that proactive pre-application discussions can lead to better design and more well-informed planning applications, with improved outcomes for all involved. This section summarises the community engagement undertaken.
- 4.1.2 To facilitate public participation, the Applicant mandates a hybrid consultation which included a digital consultation on a project website (<https://projects.statkraft.co.uk/alleston-solar-farm/>) and an in-person public exhibition for people to meet the team and view plans. This helped to ensure that the consultation was widely accessible.
- 4.1.3 A total of 1,550 properties, both residential and businesses, were mailed bi-lingual newsletters encouraging them to attend the public exhibition events.
- 4.1.4 The Applicant hosted two community events on Wednesday 29th November 2023 at Lamphey Jubilee Hall and Thursday 30th November 2023 at Pennar Community Hall in Pembroke Dock. Following feedback from a local councillor, a third event was added, being held in Pembroke Town Hall on Wednesday 29 November 2023. While it was not possible to communicate this with all residents by mail, posters were distributed to local organisations and the Ward and Town Councillors were requested to share the updated information on their social networks.
- 4.1.5 The Community Events were held to provide the community with a project summary, information regarding environmental considerations and community benefits of the project. To acquire feedback, freepost reply cards, project email (UKProjects@statkraft.com), a freephone phone number and project website were shared with attendees.
- 4.1.6 Following the public exhibition, the project website featured information from the in-person consultation including a copy of the newsletter, exhibition boards and constraints maps, as well as opportunities for local people to ask questions and to answer the provided online survey. The website has remained open for further feedback and comments.
- 4.1.7 Feedback from the public consultation has helped the Applicant to refine designs relating to the overall scope of the project, public rights of way and to reduce the overall visual impact on nearby properties.
- 4.1.8 Wherever possible, resources for the exhibition and relating to the project have been produced in both English and Welsh. The in-person events were also attended by a Welsh-speaking member of the project team for those who wished to discuss the project in Welsh.
- 4.1.9 Full details of the community consultation events, and feedback will be provided in the Pre-Application Consultation (PAC) Report prepared by Grasshopper to support the formal submission.

5 Planning Policy Context

5.1 Overview

5.1.1 This section of the PS sets out the national planning policy context, the development plan policies and other material considerations, which are relevant to the determination of this application.

5.2 National Policy on Climate Change, Sustainability and Renewable Energy

Prosperity for All: A Low Carbon Wales (March 2019)^{iv}

5.2.1 Prosperity for All: A Low Carbon Wales is the Welsh Government's first statutory decarbonisation plan: It sets out the Welsh Government's approach to cut emissions and increase energy efficiency while simultaneously ensuring a fairer and healthier society. The document sets out policies and proposals that directly reduce emissions and support the growth of the low carbon economy.

5.2.2 In regard to the power sector, the plan sets a target to reduce power sector emissions by 37% from baseline 1990 levels by 2030. Policy 26 'Implementing Energy Consenting, Planning and Permitting Policy' states planning has a key role in changing the source of power generation of Wales. Policy 31 'Delivery of our Renewable Energy Targets' sets the goal of generation 70% renewable electricity by 2030.

Net Zero Wales (October 2021)^v

5.2.3 In 2021, the Welsh Government published Net Zero Wales which explains policies and proposals in respect of energy generation. The following goals were set:

- 1 GW additional renewable energy capacity installed by 2025
- No new build unabated fossil fuel generation in Wales from 2021. All current unabated gas generation removed from the system by 2035.

5.2.4 Policy 22 of Net Zero Wales seeks to increase the delivery of renewable energy developments through the planning systems. A positive policy framework for the consenting and development of large-scale renewable energy projects and associated infrastructure.

5.2.5 All goals from Net Zero Wales are legally binding and must be achieved.

National Infrastructure Strategy – Fairer, Faster and Greener (November 2020)^{vi}

5.2.6 The National Infrastructure Strategy explains the UK Government's plans to deliver "an infrastructure revolution" on the pathway to net zero by 2050. To do so the strategy explains:

"To achieve net zero by 2050, the power system will need to be virtually carbon free and significantly larger to cope with the additional demand from electrification in transport, heating and some industrial processes. This expanded system required increase investments in network infrastructure, sources of flexibility, such as interconnection, demand response and storage, together with enough low carbon generation capacity to provide the vast majority of the UK's electricity needs."

5.2.7 The Strategy further explains that a significant increase of solar is needed to achieve net zero. The Government proposes to continue supporting renewables through the Contracts for Difference subsidy mechanisms, which includes solar technologies.

Review of Wales' Energy Targets (January 2023)^{vii}

5.2.8 In January 2023, the Welsh Government announced a proposal to alter renewable energy targets. A consultation was thus launched on 24th January 2023 to 18th April 2023, seeking views on revising the current targets listed below:

- Wales to generate electricity equal to 70% of its consumption from renewable sources by 2030
- 1GW of renewable energy capacity in Wales to be locally owned by 2030
- An expectation for all new energy developments in Wales to have at least an element of local ownership from 2020

5.2.9 A summary^{viii} of consultation information was then produced, which will be used to finalise the new renewable energy target for Wales

The Well-being of Future Generations (Wales) Act 2015 (April 2015)^{ix}

5.2.10 The Well-being of Future Generations (Wales) Act 2015 states that all public bodies in Wales have a duty to secure sustainable development to achieve the 7 well-being goals. All planning applications in Wales need to demonstrate how they align to the following well-being goals:

- A Prosperous Wales
- A Resilient Wales
- A More Equal Wales
- A Healthier Wales
- A Wales of Cohesive Communities
- A Wales of Vibrant Culture and Thriving Welsh Language
- A Globally Responsive Wales

5.2.11 Key matters highlighted in the guidance for public bodies to focus attention are decarbonisation, including the use of clean energy, and sustainable consumption and production.

Renewable Energy Deep Dive: Recommendations (March 2024)^x

5.2.12 The Renewable Energy Deep Dive is a periodic biannual review regarding renewable energy delivery at present. The most recent update within March 2024 sets the renewable energy vision for Wales, which is to accelerate actions in reducing energy demand and maximising local ownership of renewable energy. In regard to the national energy plan, the recommendations include identifying gaps to adequately match energy generation and energy demand.

5.3 National Planning Policy

Planning Policy Wales (Edition 12) (February 2024)^{xi}

5.3.1 Planning Policy Wales (PPW) Edition 12 was published in February 2024 and sets out the land use planning policies of the Welsh Government. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales. PPW highlights that a well-functioning planning system is fundamental for sustainable development and achieving sustainable places.

5.3.2 The key principles of PPW are the following:

- Growing our economy in a sustainable manner;
 - Making best use of resources;
 - Facilitating accessible and healthy environments;
 - Creating and sustaining communities; and
 - Maximising environmental protection and limiting environmental impact.
- 5.3.3 Paragraph 2.14 states that the document acts as a catalyst for the positive delivery of the planning system across Wales.
- 5.3.4 Paragraph 2.26 explains the need for planning authorities to take a balanced approach to implement the Well-being of Future Generations Act and its Sustainable Development Principle. It states there may be occasions when one benefit of a development proposal outweighs others, and in such cases robust evidence should be presented to support these decisions, whilst seeking to maximise contributions against all the well-being goals. Paragraph 2.27 identifies a long list of key factors to consider in the assessment process split into social, economic, cultural and environmental considerations. In summary these include:
- How the proposal would support the achievement of a more prosperous, low carbon, innovative and resource efficient Wales;
 - Whether environmental risks are prevented or appropriately managed;
 - Whether the causes and impacts of climate change are fully taken into account through location, design, build, operation, decommissioning and restoration; and
 - Whether a proposal supports decarbonisation and the transition to a low carbon economy.
- 5.3.5 Paragraph 3.30 states that the planning system plays a key role in tackling the climate emergency through the decarbonisation of the energy system and the sustainable management of natural resources. It also states that the transition to a low carbon economy brings opportunities for clean growth and quality jobs, together with wider benefits of enhanced places to live and work, with clean air and water and improved health outcomes. Paragraph 3.33 explains that the planning system plays a significant role in managing the significant risk of climate change to people, property, infrastructure and natural resources.
- 5.3.6 Section 5 of the PPW explains that the use of renewable and low carbon energy sources is one of the ways of achieving productive and enterprising places. Paragraph 5.7.1 sets out that low carbon electricity must become the main source of energy in Wales. Renewable electricity will be used to provide both heating and transport in addition to power. This section further emphasises that the future energy supply mix will depend on a range of established and emerging low carbon technologies.
- 5.3.7 Paragraph 5.7.2 states that with the overall power demand expected to increase, significant investment into energy generation, transmission and distribution infrastructure will be needed to meet future demand. Ways to meet this demand include integrating renewable generation with storage, as well as other flexibility services.
- 5.3.8 Paragraph 5.7.6 states that the planning system should secure an appropriate mix of energy provision, which maximises benefits to our economy and communities whilst minimising potential environmental and social impacts. Paragraph 5.7.7 presents that the benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, is of paramount importance. The continued extraction of fossil fuels will hinder progress towards achieving overall commitments to tackling climate change. The planning system should:
- Integrate development with the provision of additional electricity grid network infrastructure;

