# We hope you find the information useful and invite you to let us kno

We hope you find the information useful and invite you to let us know your views by completing our feedback form. All feedback will be taken into consideration by the project team prior to the submission of a planning application to Durham County Council.



#### GSK and The Farm Energy Company

The proposed solar farm is being brought forward in partnership by GSK and The Farm Energy Company.

GSK is a science led, global healthcare company, with a long track record of installing energy efficient and renewable energy technologies.

GSK has a target of achieving a carbon neutral value chain by 2045 with ambitious goals to reduce carbon, water and waste in the meantime.

The Farm Energy Company is a UK based renewables developer and operator founded in 2011 that specialises in large-scale private wire and offsite projects for significant energy users.

GSK and The Farm Energy Company have been working as development partners for a number of years and are currently constructing a combined wind and solar farm at the GSK facility in Irvine, Scotland. They are also collaborating on renewable energy projects at various GSK sites across the UK.





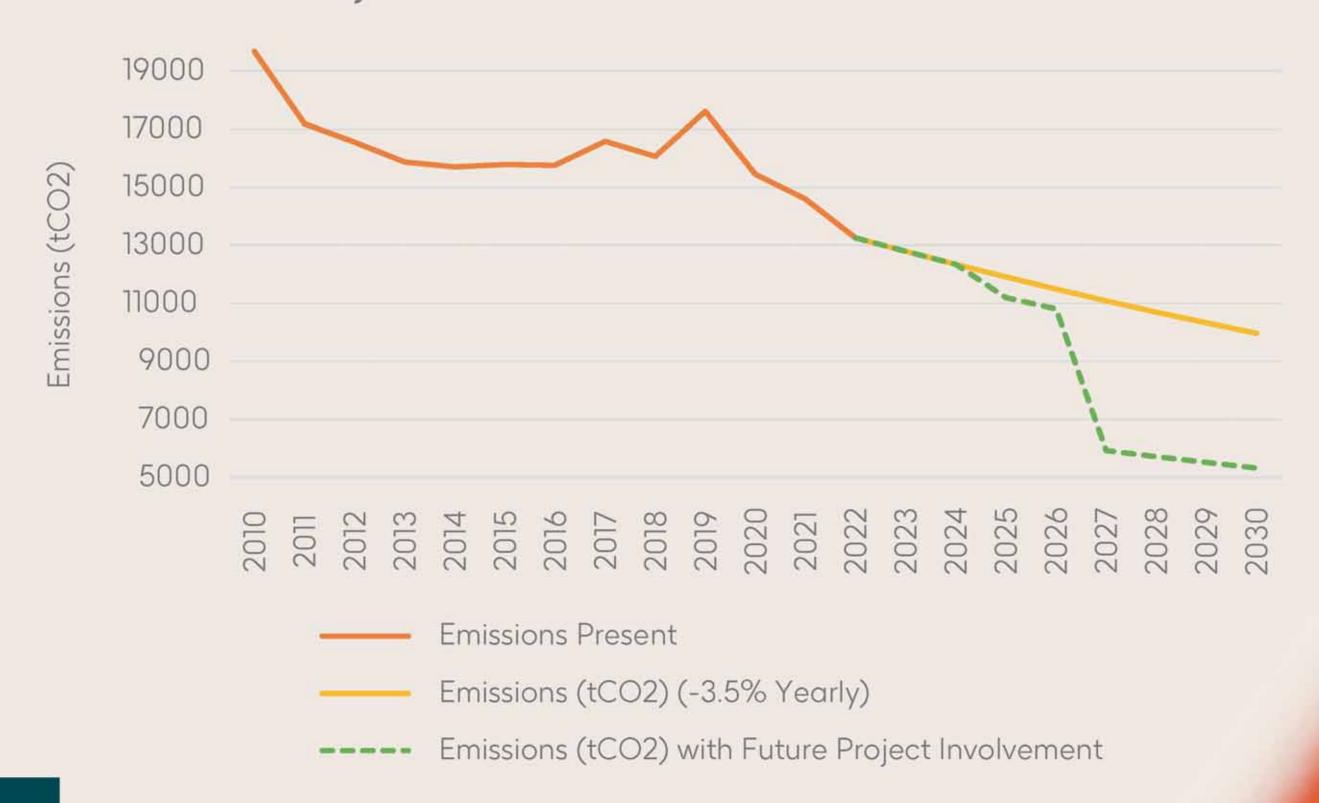


## **GSK Barnard Castle**

Opened in 1945, the GSK Barnard Castle site is one of its largest manufacturing bases in the UK. The site employs more than 1,000 people and plays a global role in supplying innovative, lifechanging medicines for a range of diseases.

