# FENWICK Solar Farm

Fenwick Solar Farm EN010152

### **Consultation Report**

Appendix B2: Non-statutory consultation booklet Document Reference: EN010152/APP/5.2

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

> October 2024 Revision Number: 00



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#### **Revision History**

#### Revision Number Date Details

00

October 2024 DCO application

Prepared for: Fenwick Solar Project Limited

Prepared by: AECOM Limited

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# FENWICK Solar Farm.

**NON STATUTORY PUBLIC CONSULTATION BROCHURE | JUNE 2023** 



**BOOM-POWER.CO.UK** 



# INTRODUCTION.

Fenwick Solar Project Limited (a Boom Power company) is proposing a new solar farm with energy storage facilities at Fenwick. This brochure sets out to provide an outline of our scheme.

The proposed solar farm at Fenwick will cover an area of 326 hectares and will generate approximately 237.5 megawatts (MW) of low carbon electricity. Solar Photovoltaic (PV) modules will generate the electricity and a Battery Energy Storage System(s) will be installed to enable electricity to be stored and released into the National Grid when it is most needed.

At the time of writing, work is ongoing to assess how the site will connect to the existing National Grid Thorpe Marsh Substation, whether via underground cables or by connecting directly to an overhead line that passes close to the site.

Our proposals to generate more renewable power in the UK will make a significant contribution towards the UK meeting its net zero targets and will deliver against Doncaster City Council's priorities around tackling climate change and generating more electricity from renewable sources.

### WHY ARE WE CONSULTING?

Meaningful engagement with the local community is what we at Boom power strive to achieve and we want to hear your thoughts and ideas. Consultation is an opportunity for both the developer and the community to share information and feedback on a proposed development.

At this stage of the process, we are commencing our engagement with local authorities and other agencies, as well as presenting our initial proposals and seeking the views of the local community and stakeholders. Communities have a vital role to play in this process, and we want to hear your views.

Your feedback will help us to develop our designs ahead of a statutory consultation period planned to take place later this year. Your input is important to us, and all responses received during the consultation period will be considered.

The consultation will run from Tuesday 27 June 2023 to 23:59 on Monday 24 July 2023. Respond before the consultation closes to share your thoughts on the Fenwick Solar Project.



# WHO ARE BOOM POWER?

WE SHAPE THE FUTURE BY SUSTAINABLY HARVESTING ENERGY IN BALANCE WITH NATURE.

### BUILD

Our team of experts have led to our successful construction legacy by actively seeking and adopting the latest technologies to deliver pioneering, first-of-a-kind projects on a global scale.

### **OWN**

Specialising in non-subsidised renewable infrastructure projects we hold strong partnerships with local communities, clients and investors to jointly reduce our global carbon footprint.

### **OPERATE**

Our operational projects produce clean energy which contributes towards a sustainable economy and aids in the repair of our planet through our biodiversity net gain approach.

### MAINTAIN.

Our dedicated team monitor all components post-operation to ensure our projects continuously reach their optimum level of performance to provide the grid with greater stability.



### +700

#### **MEGAWATTS CONSTRUCTED**



MILLION TREES OFFSET PER YEAR



### 950,000

TONNES OF CO<sub>2</sub>e PREVENTED PER YEAR



### +850

#### **MEGAWATTS DEVELOPED**



### 450,000

#### AVERAGE HOMES POWERED PER YEAR



300,000

CARS OFFSET FROM THE ROAD PER YEAR



# **WHY THIS LOCATION?**

There are many factors which make this site ideal for a solar farm:

#### SUNLIGHT AND SITE TOPOGRAPHY

The Doncaster and Yorkshire area climate provides an optimal area for solar development. It provides good levels of sunshine along with days that are cool and clear, maximising the efficiency of the solar modules.

The land at Fenwick is flat - ideal conditions for the installation of solar PV modules.

#### **PROXIMITY OF A SITE TO DWELLINGS**

The Fenwick site is situated in a rural area. Our design will work to place the PV modules and Battery systems where they are less visible from nearby homes and use hedgerows and other natural barriers to provide screening.

We are committed to designing the scheme sensitively to limit the impact to local residents.

#### **AGRICULTURE LAND CLASSIFICATION AND LAND TYPE**

Available data indicates that the land at Fenwick is lower grade agricultural land, enabling the Scheme to avoid impacting 'best and most versatile' agricultural land.

#### ACCESSIBILITY

The Fenwick site is sufficiently served by road to enable the components of the solar farm to be delivered to the Site.

#### **GRID CONNECTION**

The site is in sufficient proximity to the existing National Grid Thorpe Marsh Substation, approximately 6 km south, which is where the electricity generated by the Site will feed into the National Electricity Transmission System (NETS)

## **CONSTRUCTION & OPERATION.**

We will work closely with the local Highways Authority and statutory bodies to mitigate and reduce any adverse effects on the local community through the construction period.