- Optimise energy storage;
- Facilitate the integration of sustainable building design principles in new development;
- Optimise the location of new developments to allow for efficient use of resources;
- Maximise renewable and low carbon energy generation;
- Maximise the use of local energy sources, such as heat networks;
- Minimise the carbon impact of other energy generation; and
- Move away from the extraction of energy minerals, the burning of which is carbon intensive.

5.3.9 In relation to the rural economy, PPW specifically acknowledges that diversification of farms can include solar development. PPW paragraph 5.6.10 and 5.6.13 state that:

“...planning authorities should adopt a positive approach to diversification projects in rural areas... Diversification can strengthen the rural economy and bring additional employment and prosperity for communities.

Diversification can also include renewable energy proposals such as anaerobic digestion facilities of solar and wind installations, which will help to increase the viability of rural enterprises by reducing their operating costs. These schemes should be supported where there is no detrimental impact on the environment and local amenity.”

5.3.10 Paragraph 5.9.15 states that the energy generation is of national significance. Therefore, planning applications should be determined based on individual proposals and that the local need for a particular scheme should not be a material consideration.

Future Wales: The National Plan 2040 (February 2021)^{xii}

5.3.11 Future Wales is the Welsh Government’s National Development Framework and is the highest tier of the Development Plan in Wales. It sets out a strategy for addressing key national priorities through the planning system, which include achieving decarbonisation, climate-resilience and achieving net zero. Future Wales recognises the challenges climate change poses and the potential significant impacts on the wellbeing of both current and future generations. Future Wales highlights that increasing temperatures and extreme weather events caused by climate change are putting pressure on infrastructure and the built environment, which all contribute to social and economic resilience. Future Wales:

- Supports a low carbon economy and the decarbonisation of industry, and the growth of sustainable and renewable energy; and
- Supports infrastructure development, including transport, energy, and digital communications.

5.3.12 Furthermore, Future Wales sets out the following ambitious targets for the generation of renewable energy:

- 70% of electricity consumption to be generated from renewable energy by 2030
- One gigawatt of renewable energy capacity to be locally owned by 2030
- New renewable energy projects to have at least an element of local ownership from 2020.

5.3.13 Section 2 states that Future Wales together with Planning Policy Wales will ensure the planning system delivers a resilient and decarbonised Wales.

5.3.14 Section 3 includes the Future Wales' Outcomes which are described as 'collectively a statement of where we want to be in 20 years' time. Every part of Future Wales...is concerned with achieving the Outcomes'. The Outcome of principal relevance to the Development is:

"A Wales where people live in places which are decarbonised and climate resilient: The challenges of the climate emergency demand urgent action on carbon emissions and the planning system must help Wales lead the way in promoting and delivering a competitive, sustainable decarbonised society".

5.3.15 Policy 17 and 18 of Future Wales are of principal relevance to the Development.

5.3.16 Policy 17 of Future Wales relates to 'renewable and low carbon energy and associated infrastructure'. Policy 17 confirms that the Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs, and that in determining planning applications for renewable and low carbon energy development, decision-makers must give significant weight to the need to meet Wales's international commitments and target to generate 70% of consumed electricity by renewable means by 2030, in order to combat the climate emergency.

5.3.17 Policy 18 provides a decision-making framework for renewable and low carbon energy technology. It states:

"Proposals for renewable and low carbon projects (including repowering) qualifying as Developments of National Significance will be permitted subject to policy 17 and the following criteria:

- 1. Outside of the Pre-Assessed areas for wind developments and everywhere for all other technologies, the proposed does not have an unacceptable adverse impact on the surrounding landscape (particularly on the setting of National Parks and Areas of Outstanding Natural Beauty);*
- 2. There are no unacceptable adverse visual impacts on nearby communities and individual dwellings;*
- 3. There are no adverse effects on the integrity of Internally designated sites (including National Site Network sites and Ramsar sites) and the features for which they have been designated (unless there are no alternative solutions, imperative Reasons of Overriding Public Interest and appropriate compensatory measures have been secured);*
- 4. There are no unacceptable adverse impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), protect habitats and species;*
- 5. The proposal includes biodiversity enhancement measures to provide a net benefit for biodiversity;*
- 6. There are no unacceptable adverse impacts on statutorily protected built heritage assets;*
- 7. There are no unacceptable adverse impacts by way of shadow flicker, noise, reflected light, air quality or electromagnetic disturbance;*
- 8. There are no unacceptable impacts on the operations of defence facilities operations (including aviation and radar) or the Mid Wales Low Flying Tactical Training Area (TTA-7T);*
- 9. There are no unacceptable adverse impacts on the transport network through the transportation of components or source fuels during its construction and / or ongoing operation;*
- 10. The proposal includes consideration of the materials needed or generated by the development to ensure the sustainable use and management of resources; and*

11. There are acceptable provisions relating to the decommissioning of the development at the end of its lifetime, including the removal of infrastructure and effective restoration.

The cumulative impacts of existing and consented renewable energy schemes should also be considered.”

5.3.18 The supporting text to both policies states that Policy 17 demonstrates the Welsh Government’s support in principle for all renewable energy projects and technologies. The supporting text also refers to the Welsh Government’s target for new renewable energy projects to have at least an element of local ownership from 2020, but specifically states that this is not a planning consideration.

Technical Advice Notes^{xiii}

5.3.19 A series of Technical Advice Notes (TANs) supplement PPW as listed below:

- Technical Advice Note 5: Nature Conservation & Planning
- Technical Advice Note 6: Planning for Sustainable Rural Communities
- Technical Advice Note 10: Tree Preservation Orders
- Technical Advice Note 11: Noise
- Technical Advice Note 12: Design
- Technical Advice Note 15: Development and Flood Risk
- Technical Advice Note 18: Transport
- Technical Advice Note 23: Economic Development
- Technical Advice Note 24: The Historic Environment

5.3.20 The TANs do not directly address renewable energy developments, however TAN 6^{xiv} provides technical guidance to supplement a range of issues such as the rural economy, rural housing and sustainable agriculture which can be applied to the Development. TAN 15^{xv} emphasises the importance of assessing flood risk and implementing mitigation measures to reduce an increase of surface water runoff.

Overarching National Policy Statement for Energy (NPS EN-1) (January 2024)^{xvi}

5.3.21 Designated in January 2024, the National Policy Statement (NPS) sets out national policy for energy infrastructure and are material considerations in respect of the Development. The Overarching NPS (EN-1) sets out the background context, scope and geographical coverage of the 4 parts of the NPS.

5.3.22 Paragraph 2.2.1 of the states that the UK legislated for a 2050 net zero greenhouse gas emissions target through the Climate Change Act 2008 Order 2019. However, in 2020, the UK communicated in 2020 to reduce greenhouse gas emissions by 68% from 1990 levels by 2030. In April 2021, the government legislated the sixth carbon budget which requires the UK to reduce greenhouse gas from 1990 levels by 78% by 2035. Paragraph 2.2.2 explains that the UK government will continue to update this decarbonisation plan in the coming years.