We manufacture, fill and pack sterile injectables as well as inhaled and dermatological products, treating patients with HIV, asthma, lupus, psoriasis and nasal allergies to name a few.

As a new product introduction site, this investment in solar energy helps us to secure our future and for our next generation.



#### Emissions Projections 2010 - 2030



# A renewable solution to increasing energy costs

In recent times, the cost of energy has soared to unprecedented levels and GSK has been impacted by this increase. Our project will assist in the sustainability of the facility and help provide stability to its operating costs and improve energy security.

The solar farm would provide up to 16MWp of low carbon renewable energy. At GSK Barnard Castle, this would:

- Meet around 52% of its electricity consumption
- Reduce its carbon footprint by around 4,353 tonnes of CO2 per year (87,064 tonnes of CO2 across the lifetime of the solar farm)
- Reduce its reliance on fossil fuels.

GSK has a target of achieving a carbon neutral value chain by 2045 with ambitious goals to reduce carbon, water and waste in the meantime.

Durham Council has committed to reaching Net Zero by 2030, with an 80% real carbon reduction to emissions. Working with partners and communities, they aim to achieve a carbon neutral County Durham by 2045. The solar farm would contribute to both national and local renewable energy targets.







# Project Overview

We are currently preparing a planning application to be submitted to Durham County Council for a solar farm development which will **deliver renewable energy to the GSK Barnard Castle Site** via a private wire connection.

It will be developed, owned and operated by The Farm Energy Company.

The site lies to the north east of the existing GSK plant, covering an area of approximately 27 hectares.

Access to the site is from an existing track off the A688.

The proposed solar farm development comprises the following elements:



Solar PV modules mounted onto arrays



Inverter / transformer units



Batteries to store electricity for future use

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Substation

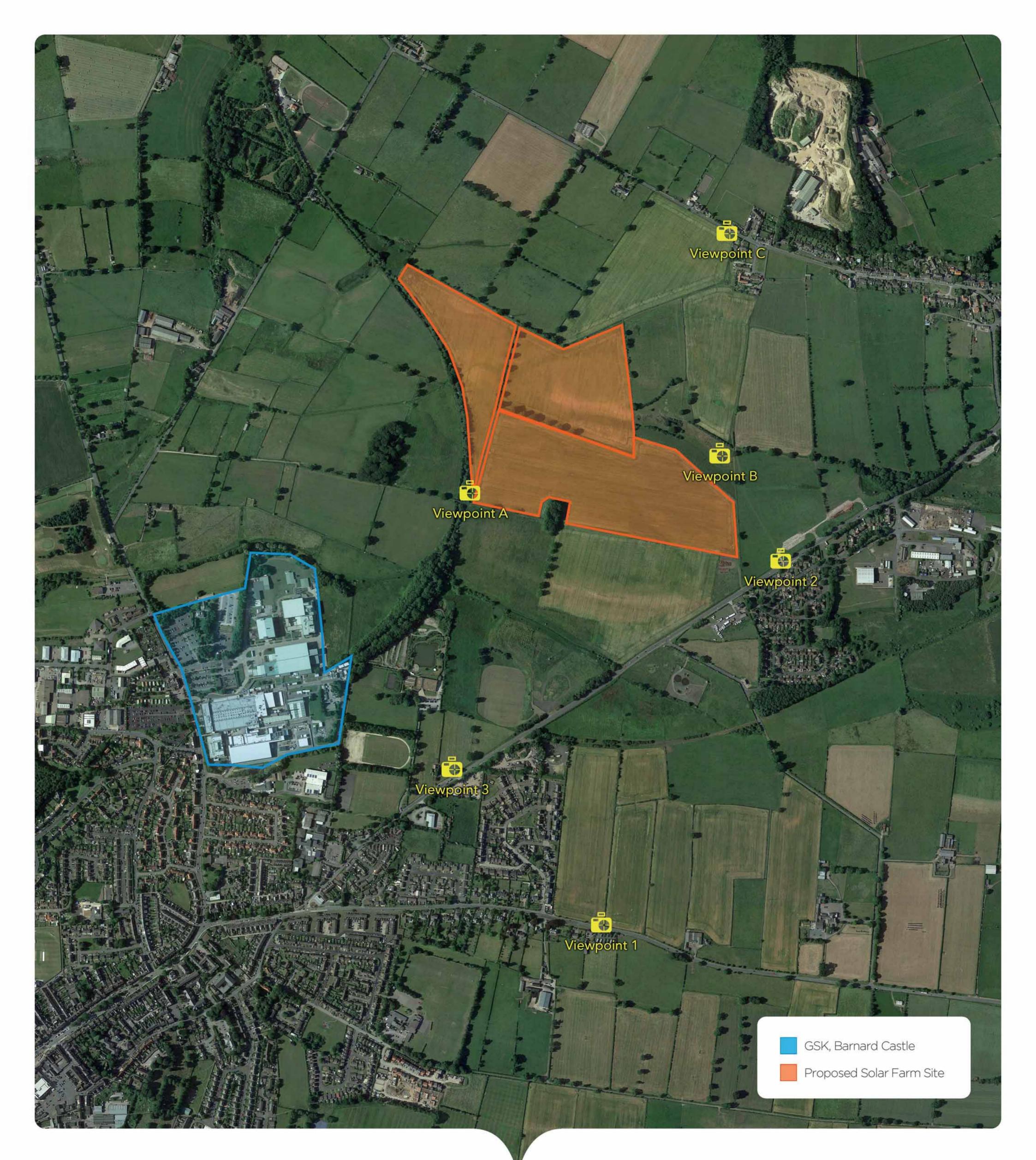


Access tracks and landscaping in and around the site



Fencing and security measures





### Site Location





Existing hedge to be gapped up.

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Wildflower seeding to the western boundary.

> Public Right of Way retained with solar farm set back either side of path.

3m of existing neutral grassland either side of existing hedgerow to be retained.

Native hedge provided to screen battery area adjacent to fencing from Public Right of Way users.

> Interpretation panel to be provided with information on the solar farm.

> Wildflower seeding to the western boundary.

> > Wildflower seeding to the southern boundary.

# Landscaping Masterplan



Trees and native shrub required for screening from residents at Stainton and users of Public Right of Way.

Existing wall and tree planting retained and additional trees planted to north east boundary.

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Native hedge planted from where wall ends.

6no total of bird and bat boxes to be provided on 4 existing trees.

Native hedge planted

Kev Application boundary Existing Public Right of Way (to be retained) Vegetation to be retained Neutral grassland verges Proposed Module arrays Maintenance roads - Gravel hardstanding to be overseeded. Fenceline - green wire mesh Spare parts container Substation Overhead Line Bufferzone Transformer station Batteries / Power Electronics stations Native hedge planting - Approx. 1,667 linear metres Existing hedges across site to be gapped up, please refer to drawing notes. Native tree planting - Approx. 15no Wildflower seeding - Approx: 37,450m2 Under seeding to module arrays - Approx. 208,583m2 Interpretation panel Indicative permissive footpath 3 all-purpose bird nest boxes on two existing trees 3 all-season bat boxes on different aspects on two of the existing trees

Notes:

Proposed native hedge and tree planting along fence line to provide screening from residents to south and users of Public Right of Way.

An additional permissive footpath is to be provided, connecting existing Public Rights of Ways.

Proposed native hedge planting and wildflower seeding to provide screening from the south.

150m



Drawing based on Module Array Layout GBR.9400.DEV.M2.001.0 Rev E
 Landscape design subject to drainage / services review.

# GSK

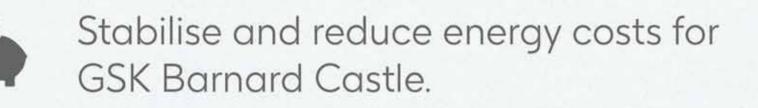
## Project Benefits



Support GSK's target to source 100% of its electricity from renewables by 2025.



Meet 52% of GSK Barnard Castle's electricity needs, increasing energy security and reducing reliance on fossil fuels.



- Enhance biodiversity across the site.
- Retention and improvement of the existing



Support national and local renewable energy targets.



Generate up to 16MWp of renewable energy, offsetting electricity imported from the grid.