Our Framework Construction Traffic Management Plan will outline in detail the measures that we will take, and a Framework Environmental Management Plan will outline how any effects on the environment will be mitigated against. These plans will be submitted with our DCO application (DCO explained on the next page).

We would like to gather your ideas and suggestions if you know of any sensitive points or other locations locally which should be taken into consideration as these plans are developed. Please use the feedback form at the back of this brochure to give us your ideas.

# WHAT IS A DEVELOPMENT CONSENT ORDER (DCO)?

As the Fenwick solar farm will have the ability to generate more than 50 MW of renewable electricity, it is classified as a Nationally Significant Infrastructure Project (NSIP). Under the Planning Act 2008, NSIPs are developments which require Development Consent to be granted by the Secretary of State for the Department of Energy Security and Net Zero. We are working closely with the Local Authority, Doncaster City Council, as a key consultee.

Unlike applications for planning permission, which are submitted to and determined by local planning authorities, DCO applications are submitted to the Planning Inspectorate (PINS). The inspectors administer the application process on behalf of the Secretary of State for Department of Energy Security and Net Zero.

The process of preparing an application for a DCO requires a rigorous set of conditions to be met including consulting with the public. As the project is in its early stage, this consultation is a non-statutory consultation. This means some of the information we are presenting is still in development and details may change as the project progresses.

We will use the feedback from this consultation to refine and develop our design. An updated proposal will be presented during our statutory consultation as required by the Planning Act 2008, where you will be able to share your views and feedback on our revised proposals. Our statutory consultation dates will be advertised nearer the time.

We will be carrying out environmental impact assessments and preparing our environmental statement in preparation for submitting it to the Planning Inspectorate.

#### PROJECT DEVELOPMENT BEGAN

November 2022

June 2023

mber 2023

This project has been carefully selected as part of a detailed feasibility process.

#### NON-STATUTORY PUBLIC CONSULTATION

A chance to engage with the local community about the proposed development.

#### PROJECT DEVELOPMENT AND ENVIRONMENTAL IMPACT ASSESSMENT

The feedback from the nonstatutory public consultation will be used to further development the project.

## STATUTORY PUBLIC CONSULTATION

Another chance to engage with the local community about the progress with our proposal.

#### DEVELOPMENT CONSENT ORDER APPLICATION PREPARATION

Development Consent Orders are required for designated Nationally Significant Infrastructure Projects.

#### DEVELOPMENT CONSENT ORDER SUBMISSION

Development Consent Order will be submitted to the Secretary of State for the Department for Energy Security and Net Zero.



# **BENEFITS**.

#### **ENERGY SECURITY**

In the aftermath of the global pandemic and the conflict in Ukraine, European gas prices soared by more than 200% in 2021-2022. This record rise in global energy prices has led to an unavoidable increase in the cost of living in the UK, as we use gas both to generate electricity, and to heat the majority of our 28 million homes. Accelerating the transition away from oil and gas depends critically on how quickly we can roll out new renewables, creating around 480,000 clean jobs by the end of the decade and building a British power system that is much more self-sufficient.

#### LOW CARBON, RENEWABLE ELECTRICITY

Power generation in the UK is undergoing a major change. The Government has committed to achieving net zero carbon emissions by 2050 and to decarbonising the electricity system by 2035. This will require large amounts of home-grown, renewable electricity generation infrastructure to be delivered, including 70 GW solar generation capacity by 2035 – the equivalent to a five-fold increase on existing solar generation.

Boom Power has secured a connection agreement to export 237.5 MW of electricity into the National Grid at the Thorpe Marsh substation. The project will therefore make a significant contribution to providing the renewable electricity generation capacity that the country urgently needs to develop.

#### **ENVIRONMENTAL**

Solar power produces less carbon dioxide than producing electricity with fossil fuels. The solar farm supports the UK's target of cutting emissions towards net zero.

Compared to arable farming, solar farms can support a biodiversity net gain by providing an overall increase in natural habitat and ecological features. Whilst there is an initial change to the countryside, the operational solar farm has the potential to become a haven for wildlife.

#### LOCAL COMMUNITY

There will be local employment opportunities through the construction phase of the solar farm, and we are committed to using local businesses where practicable.

The land will become eligible for business rates thus providing a greater income to the council to spend in the area.

#### **COMMUNITY BENEFIT FUND**

We are open to the idea of funding community projects which will add value to the local community in Fenwick. Please could you give us your ideas in the feedback form at the back of this brochure.

#### **TEMPORARY DEVELOPMENT**

This is a temporary development, and the Development Consent Order (DCO) would require the Scheme to be decommissioned at the end of its operational life. After this, the land will be returned to the landowner in a condition that will enable its existing uses to be resumed.