5.3.23 To meet the noted net zero targets, EN-1 sets out goals for decarbonising the power sector, enabling security of energy supplies, and enforcing sustainable development. Paragraph 2.3.3 states that our objectives for the energy system are to ensure our supply of energy always remains secure, reliable, affordable, and consistent with meeting our target to cut GHG emissions to net zero by 2050. EN-1

clearly states the need for new energy infrastructure to increase the supply of clean energy from renewables, nuclear and hydrogen manufactured, as well as developing carbon capture and storage.

- 5.3.24 Paragraph 3.3.65 states that there is an urgent need for new electricity network infrastructure to meet the UK's energy objectives. Solar and wind are identified to play a large role in the net zero future. Paragraph 3.3.20 explains:

“Our analysis shows that a secure, reliable, affordable, net zero consistent system in 2050 is likely to compromise predominantly of wind and solar”.

National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) (January 2024)^{xvii}

- 5.3.25 NPS EN-3 is a technology specific NPS regarding renewable electricity generation (both onshore and offshore). Paragraph 1.1.2 states that:

“Electricity generation from renewable sources of energy is an essential element of the transition to net zero and meeting our statutory targets for the sixth carbon budget (CB6). Our analysis suggests that demand for electricity is likely to increase significant over the coming years and could more than double by 2050. This could require a fourfold increase in low carbon electricity generation, with most of this likely to come from renewables.”

- 5.3.26 The EN-3 further describes essential renewable sources by stating ‘solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation’ in paragraph 2.10.13. Paragraph 2.10.10 notes a goal of 70 gigawatts in combined ground and rooftop solar deployment by 2035.

- 5.3.27 The key factors influencing site selection and design (paragraph 2.10.18 to paragraph 2.10.48) are noted below:

- Irradiance and site topography;
- Network connection;
- Proximity of a site to dwellings;
- Agriculture land classification and land type;
- Accessibility;
- Public rights of ways; and
- Security and lighting.

- 5.3.28 Technical considerations for solar farms (paragraph 2.10.49 to paragraph 2.10.69) are listed as:

- Capacity of a site;
- Site layout design and appearance;
- Decommissioning; and
- Flexibility in the project details.

- 5.3.29 Impacts to be considered from a solar development (paragraph 2.10.73 to paragraph 1.11.44) include:

- Biodiversity, ecological, geological conservation and water management;

- Landscape, visual and residential amenity;
- Glint and glare;
- Cultural heritage; and
- Construction including traffic and transport noise and vibration.

5.3.30 The factors that influence site selection and technical considerations noted in the EN-3 will be addressed.

5.4 Local Planning Policy

South West Wales Energy Strategy (March 2022)^{xviii}

- 5.4.1 The South West Wales Energy Strategy was developed by the South West Wales Energy Core Group. The document presents a strategic pathway to deliver the ambitious goals for decarbonising the energy system. South West Wales aims to reduce energy system emissions by 55% by 2035.
- 5.4.2 Energy vision scenario modelling was completed to model the future reduced emission system. This model noted that the electricity network would need to be decarbonised through renewables and behind the meter renewable generation. The model also concluded that 1,215 MW of solar PV would need to be installed, including 840 MW of ground mounted solar to achieve 55% reduction in emissions by 2035.
- 5.4.3 The strategy further explained the economic impacts of achieving a reduced emissions energy system. Approximately £4 billion of investment and spending is needed to achieve energy efficiency, increased renewable generation and decreased heat demand in 2035. In addition to this investment, 16,000 net jobs will be created, providing a notable boost to the local economy.

Pembrokeshire County Council Local Development Plan (February 2013)^{xix}

- 5.4.4 PCC declared a Climate Emergency in May 2019 and has committed to becoming a net zero carbon local authority by 2030 and district wide net zero by 2050. The Pembrokeshire County Council adopted a Local Development Plan (LDP) in February 2013. The LDP provides a framework for development decisions and desirable development for Pembrokeshire's economy, communities and environment. The LDP also sets out how best to secure resilience to climate change and to deliver a sustainable development. Relevant policies within the LDP include:
- **Policy SP1 Sustainable Development:** All development proposals must demonstrate positive economic, social and environmental impacts, as well as how they will be achieved and adverse impacts avoided;
 - **Policy SP10 Transport Infrastructure and Accessibility:** Approval will be granted to sustainably increasing the accessibility of services and facilities to the existing transport infrastructure;
 - **Policy SP11 Waste:** Supports minimisation of the production of waste through re-use, recovery for materials or energy and safe disposal using the best practicable environmental option;
 - **Policy GN.1 General Development Policy:** Developments should meet the following criteria:
 - Be compatible with the capacity and character of the site and the local area;

- Not result in significant detrimental impact on local amenity in terms of visuals, loss of light, loss of privacy, odours, smoke, dust, air quality or noise and vibration levels;
 - No adverse effects to landscape character, quality or diversity, including qualities of the Pembrokeshire Coast National Park;
 - Protects the natural environment;
 - Be within an accessible location and incorporate sustainable transport principles to reduce impact on highway safety or traffic increase;
 - Provide necessary and appropriate service infrastructure and access parking;
 - Not result in harm to health and safety;
 - Not have a significant adverse impact on water quality; and
 - Not contribute to the coalescence of distinct settlements or create ribbon development.
- **Policy GN.2 Sustainable Design:** The criterion for sustainable design of developments is:
- Good design which incorporates local distinctiveness;
 - Appropriate to the local character in terms of layout, scale, form, siting, massing, height, density, mix, detailing, use of materials, landscaping and access, and layout;
 - Incorporates a resource efficiency and climate change design through location, orientation, density, layout, land use, materials, water conservation, sustainable drainage systems, and waste management solutions;
 - Achieves a flexible and adaptive design;
 - Creates an inclusive environment and enhances community safety;
 - Integrates with adjoining streets and spaces to promote a good quality public realm; and
 - Delivers well-designed outdoor spaces with good linkages to streets, spaces and other green infrastructure.
- **Policy GN.3 Infrastructure and New Development:** If a development generates a need for new or improved infrastructure, this must be funded by the development. New infrastructure must be related in scale and kind and be appropriately sited;

- **Policy GN.4 Resource Efficiency and Renewable and Low-carbon Energy Proposals:** Developments which enable the supply of renewable energy through environmentally accepted solutions will be supported;
- **Policy GN.10 Farm Diversification:** Diversifying the range of economic activities on a farm will be permitted as long as the proposed use helps to support the continued agricultural operation and a new building is justified;
- **Policy GN.35 Protection of Open Spaces with Amenity Value:** Developments should not adversely affect the appearance, character or local amenity value of areas of public and private open space. If an adverse effect is identified, the development must demonstrate that no suitable alternative site is available;
- **Policy GN.37: Protection and Enhancement of Biodiversity:** All developments should maintain and enhance biodiversity where possible. If a development will harm protected species or their habitats, effects must be minimised or mitigated;
- **Policy GN.38: Protection and Enhancement of the Historic Environment:** developments should protect or enhance character and integrity of sites with architectural, historical, and/or archaeological importance; and
- **Policy GN.39 Transport Routes and Improvements:** Improvements to transport networks must minimise the impact on the built and natural environment, have good design and high-quality landscaping and improve road safety.

5.4.5 The PCC LDP is subject to a review which has been delayed. An updated LDP 2 timetable is still uncertain and will depend on the release of information and outcomes of research. Specific dates will be identified at a later date and therefore the Development should be assessed by the LDP above.

Pembrokeshire County Council Renewable Energy Supplementary Planning Guidance (October 2016)^{xx}

5.4.6 PCC provides a Renewable Energy Supplementary Planning Guidance (SPG) elaborates on the Council's approach to renewable energy as set out in the LDP, specifically Policy GN4. The Renewable Energy SPG functions to assist and guide renewable energy applications provide balanced economic, social and amenity impacts to Pembrokeshire. Developments should also consider environmental impacts including biodiversity and visual and landscape considerations.

5.4.7 General considerations that should be taken into account include proximity to the Pembrokeshire Coast National Park, specifically if the proposal is visible from the well-used areas of the park. Listed buildings should be assessed for impacts as well. The SPD further lists receptors that should be considered in renewable energy developments:

- Persons affected by the proposal including residents, workers and visitors;
- Terrestrial wildlife species and habitats;

- Areas of special value for architectural and history, such as conservation areas;
- Individual buildings of architectural and history interest;
- Scheduled ancient monuments;
- Areas of landscape value;
- Landscape of non-statutory local value; and
- Public highways, railways and Public Rights of Way.