Batteries to store excess power for future use.



Decommissioning and removal of the existing wind turbines at the site.



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Continued agricultural use of the land for sheep grazing, alongside the solar farm.



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Public Right of Way (PRoW) and potential access improvements to the railway.

Community Benefit Fund providing £15,000 per annum for local projects (equating to £600,000 over the lifetime of the solar farm).



# Environmental and Technical Considerations

The project team is committed to minimising potential environmental impacts of the Proposal.

Technical experts have been preparing a number of environmental and technical assessments to support the planning application to be submitted to Durham County Council. This includes the following:



- Ecological Appraisal
- Landscape and Visual Assessment
- Cultural Heritage and Archaeological Assessment
- Flood Risk Assessment.

The ecological surveys conducted on the arable farmland indicate that there are no protected species that will be affected by the development of the solar farm. In fact, the development of the solar farm will contribute to a biodiversity net gain. Measures will be taken to enhance biodiversity, such as sowing wildflowers to attract bees and improving hedgerows to create 'green corridors'. We have appointed an independent, peer reviewed ecologist to scrutinise our plans.

The Landscape and Visual Impact will be thoroughly assessed, and steps will be taken to mitigate potential impact. This includes increased planting along boundaries and careful layout and design of the solar arrays. When compared to other forms of energy generation, for example wind turbines, solar farms have a relatively limited impact due to their low-lying nature and minimal ground disturbance.



The infrastructure associated with the development will cover less than 10% of the land. The remaining portion of the land will remain accessible for vegetation growth and sheep grazing, allowing for ongoing biodiversity enhancements and retain agricultural use of the land throughout the lifespan of the solar farm.



# Site Projections

Three new viewpoints were chosen to produce indicative photomontages showing what the solar farm might look like when built.



#### Viewpoint A



Existing Photograph - View from south western site boundary adjacent to existing public right of way, looking north east . Grid reference: NZ 06116 18095.







#### Viewpoint B



Existing Photograph - View from south eastern site boundary on the existing public right of way, looking south west. Grid reference: NZ 06774 18038.



Proposed Illustrative Photomontage

#### Viewpoint C



Existing Photograph - View from Stainton Road looking south west. Grid reference: NZ 06752 18737.







# Site Projections

Three viewpoints were chosen to produce indicative photomontages showing what the solar farm might look like when built.



#### Viewpoint One



Existing Photograph - View from bus stop. Residential property Oaklands, adjacent to minor road (Darlington Road).







#### Viewpoint Two



Existing Photograph - View from opposite Stainton Grove . adjacent to A668 road





Proposed Illustrative Photomontage

#### Viewpoint Three



Existing Photograph - View from the edge of Barnard Castle, adjacent to A668 road



Proposed Illustrative Photomontage



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#### Viewpoint 4a

#### Added July 2023



Existing Photograph - View from Stainton Road, to the west side of Stainton Village, looking south west.









# Responding to feedback

We would like to thank those who took the time to provide their feedback during our initial consultation on our early proposals for the project. Your views are important to us and have been reviewed by the project team as they have worked to progress the project. On these two boards, we have highlighted the key themes from the first consultation and the project team's response to them.

65%

Feedback Theme	Project Team Response
Request for photomontag viewpoints from Stainton village.	e These have been commissioned and can be viewed at this updated exhibition.
Concern about the public footpath running through the proposal site.	TOOTDOTHS THYOURD THE SITE TO ENHANCE LOCAL CONNECTIVITY
Queries about screening and fencing proposed.	A draft detailed landscape masterplan is being prepared as part of the planning application (see the Landscaping Masterplan board). This will include planting along the site boundaries to ensure screening for local residents.

This part of the project will also enable biodiversity improvements by creating 'green corridors' for local wildlife.



# Responding to feedback

Feedback Theme	Project Team Response
Request for more detail on the draft layout.	The draft layout of the solar farm has been revised and is shown on the Landscaping Masterplan board.
Suggestion that solar panels could be placed on the roof of the GSK Barnard Castle buildings as an alternative.	This has been considered but most of the buildings at the GSK site are unsuitable for the installation of solar panels. Those that could accommodate the infrastructure would only produce a fraction of the energy required by the factory or offered by this project.
Questions about future land classification.	When the proposed solar farm comes to the end of its lifetime, the solar panels and infrastructure will be removed and the land will return to agricultural use or crop growing. In addition to this, throughout the lifetime of the solar farm, the land under

the solar panels can be used for sheep grazing.