5.4.8 Projects that are likely to cause impacts to the above listed, should consider the impact of glint, glare flicker and noise as well. If a project has impact on terrestrial wildlife and habitats, special consideration should be given to birds, bats, hedgerows and trees within the site or along the site boundary.

5.4.9 Cumulative impacts should also be assessed for renewable energy projects. This should take into account:

- Operational renewable energy projects;
- Consented schemes;
- Proposals at the application stage; and
- Applications in the appeal process.

5.4.10 The SPG also discusses solar on BMV land by stating:

“Land areas hosting solar PV arrays have a reduced capacity for growing crops. The range of farm animals that can graze such area is also restricted. It is preferable to avoid placing solar farms on the best and most versatile agricultural land (grades 1, 2 and 3A)”.

Pembrokeshire’s Local Area Energy Plan (June 2022)^{xxi}

5.4.11 Pembrokeshire’s Local Area Energy Plan (LAEP) describes what a net zero carbon system could look like in 2050 and the key immediate actions needed by the Council to achieve such. Objectives of the LAEP include a resilient energy system, support of the agricultural and rural economy (ensuring the best use of land) and facilitating innovation decarbonisation. To achieve a resilient energy system, at least 3x the current capacity of local renewables must be developed. The LAEP notes that renewables will mainly be rooftop and ground PV, with up to 720MW needed by 2050.

5.4.12 LAEP provides a strategy to develop local onshore renewables. This includes updating the LDP to provide guidance on the Council’s expectations for local ownership, commercial arrangement, environmental stewardship and co-benefits. A risk was identified in updating the LDP as schemes could be demotivated by identifying there is no land suitable for development. In addition to the LDP update, the LAEP states that a programme of renewable energy development will be completed in 2023-2024.

5.5 Summary

5.5.1 This section of the PS demonstrates that there is extensive policy support for renewable energy generation within Wales, South West Wales and Pembrokeshire. Policy set out targets and timelines for reduction of energy system emissions, increasing renewable energy development and promoting sustainable development which has limited impacts to the local community.

- 5.5.2 The Development would make an important contribution towards achieving a reduction of 55% energy system emissions by 2035 and where impacts arise, they will be mitigated in accordance with national and local planning policy. The policy context has been taken into account in the design considerations of the scheme and it is considered that this policy context provides clear, and favourable, support for the Development at this location.

6 Planning Assessment

6.1 Overview

- 6.1.1 This section provides a planning assessment which discusses the principle of Development, topic specific considerations, and provides a robust case for why and how the scheme represents a form of sustainable development.
- 6.1.2 The Development has been informed by a series of technical assessments and through consultation with relevant stakeholders and the local community.
- 6.1.3 To demonstrate how the Development responds to these matters, this section of the PS sets out the key topics arising from this informative work and in doing so, demonstrates the compliance of the application with the relevant planning policy context.
- 6.1.4 This section assesses the Development against the following issues, providing a summary, where applicable of the supporting technical reports that have been submitted with the application:
- The Principle of Development as Renewable Energy;
 - Landscape and Visual;
 - Cultural Heritage;
 - Agricultural Land;
 - Flood Risk and Hydrology;
 - Ecology and Biodiversity;
 - Transport and Access;
 - Current Use and Rural Diversification;
 - Noise;
 - Glint and Glare;
 - Air Quality;
 - Sustainable Development Assessment; and
 - Wider Scheme Benefits.

The Principle of the Development as Renewable Energy

- 6.1.5 Planning Policy Wales (Edition 12) supports the principle of renewable energy developments by stating low carbon electricity must become the main source of energy in Wales and the planning system must maximise renewable energy generation. The Development will produce approximately 30 MW of renewable energy, specifically solar energy, and the principle of the Development is therefore supported by national policy.
- 6.1.6 The Development will further support and contribute towards meeting the challenging renewable and decarbonisation goals established by the Wales Government. Prosperity for All: Low Carbon Wales

established a target to reduce power sector emissions by 37% in 2030, similar to Net Zero Wales establishing the target of 1 GW additional renewable energy capacity by 2025. According to the Future Energy Grids for Wales Insights Report^{xxii}, Wales will need 18.2 GW of renewables by 2050.

6.1.7 In addition to national goals, the Development contributes to ambitions at a local level, as set in the South West Wales Energy Strategy, of developing 840 MW of ground mounted solar by 2035. This will allow the energy system emissions to reduce by 55% in 2035, a specific goal set within the South West Wales Energy Strategy. PCC’s Local Area Energy Plan commits the authority to developing 720 MW of renewable energy by 2050.

6.1.8 Table 6.1 demonstrates the progress of renewable energy developments according to the Renewable Energy Planning Database of July 2024^{xxiii} in Wales and Pembrokeshire towards the net zero goals established above.

Table 6.1: Renewable Energy Developments and Net Zero Targets

Status	Wales			Pembrokeshire		
	Capacity (MW)	Target 2050 (MW)	Shortfall (MW)	Capacity (MW)	Target 2050 (MW)	Shortfall (MW)
With extant planning permission (construction not started)	284.35			0		
Under construction	316.9			1		
Operational	2,978.69			197.79		
TOTAL	3,579.93	18,200	14,620.07	198.80	720	521.2

6.1.9 As demonstrated, both nationally and locally the number of renewable energy developments are immensely inadequate. The contribution of 30 MW from the Development would contribute 0.001% to the Welsh goal and 4.3% to the Pembrokeshire goal. This demonstrates how crucial it is for renewable energy developments such as the Development to be constructed to hit renewable energy targets.

6.1.10 Renewable energy development may need to increase further than the targets identified above. As confirmed in Prosperity for All: Low Carbon Wales, PPW and NPS EN-3 electricity demand will significantly increase by 2050, the year in which Wales is committed to a 100% reduction in CO₂ emissions. NPS EN-3 states that electricity demand will double by 2050, which requires a fourfold increase of renewables. The scale and roll-out of renewable developments will clearly need to be heavily increased without delay in order to ensure electricity demand does not continue to rely on energy sources which produce greenhouse gas emissions such as oil and gas.

6.1.11 Renewable energy developments contribute to national energy security by accelerating the transition away from the volatile market associated with energy sources such as oil and gas.

- 6.1.12 Additionally, PCC declared a Climate Emergency in 2019 and has committed to net zero by 2050 in line with national goals. The climate emergency objectives are reflected in Policy GN.4 'Resource Efficiency and Renewable and Low-carbon Energy Proposals' of the PCC Local Development Plan. Policy GN.4 states developments which supply renewable energy through environmentally accepted solutions will be supported. These are pertinent and relevant policies to the Development as, once operational, it will positively contribute towards renewable energy production in the county. Additionally, Production of 30 MW clean renewable energy is a significant contribution to meeting both national and local renewable energy targets. This provides a CO₂ displacement of 222,156 tCO_{2e} over the Development's lifespan compared to the same energy from fossil fuel sources. This is being provided at a time of a climate emergency and positively contributes to climate change mitigation
- 6.1.13 In relation to Policy GN10 'Farm Diversification', the Development has an opportunity to support a new range of economic activities on the agricultural land of Alleston Farm. Although PCC Renewable Energy SPG states that solar PV arrays reduce capacity for crops and animals that can graze, the Development has been designed to allow agricultural activities to continue on Site. The land between the panels within the fenced area can continue to be made available for sheep grazing, allowing for on-going farm operation to take place alongside the operation of the solar farm. As the Site is currently producing arable crops, this activity can be continued in certain areas, and the Development will not impact the range of arable crops which can grow nor the equestrian business present on Site. The portion of the Site occupied by the Development will be minimal and therefore is in compliance with Policy GN10 as the solar farm will provide valuable income for farmers through the continued operation of the agricultural land.
- 6.1.14 Although the Development will lead to the change of agricultural land, it is important to note that it is temporary in nature. At the end of its life, the Site can be returned to full agricultural use. As such, there is no loss of agricultural land as a result of the Development.
- 6.1.15 In applying the relevant national and local policy regarding the principle of the Development as renewable energy, the Development is fully compliant, and the 'in principle' acceptability of the Development is considered established. In summary:
- PPW, Prosperity for All: Low Carbon Wales and Net Zero Wales support the principle of renewable energy development and reduction of carbon emissions. The Development will produce 30 MW of renewable electricity and save 222,156 tCO_{2e} over 40 years;
 - Wales will need 18.2 GW of renewable energy and PCC's Local Area Energy Plan commit to 720 MW of renewable energy to achieve net zero in 2050. Wales is 14,620 MW behind this goal and Pembrokeshire is 521 MW behind this goal. The Development is therefore critical to achieve sufficient renewable energy locally and nationally; and
 - The Development acknowledges the importance of agricultural land and works with the Site to minimise impacts and promote farm diversification.

Landscape and Visual

- 6.1.16 PPW (Policy 18) and Local Plan Policy GN1 'General Development Policy' require developments to avoid causing unacceptable impact to the surrounding landscape. Policy GN 35 'Protection of Open Spaces with Amenity Value' states that Developments should not adversely affect character or local amenity of open space. The PCC Renewable Energy SPG states that developments should consider impacts on visual amenity and landscape character. In order to assess the impact on the surrounding landscape, a 'Landscape and Visual Effects' Chapter has been provided as part of the (ES) support to support the application.
- 6.1.17 Chapter 7 'Landscape and Visual Effects' of the ES provides insight into how the Development has responded directly to the landscape setting of the Site. The Chapter makes clear that great care has been taken in designing a high-quality scheme that secures multifunctional social and environmental

gains. The objective of the Landscape Strategy is to integrate the Development into its surroundings, minimise potential negative effects, and enhance the landscape character, amenity value and biodiversity. It demonstrates that the carefully designed proposals which incorporates a landscape and ecological-led design will result in the Development being appropriately assimilated into the landscape setting.

- 6.1.18 The likely landscape and visual impacts of the Development during the phase and operational phase have been fully assessed and set out in more detail in Chapter 7 of the ES.
- 6.1.19 During the construction phase of the Development there will be a temporary effect on the Site and its immediate context, fields, users of PRoW 32/51/1, users of PRoW 32/51/2, users of PRoW 32/52, residents of Lower Lamphey Road and residents of Upper Longstone. As a result of the comprehensive Construction Environmental Management Plan (CEMP) to be implemented, these visual effects will be mitigated, and whilst they remain significant, will only be for a temporary period.
- 6.1.20 The Development will implement a Landscape Strategy that reinforces the characteristic landscape pattern through adequate mitigation measures. The proposed landscape mitigation measures includes the planting and management of vegetation and natural features on Site. A 0.08ha section of orchard planting will be provided for biodiversity benefits and visual screening of the Development. Visual screening will additionally be provided for Grade II Listed Building Alleston Farmhouse as solar infrastructure has been removed from Fields F5 and F7. Additionally, there will be 2.66ha of native woodland and 2.5km of native hedgerow planting which will provide visual screening of the Development and enhance the existing landscape character.
- 6.1.21 In addition to the Landscape Strategy, a oLEMP is included within Chapter 7 and a LEMP will be secured via a planning condition. The oLEMP demonstrates the management of the biodiversity and landscape enhancements on Site. This includes maintaining the healthy growth of trees, hedgerows and grassland planted, as well as strengthen species by providing adequate habitats such as nesting and grassland.
- 6.1.22 In view of the above findings, it is considered that the Development would accord with the relevant provisions of the following:
- PPW and Local Plan Policy GN1 'General Development Policy' as the implemented Landscape Strategy and LEMP will reduce unacceptable impacts to the landscape;
 - Policy GN 35 'Protection of Open Spaces with Amenity Value' because the Development will protect the landscape through additional planting and adequate visual screening; and
 - the PCC Renewable Energy SPG as the Site is considered to have the capacity to accommodate the Development without undue or unacceptable effects on the landscape character and visual amenity.

Cultural Heritage

- 6.1.23 Policy 18 of Future Wales: The National Plan 2040 states that there should be no unacceptable adverse impacts on statutorily protected built heritage assets. On a local level, cultural heritage is addressed in the PCC LDP in Policy GN.38 'Protection and Enhancement of the Historic Environment' which explains sites with architectural, historical and/or archaeological importance should be protected and enhanced. The PCC Renewable Energy SPG suggests renewable energy developments to consider impacts on areas of archaeological history, conservation areas, as well as buildings of archaeological and historic interest and scheduled ancient monuments. Chapter 6 'Historic Environment' of the ES and accompanying appendices of the historic environment desk-based assessment (HEDBA), Geophysical Survey and Archaeological Evaluation Report have been produced within the requirements of relevant national and local planning policy guidance.
- 6.1.24 During consultation with Heneb, the Site was identified to have the potential for archaeological remains. Following a geophysical survey and targeted trial trenching to assess this archaeological resource, it was established that the resource had been shortened due to ploughing and was therefore not of

national significance. The Development is assessed to have minor impacts on these low value resources, however, will be preserved during the lifespan of the Development. Archaeological resources will also be preserved through the construction of the Development as areas of highest archaeological potential will be avoided.

- 6.1.25 In addition to the archaeological resource on Site, the preservation and enhancement of Grade II Listed Building Alleston Farmhouse is incorporated into the Development. Any impacts to the building and associated areas have been mitigated by removing panels from Fields F5 and F7, as well as 0.08 ha of orchard planting which will preserve key views of this historic asset.
- 6.1.26 In view of the above, the Development is in compliance with the following local and national requirements:
- Policy 18 of Future Wales: The National Plan 2040 as the built heritage asset Alleston Farmhouse is protected;
 - PCC LDP Policy GN.38 'Protection and Enhancement of the Historic Environment' because archaeological resources have been assessed and impacts will be minimised during construction. The key views from Alleston Farmhouse will be protected through orchard planting and by moving the panels from Fields F5 and F7; and
 - PCC Renewable Energy SPG since the Development has considered the impact on archaeology and history and has incorporated mitigation and design measures accordingly.

Agricultural Land

- 6.1.27 PPW states that BMV should be considered a finite resource and therefore conserved for the future. It should be noted that this statement applies to all types of development, including development such as housing, where agricultural land, and any BMV within it, is permanently destroyed. Whilst the PPW policy also applies to solar development, the harm of temporarily resting the land whilst the site is operational causes no significant long-term harm to the soils. In order to conserve BMV, PPW explains that developments on BMV should only be permitted if there is an overriding need; previously developed or lower grade land is unavailable; or other constraints, such as historic or archaeological designations, outweigh the agricultural considerations.
- 6.1.28 PCC's Renewable Energy SPG addresses development on agricultural land by stating solar farms should avoid BMV (noted as Grades 1, 2 and 3a within the SPG) as solar PV arrays reduce area for growing crops and grazing animals. Within PCC's Local Plan, Policy GN10 'Farm Diversification' supports projects which can diversify economic activities on a farm without harming agricultural operation.
- 6.1.29 In April 2023 an Agricultural Land Classification (ALC) survey, carried out by Amet Property, was undertaken at the Site. A follow-up ALC survey was undertaken in January 2024 to include additional land. The surveys confirmed that the Site comprises 7.4ha ALC Grade 2 land and 35.3ha ALC Grade 3 land. As a result of these survey findings, the Development has had considered national and local planning policies regarding BMV agricultural land.
- 6.1.30 Chapter 8 'Agricultural Land and Soils' of the ES assesses the potential effects of the Development on agricultural land and soils. The chapter explains that although a large portion of the Site is identified as BMV land, only 8.6ha will be temporarily lost to the infrastructure of the Development. Agricultural operation will not be impacted as the two fields in the north will remain in agricultural use for farmers growing haylage or could be let to others for farming and the horse grazing within the eastern portion of the Site will be retained.
- 6.1.31 The agricultural land subject of the Development, including BMV land, will be protected during the construction phase and returned to full agricultural use following decommissioning. Measures to ensure the protection of soils are detailed in the Outline Soil Resources Management Plan (oSRMP). During construction, measures will be taken to reduce harm to agricultural land, for example vehicle movements

will be avoided when soils are wet to avoid soil compaction and harm to the soil structure. Decommissioning strategies will follow the Decommissioning Environment Management Plan (DEMP) and an updated ALC methodology, as this will be approximately 40 years away from consent of the Development. The objective of decommissioning will remain to removal structures and return the land to the previous ALC grade and condition through measures implemented by the DEMP. As the Development will restore BMV there will be no loss of the finite resource.