GSK



# Responding to feedback

#### Added July 2023

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Feedback Theme	Project Team Response
Can improvements         be made to the         footpath proposals?	<ul> <li>Following discussions with Durham County Council's Public Right of Way Officers, The Farm Energy Company will amend the proposals to incorporate the following:</li> <li>Provision of a new accessible ramp to replace the steps up from the railway to FP4</li> <li>Contribution to surfacing of the railway from the bridge to GSK The permissive footpath at the southern boundary of the site, improving access to Barnard Castle from Stainton Village, and enabling a footpath link around the site would still be part of</li> </ul>

the plans.



Use of the Community Benefit Fund (CBF) and could it be accrued to fund larger schemes?

Why haven't all

in the exhibition

material?

viewpoints been used

There are a number of options for the operation of community benefit funds. Some are run by the local parish council(s) and others appoint a board made up of community representatives. Decisions around the distribution of the CBF, and organisations that will receive funding, will be subject to discussion with the relevant parties. The Farm Energy Company will be open to suggestions that would make effective use of the funds provided to the community from the project.

Feedback from the original consultation event requested additional viewpoints from Stainton village be included as part of any updated exhibition material.

Following this event and as part of the EIA Scoping process, Durham County Council identified a number of viewpoints which they considered should be used as the basis for assessment as part of the Landscape and Visual Impact Assessment (LVIA). This included a number of locations in and around Stainton village.

The second exhibition therefore included a number of these viewpoints, with associated photomontages, showing what the proposed solar farm might look like from various representative points in Stainton. The LVIA also includes an additional photomontage from the village of Stainton and this has now been uploaded to the website.

## Responding to feedback

#### Added July 2023

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#### Project Team Response



be started before the construction of the solar farm, and would you seek advice from local organisations on the type of planting?

Can the landscaping

This is something we can definitely consider on both counts. However, it has to be noted that the construction period is only around 3-6 months, and we will have to tie in with the relevant planting seasons. We would welcome advice from local organisations on which trees/hedgerows are more likely to thrive.

To calculate the biodiversity, base line surveys were undertaken by independent ecologists to record the habitats, flora and fauna on the proposed site.

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How was the biodiversity baseline calculated and how will you achieve the net gain that you have referenced in your consultation documents? Following the baseline assessment, a landscape management plan was prepared using independent ecologists and landscape architects alongside Farm Energy. This proposal will include 1.65km of new hedgerow, enhance 1.04km of existing hedgerow and retain 1.24km of existing hedgerow. 15 new native trees will be planted as part of the proposed scheme and all existing trees will be retained. Additionally, the project will look to create natural grasslands, the details of which will be agreed with ecologists.

In total the site is looking to achieve 68% uplift for area habitats and 168% uplift for hedgerows.

As part of the scheme, we are working with independent advisors to put plans in place to achieve these numbers.