6.1.32 Furthermore, an Alternative Site Assessment (ASA) has been submitted to support the application which assesses potential sites for the Development. Areas with lower grade agricultural land were identified and evaluated to determine if this proposed solar farm could operate elsewhere in this area without presenting an equal or greater risk of significant environmental effects arising. The ASA concludes that there are no sites with lower grade agricultural land suitable, available or feasible for the Development. It should also be noted that (as demonstrated in the 'Principle of Development' section, the need for renewable energy is so great that it is not an 'either/or' question. The renewable energy targets and commitment to net zero both locally and nationally require the Development to hit these critical goals.

6.1.33 In summary, the Development has demonstrated compliance with PPW, PCC Policy GN37 by:

- Limiting the amount of BMV land used by solar array installation and associated infrastructure to 8.6 ha;
- Protecting BMV land and agricultural land through mechanisms set out in an oSRMP and DEMP to maintain the soil quality of the Site; and
- Assessing alternative sites within the ASA to demonstrate that there are no suitable available alternative sites with reduced BMV land.

Flood Risk and Hydrology

6.1.34 Policy GN.1 'General Development' of the PCC LDP states that developments should not adversely impact water quality. The LDP additionally refers to TAN 15 on Flood Risk for proposals to follow.

6.1.35 The Flood Consequences Assessment (FCA) submitted alongside the planning application was created in accordance with TAN 15. The FCA determined the risk and consequences of flooding and mitigation measures to avoid potential flooding at the Site as a result of the Development. The FCA provides an effective assessment of the hydrological conditions, the impact of a solar farm in this location, and the mitigation of risk that has been designed-in to the scheme. This FCA was also created to account for changes in flooding brought on by climate change.

6.1.36 The FCA confirms that the Site is majority located within Flood Zone A and is therefore at low risk of flooding from surface water and small watercourses. A small portion of the Site is within Flood Zone 2 and 3 in association with Alleston Brook. To ensure flood risk is not increased or impacts the Development, infrastructure is placed outside areas of increased risk of flooding. Additionally, Sustainable Urban Drainage (SuDS) features will be implemented throughout the Site which will reduce flood risk and protect water quality.

6.1.37 The FCA includes a Flood Mitigation Strategy which protects the water quality of nearby water, as well as Alleston Brook. This includes implementing appropriate pollution control measures and SuDS to minimise the risk of contamination.

6.1.38 The accompanying FCA concludes that the Development is compliance with:

- TAN 15 as flood risk will not be increased due to the nature of the infrastructure and the low risk of flooding on Site; and
- PCC LDP Policy GN.1 because SuDS features will protect the water quality of nearby water courses.

Ecology and Biodiversity

- 6.1.39 Both national and local policy place great importance on the protection and enhancement of biodiversity, including achieving biodiversity gain when mitigating ecological impacts of development.
- 6.1.40 PPW states that developments should maximise environmental protection and limit environmental impact, which is similar to Policy 18 of Future Wales which explains that there should be no unacceptable harm to sites for nature conservation, species and habitats. PCC LDP Policy GN.37 'Protection and Enhancement of Biodiversity' ensures that developments maintain and enhance biodiversity where possible. PCC Renewable Energy SPG states that renewable energy developments should consider terrestrial wildlife species such as birds and bats and habitats such as hedgerows and trees. Local and national planning policy has been considered in the production of ES Chapter 9 'Biodiversity' which assesses the impacts of the Development on biodiversity.
- 6.1.41 The Development will provide the following habitats to achieve a significant NBB:
- 1.44km of native hedgerow and trees;
 - 1.77ha of native shelter belt and woodland;
 - 0.08ha of native orchard planting;
 - 10.53ha of new grassland;
 - 3.67ha of existing grassland at field margins;
 - 7.79ha of flower-rich pollinator seeding; and
 - 38.76 ha of low maintenance grassland within the Development footprint.
- 6.1.42 During the construction and operation phase of the Development, there is a potential impact to habitats and species which has been assessed in Chapter 9. Planting will commence to address impacts to woodland, scrub, hedgerows and trees. A total of 1.77 ha of woodland, 1.44km of hedgerows and 0.08 ha of orchard planting. The implemented LEMP will ensure that the planting will comprise of diverse species, providing a biodiversity gain. The LEMP will also monitor and manage the planting to ensure adequate growth over the lifespan of the Development.
- 6.1.43 Chapter 9 identified that the species overwintering birds, dormouse, otter, water vole, hedgehog and polecat have the potential to be impacted during the construction of the solar farm. In order to protect these species, an Ecological Clerk of Works will be provided which will be secured by the CEMP. The CEMP will additionally mitigate any impacts on ecology during construction and manage these impacts. During the operation of the solar farm, impacted species will be badgers, widespread reptiles and amphibians as well as non-native species. The LEMP will include habitat creation and enhancement measures which will mitigate any impacts to these species and therefore provide a benefit.
- 6.1.44 An Arboricultural Impact Assessment (AIA) has been produced for the Development to identify significant trees and hedges that could be impacted by the Development, as well as the quality and value of vegetation on Site. The AIA identified a small group of trees and hedgerows were identified to be potentially impacted from the Development. However the implemented Landscape Strategy will include a comprehensive plan of planting, which will adequately compensate for the identified loss. To protect the ancient woodland and trees on Site, fencing will be fit for construction activity. Therefore, the AIA identifies that the bulk of the Development will have no negative impact on the existing trees and hedgerows.
- 6.1.45 Overall, the Development has demonstrated compliance to PPW, Future Wales, PCC LDP and PCC Renewable Energy SPG by incorporating the following mechanisms for biodiversity:

- 1.77 ha of woodland, 0.08ha of orchard and 1.44km of hedgerow planting which will be managed and monitored by a LEMP;
- Providing an Ecological Clerk of Works to monitor species on Site;
- Implementing a CEMP to protect the natural environment during construction; and
- Providing a significant NBB gain.

Transport and Access

- 6.1.46 Transport and access issues are considered in both local and national planning policy. PCC LDP Policy SP10 'Transport Infrastructure and Accessibility' of the PCC Local Plan ensures developments increase accessibility and do not harm the existing transport infrastructure. NPS EN-3 states that transportation during construction as well as transportation noise and vibration should be considered when assessing the impacts of a solar development. Transport and access was assessed in the Transport Statement (TS) and Construction Traffic Management Plan (CTMP) produced for the Development.
- 6.1.47 The access for the Development will be taken directly from Lower Lamphey Road via an existing junction to the north of the Site. This junction will be improved as part of the Development to ensure easy access from the wider highway network.
- 6.1.48 The TS has not assessed the operational traffic associated with the Development as traffic flows will be approximately 2 vehicles every two weeks which will be used for monitoring and maintenance practices. Construction traffic is expected to peak at approximately 98 vehicle movements per day, vehicles will include 48 heavy good vehicles (HGV) and 50 lighter good vehicles (LGV). An assessment of the road network which accesses the Site in the TS concluded that the Development will not exacerbate the network in regard to road safety during construction.
- 6.1.49 However, the CTMP has implemented measures to control traffic during construction to ensure there is no impact on the local road network. Following the implementation of these procedures, there will be a negligible impact on the wider road network.
- 6.1.50 The Development is therefore in compliance with the following:
- NPS EN-3 as construction traffic has been assessed within the TS and has been determined to minorly impact the local road network. Nonetheless, a CTMP will be implemented to ensure that construction traffic is adequately managed; and
 - PCC LDP Policy SP10 'Transport Infrastructure and Accessibility' as accessibility and transport infrastructure will be provided through the improved junction access.

Current Use and Rural Diversification

- 6.1.51 PCC Local Development Plan Policy GN10 'Farm Diversification' supports rural diversification of agricultural businesses. Paragraph 5.6.10 to 5.6.13 of PPW explain that the diversification of farms can increase the viability of rural enterprises and support the economy.
- 6.1.52 Due to the relatively low income from farming, many farmers have had to diversify to secure an economically sustainable profit. Farm diversification is broadly defined as "the entrepreneurial use of farm resources for a non-agricultural purpose for commercial gain"^{xxiv}. Hence, diversification reflects the reduced dependence of farmers on agriculture as a source of income. Diversification also implies entrepreneurial activity on behalf of the farmer.
- 6.1.53 The solar farm is part of a farm diversification strategy that supports the ongoing viability of the wider agricultural holding, retains the potential for agricultural use (beyond the short-term construction period) and can be returned to full agricultural use at the end of the operational period. Although the Site is likely

to remain in co-located agricultural grazing use it will also provide a guaranteed income to the farm at a challenging time for UK agriculture.

- 6.1.54 The Development will be an important stream of diversification income whilst underpinning the continuation of the overall farming enterprise. As identified in Chapter 8 of the ES, farm business on Site is on a short-term non-secure basis and is grazed by horses. There will be no negative impact of the Development on farm business as the two fields in the north will remain in agricultural use for farmers growing haylage or could be let to others for farming and the east will remain a space for grazing horses.
- 6.1.55 Renewable energy is an important form of farm diversification, recognised by the National Farmers Union as an important step towards making British agriculture carbon neutral within two decades. It was estimated in 2019 that agriculture was responsible for around a tenth of UK greenhouse gas emissions^{xxv}, supporting clean energy farm diversification projects is a vital step to reaching net zero.
- 6.1.56 The Development demonstrates compliance in regard to rural diversification due to the following mechanisms:
- Allows farming practices in the north and east of the Site to continue; and
 - Restoring and protecting BMV agricultural land for future agricultural use of the Site.

Noise

- 6.1.57 Future Wales: The National Plan 2040 explains that renewable technology should not have unacceptable impacts by way of noise. PCC Local Plan Policy GN1 'General Development Policy' requires that developments have no significant loss of amenity to local residents by virtue of noise and vibration.
- 6.1.58 An Environmental Noise Impact Assessment (ENIA) has been produced by TNEI to accompany the application. The Assessment considers the potential noise generation from the plant associated with the Development, with respect to existing sound levels in the area.
- 6.1.59 The ENIA assumed that all plant would be operating at full capacity continuously and concurrently in order to identify any adverse noise impacts. Following this assessment, the ENIA concluded that the predicted operational noise levels from the Development would remain significantly below levels to have an impact on surrounding areas.
- 6.1.60 Therefore, the Development is compliant with National Planning Policy and PCC Policy GN1 because:
- There will be no significant impact of noise during operation of the Development; and
 - Residential amenity will not be harmed by any noise produced from the Development.

Glint & Glare

- 6.1.61 Glint and glare is considered in national and local planning policy. NPS EN-3 states that glint and glare impacts should be considered for solar farm developments. Future Wales Policy 18 details that there should be no impacts on nearby communities and individual dwellings. Within the PCC Renewable Energy SPG, it is required for development to consider the impact of glint and glare on the local area. To assess glint and glare from the Development a Glint and Glare study is submitted alongside the planning application.
- 6.1.62 The Glint and Glare study assessed the impacts of the Development on roads, dwellings, railways and high-level aviation. The study concluded that roads in proximity to the Development will not be impacted by glint and glare. This is similar to the 65 dwellings which were assessed by the study and will not be impacted by glint and glare. The railway line 160m north of the Development and Rosemarket Airfield in proximity to the Site will similarly not be adversely affected. In conclusion, there is no mitigation required

for the Development to reduce glint and glare impacts as road safety, residential amenity, railway operations and aviation activity will not be impacted.

6.1.63 Therefore, the Development demonstrates compliance with the following:

- NPS EN-3 as glint and glare has been considered from the Development;
- Future Wales Policy 18 because residential amenity has been proven to not be impacted from glint and glare; and
- PCC Renewable Energy SPG as the Development will not have an impact on the surrounding area in regard to glint and glare.

Sustainable Development Assessment

6.1.64 The Development represents a sustainable scheme that is supported by local and national policy. The Well-being of Future Generations (Wales) Act 2015 requires sustainable developments to be secured in order to achieve well-being. PCC Local Plan Policy SP1 'Sustainable Development' states all proposals must demonstrate positive economic, social and environmental impacts. This is expanded upon in the PCC Renewable Energy SPG which states all solar developments should deliver economic, social and environmental benefits. A summary of the Development and its benefits with respect to the ambits of Sustainable Development is as follows:

- The solar farm represents a temporary farm diversification strategy. This is key to the long-term overall survival of smaller family farms that are much more at risk from the destabilising impacts of climate change than larger commercially farmed estates. The co-location of horse grazing and growing of arable crops enable to farm to maintain agricultural output and economic activity alongside the solar arrays.
- Although the solar farm will temporarily impact BMV agricultural land, the loss will be temporary following the decommissioning of the Development after 40 years. The resting and improvement of the soil over the lifetime of the Development will improve options for the farm and its crop options. This period of soil recovery is an investment in the farmland's arable agriculture future.
- Solar is an essential part of the UK's energy security strategy; it makes the UK more economically secure and resilient to be self-reliant for energy instead of having to rely on imports, with the uncertainties and moral compromises this can entail. Energy security is also essential to energy affordability for ordinary people, and economy-wide economic stability, as evidenced by the effects of recent small provider collapses, shortages, and extreme price rises that are at the heart of the cost-of-living crisis.

Wider Benefits of the Scheme

6.1.65 Climate change is a recognised phenomenon of international and global significance. The scientific evidence is overwhelming and identifies that climate change, as a result of rising greenhouse gas emissions, threatens the stability of the global climate. The continuing production of greenhouse gases and carbon dioxide in particular is considered to be a significant contributor to the rapidly increasing rate of climate change.

6.1.66 In Wales, the main strategy for tackling climate change is to significantly reduce greenhouse gas emissions by creating a low carbon economy. As more than two thirds of the world's carbon dioxide emissions arise from the way we produce and use energy, energy policy plays a key role in meeting the climate change challenge.

6.1.67 Given the intended installed generation capacity of the Development (approximately 30MW) the proposed solar farm would make a substantial contribution towards achieving these targets and other associated policy objectives at the national and local levels.

- 6.1.68 The current economic climate and cost of living crisis across the country is undermining the social and economic wellbeing of people. Domestic renewable energy would provide greater security of supply in the medium and long term, providing an important opportunity to improve socio-economic prosperity.
- 6.1.69 Should the Site be consented, the construction of the solar farm will benefit the local economy through the award of construction contracts and associated sub-contracts. It is likely that local companies will be best placed to source construction materials, labour, equipment, and services, and will have the skills and capacity to undertake many elements of the construction activities.
- 6.1.70 Solar farms are compatible with agricultural land, they are enabled to coexist with adequate design measures that allow agricultural operations to continue. Solar energy can also be an important way for farmers to increase their revenue from land less suited to higher value crop production. Whilst the ALC demonstrates the soil is BMV land, the Development has been designed to only occupy 8.6ha of BMV land. An oSRMP will further be implemented to protect the soil quality during construction, operation and decommissioning of the solar farm. Additionally, the Development will only occupy the Site for 40 years, after which agricultural operations, if increased from the point they are currently at, can commence. This is consistent with PPW, NPS EN-3 and PCC Renewable Energy SPG.
- 6.1.71 As members of the Bumblebee Conservation Trust (BCT), Statkraft is working closely with personnel to ensure their habitat management practices provide lots of opportunities for enhancement, creation and restoration of bumblebee habitats which are currently very limited on-Site due to intensive agriculture.
- 6.1.72 The BCT has provided feedback based on a Site visit on habitat, plant species, seed mixes and ground preparation techniques that are beneficial for bumblebees. The Applicant's corporate support of the Rare Breeds Survival Trust recognises the importance of farming traditions, demonstrating how old and new can work together for the benefit of a healthier, more diverse natural environment.
- 6.1.73 Therefore, there are clear public benefits to the scheme and throughout the application process the applicant will continue to engage with PCC and consultees on the scope of benefits that can be realised through the delivery of the proposals.