## The Farm Energy Company

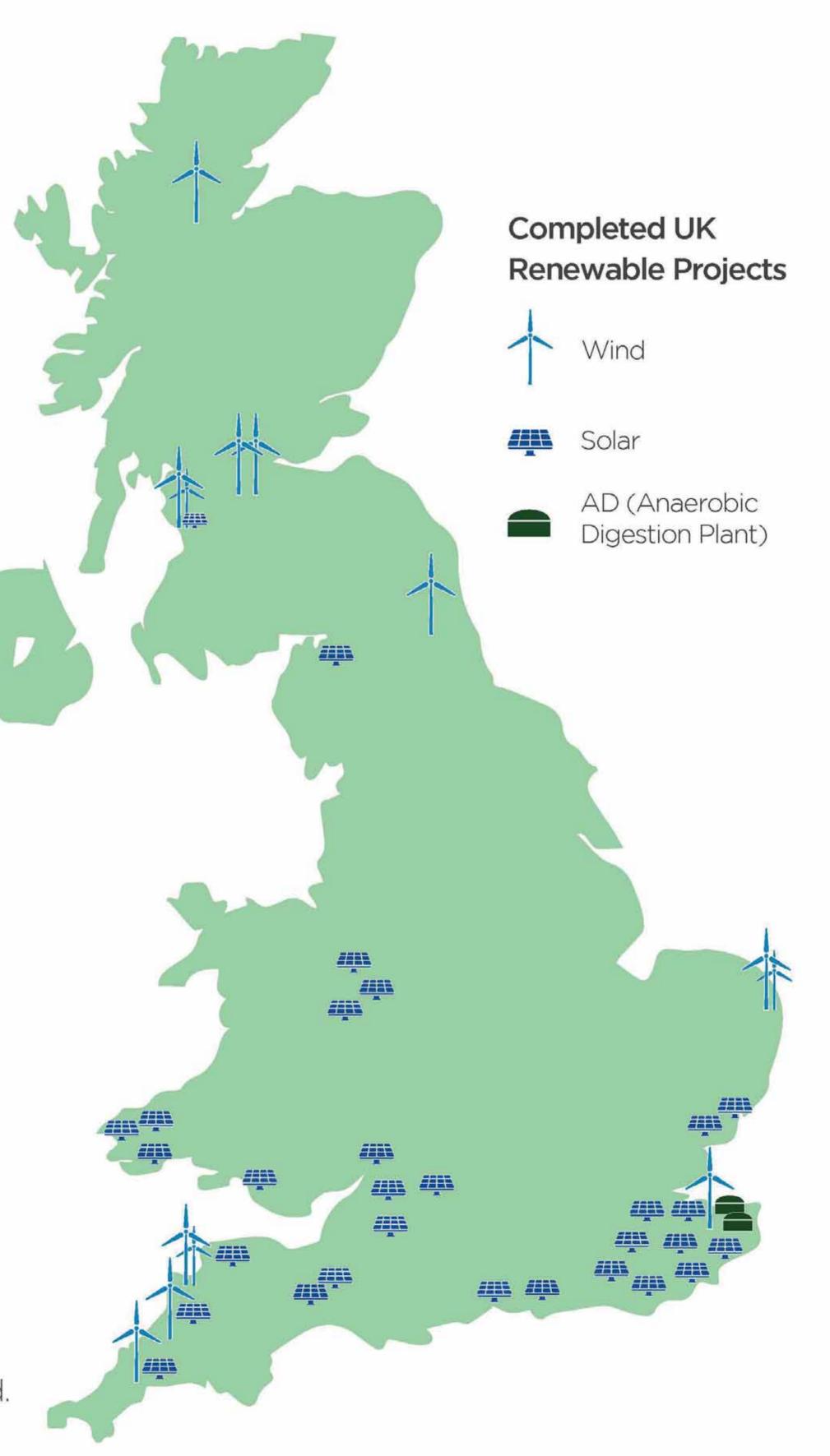
The Farm Energy Company is a UK based renewables developer and operator founded in 2011 that specialises in large-scale private wire and off-site projects for significant energy users.

The company enables its clients to source renewable energy from a range of technologies (including wind, solar, biogas and battery power) combining both private wire and grid based solutions.

What sets us apart from a number of other renewable energy companies is that our primary aim is to work with existing businesses with large power requirements to provide direct power via either a wind or solar farm.

These businesses are often at the heart of communities with many employees coming from the local area. It is therefore important that we engage with local communities to hear their views on our projects and address any concerns they may have at an early stage.

In June 2021, the UK Government set in law the world's most ambitious climate change target of cutting emissions by 78% compared to 1990 levels. We are dedicated to supporting the transition to a more sustainable energy market to help achieve this target and are working closely with a wide range of existing businesses to provide low cost, green, renewable energy. By providing increased energy security our business partners can deliver increased job security.



In achieving this, our goal is to ensure that the right technology is located in the right location and any opportunities to enhance the environment are maximised.

# Next Steps

Thank you for visiting our exhibition. We are interested in hearing your views, especially about the community benefit fund, and would invite you to complete our feedback form. Your views are important to us, and we will take on board any comments received and where possible incorporate them into our plans.

An analysis of the feedback received will be included in the Statement of Community Involvement that will be submitted with the application.

We will be finalising the surveys and assessments over the coming weeks, before submitting our planning application to Durham County Council. Durham County Council will undertake their own consultation as part of the planning process and will seek the views of statutory consultees and the community.



#### Contact us:

Email: barnardcastle@farmenergy.co.uk 0800 298 7040 Freephone:

The Farm Energy Company

GSK, Irvine