7 Summary and Conclusions

7.1.1 The PS supports a planning application submitted on behalf of Alleston Clean Energy Ltd for the following development:

“Ground mounted photovoltaic solar farm together with associated equipment, infrastructure and ancillary works.”

7.1.2 The reduction of CO₂ is of national importance within the United Kingdom as the Government seeks to reduce overall greenhouse emissions by at least 100 per cent (against 1990 levels) by 2050. Furthermore, Pembrokeshire County Council declared a Climate Emergency in May 2019 and has committed to becoming a net zero carbon local authority by 2030 and district wide net zero by 2050. This Development will contribute to the reduction of CO₂ emissions and will assist with the Council in realising its carbon neutral target.

7.1.3 The Development and the planning and technical assessments submitted within this application, demonstrate that when all factors are considered in the planning balance, the proposal is acceptable and should be approved. Some harms are acknowledged in the assessment above, and can be summarised as:

- Landscape and visual –temporary adverse impacts during construction to the Site, users of PRoWs within proximity and residents within close proximity;
- Cultural heritage – minimal harms to underground archaeological resources and the Grade II Listed Building Alleston Farmhouse;
- Agricultural land - temporary removal of a small amount of BMV land (approximately 9%) during the operational life of the development;
- Biodiversity - potential for temporary impacts on species and habitats during construction.

7.1.4 Mitigation measures have been built in to the proposals in the following way:

- Limiting the amount of BMV land used by the solar array installation and associated infrastructure to 8.6 ha;
- Protecting BMV land and agricultural land through mechanisms set out in an oSRMP and DEMP to maintain the soil quality of the Site;
- The implemented Landscape Strategy and LEMP which will provide additional planting and visual screening, reducing unacceptable impacts to the landscape and visuals;
- Archaeological resources have been assessed and impacts will be minimised during construction;
- The key views from Alleston Farmhouse will be protected through orchard planting and by moving panels from Fields F5 and F7;
- SuDS features will protect the water quality of nearby water courses; and
- A CTMP will be implemented to ensure that construction traffic is adequately managed.

7.1.5 Notwithstanding these factors, the overriding benefits of the scheme are found to relate to:

- Development will produce 30 MW of renewable electricity and save 222,156 tCO₂e over 40 years;

- South West Wales Energy Strategy and PCC's Local Area Energy Plan commit to 840 MW ground mounted solar PV and 720 MW renewable energy respectively. South West Wales is 829.25 MW of solar behind this goal and PCC is 521.7 MW of renewables behind this goal. The Development is therefore critical to achieve sufficient renewable energy locally and nationally;
- Promoting farm diversification to ensure farming practices such as equestrian activities and arable farming are continued on Site;
- A substantial NBB contribution will be made from a specific planting regime to improve habitats on Site; and
- The implemented Landscape Strategy and LEMP will provide benefits to the overall landscape of the Site.

7.1.6 Any harms identified previously, are substantially outweighed by the benefits of the renewable energy generation associated with the scheme, as we progress to net zero. As such, the proposed development can be found to be in accordance with local and national planning policy. The Applicant has extensively consulted with local stakeholders and has iteratively designed the Development to take account of local concerns.

7.1.7 In conclusion, it is considered that the Development complies with the PCC Local Development Plan and all other material considerations. Respectfully, the applicant commends the proposals to the Council and permission should be granted accordingly.

REFERENCES

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- ⁱ Appendix 2.5 Carbon Assessment. Stantec. May 2024.
- ⁱⁱ Available at: <https://flood-risk-maps.naturalresources.wales/?locale=en>
- ⁱⁱⁱ Solar resource maps & GIS data. Available from: <https://solargis.com/resources/free-maps-and-gis-data?locality=united-kingdom>
- ^{iv} Prosperity for all: a low carbon Wales. Available from: <https://www.gov.wales/prosperity-all-low-carbon-wales>
- ^v Net Zero Wales. Available from: <https://www.gov.wales/net-zero-wales>
- ^{vi} National Infrastructure Strategy: Fairer, faster, greener. Available from: https://assets.publishing.service.gov.uk/media/5fbd810dd3bf7f5736c1a18f/NIS_final_web_single_page.pdf
- ^{vii} Review of Wales' Renewable Energy Targets. Available from: <https://www.gov.wales/sites/default/files/consultations/2023-07/summary-of-responses-review-of-renewable-energy-targets.pdf>
- ^{viii} Review of Wales' Renewable Energy Targets: Consultation – Summary of responses. Available from: <https://www.gov.wales/sites/default/files/consultations/2023-07/summary-of-responses-review-of-renewable-energy-targets.pdf>
- ^{ix} The Well-being of Future Generations (Wales) Act 2015. Available from: <https://www.gov.wales/well-being-future-generations>
- ^x Renewable energy deep dive biannual recommendations update 3. Available from: <https://www.gov.wales/renewable-energy-deep-dive-biannual-recommendations-update-3>
- ^{xi} Planning Policy Wales Edition 12 February 204. Available from: <https://www.gov.wales/sites/default/files/publications/2024-02/planning-policy-wales-edition-12.pdf>
- ^{xii} Future Wales: The National Plan 2040. Available from: <https://www.gov.wales/future-wales-national-plan-2040-0>
- ^{xiii} Technical advice notes. Available from: <https://www.gov.wales/technical-advice-notes>
- ^{xiv} Technical Advice Note (TAN) 6: Planning for Sustainable Rural Communities. Available from: <https://www.gov.wales/technical-advice-note-tan-6-planning-sustainable-rural-communities>
- ^{xv} Technical advice note (TAN) 15: development, flooding and coastal erosion. Available from: <https://www.gov.wales/sites/default/files/publications/2022-03/technical-advice-note-15-development-flooding-and-coastal-erosion.pdf>
- ^{xvi} Overarching National Policy Statement for energy (EN-1). Available from: <https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1>
- ^{xvii} National Policy Statement for Renewable Energy Infrastructure (EN-3). Available from: <https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3>
- ^{xviii} South Wales Energy Strategy. Available from: <https://www.gov.wales/sites/default/files/publications/2022-04/regional-energy-strategy-south-west-wales.pdf>
- ^{xix} Pembrokeshire County Council Local Development Plan (February 2013). Available from: https://www.pembrokeshire.gov.uk/objview.asp?object_id=3398&language=
- ^{xx} Pembrokeshire County Council Renewable Energy Supplementary Planning Guidance: https://www.pembrokeshire.gov.uk/objview.asp?object_id=3206&language=
- ^{xxi} Pembrokeshire's Local Area Energy Plan. Available from: https://ehq-production-europe.s3.eu-west-1.amazonaws.com/94a5708c9e2bdcb855ed775ae79b46cfae3a1271/original/1669364010/00163c0e51e886fff3641c119bd674db_Pembrokeshire_LAEP_main_report_13_09_2022.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKICO37GBEP%2F20240124%2Feu-west-1%2Fs3%2Faws4_request&X-Amz-Date=20240124T133950Z&X-Amz-Expires=300&X-Amz-

SignedHeaders=host&X-Amz-

Signature=27a44d40b1d776ca62df1e88c13d032355338668b7fc65f2f7643e07e98e3ec3

^{xxii} Future Energy Grids for Wales (FEW) – Insights Report Issue 1.1. Available from:

<https://www.gov.wales/sites/default/files/publications/2023-07/future-energy-grids-for-wales-insights-report.pdf>

^{xxiii} Renewable Energy Planning Database. Available from:

<https://www.gov.uk/government/publications/renewable-energy-planning-database-monthly-extract>

^{xxiv} Farm Diversification in England: Results from the Farm Business Survey, 2007/08 (London: Department for Environment, Food and Rural Affairs).

^{xxv} [https://ahdb.org.uk/knowledge-library/greenhouse-gas-emissions-](https://ahdb.org.uk/knowledge-library/greenhouse-gas-emissions-agriculture#:~:text=In%20the%20UK%20(2019)%2C,higher%20than%20those%20from%20agriculture.)

[agriculture#:~:text=In%20the%20UK%20\(2019\)%2C,higher%20than%20those%20from%20agriculture.](https://ahdb.org.uk/knowledge-library/greenhouse-gas-emissions-agriculture#:~:text=In%20the%20UK%20(2019)%2C,higher%20than%20those%20from%20agriculture.)