Arable farming will no longer be possible once the solar farm is in operation, however, sheep farming will be encouraged. We will seek opportunities with local farmers to deliver sheep grazing on the Solar PV Site.



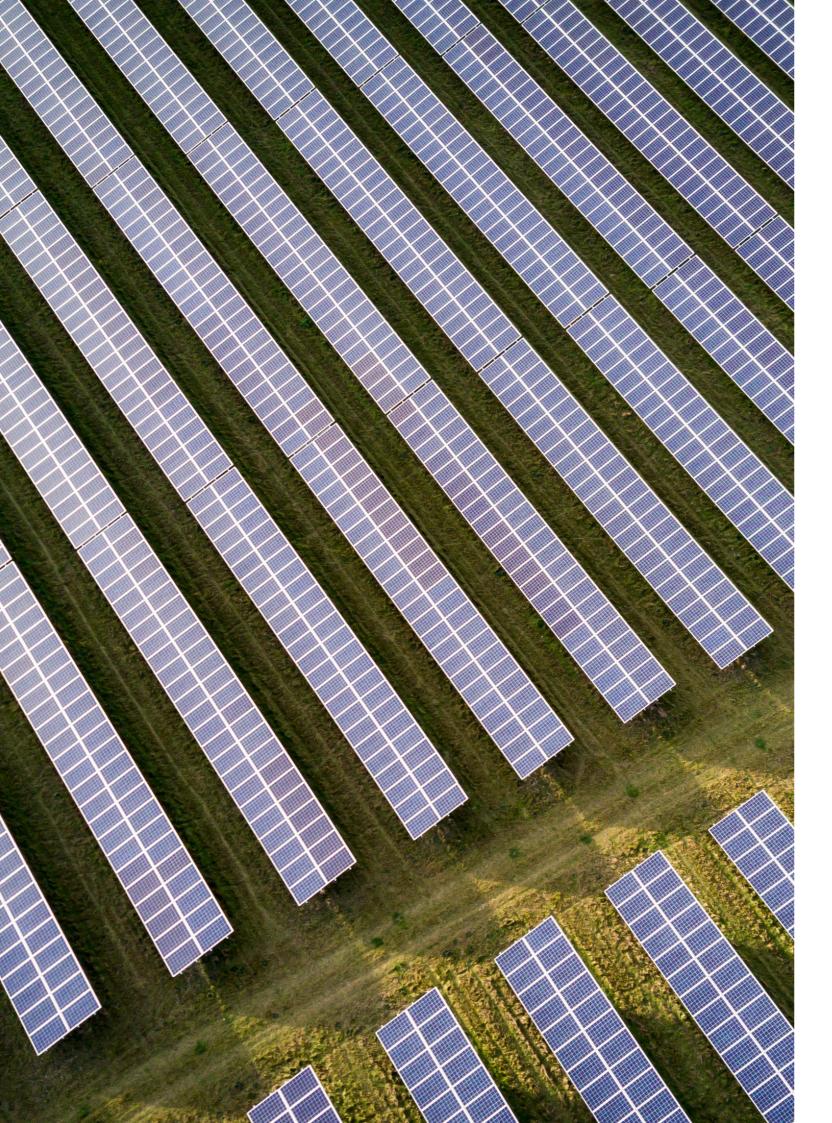
### 237.5<sub>MW</sub> LOW-CARBON ELECTRICITY

**326** (HA) HECTARES OF LAND

CREATION OF WILDLIFE HABITATS







# WHAT COMPONENTS ARE USED IN A SOLAR FARM?

#### **SOLAR PHOTOVOLTAIC (PV) MODULES**

Solar PV modules are made up of multiple PV cells which convert the sunlight into direct current (DC) electricity.

#### **ENERGY STORAGE**

Energy storage is essential as it allows electricity generated during times of low demand to be stored and then released to the National Electricity Transmission System when required such as peak electricity usage periods. An on-site battery system is proposed to be used for energy storage.

#### **INVERTERS**

Inverters convert the DC electricity generated by the solar PV modules into alternating current (AC), the type of electricity we use in our homes, so it can be exported to the national Grid for use.

#### **SWITCHGEAR**

The switchgear allows the site to connect to or be isolated from the grid during routine maintenance.

#### TRANSFORMERS

Transformers change the voltage of the electricity generated which makes it more efficient to move over longer distances. The transformers ensure that the voltage of the energy generated is matched to the voltage of the national grid for transmission and distribution around the UK.

#### **SUBSTATIONS**

Substations are used to safely collect and manage the energy exported from the site to the national grid. On-site substations will be used to manage the energy leaving the site via the grid connection cable route to the National Grid Thorpe Marsh Substation.

#### SECURITY

Security fencing will enclose all the site equipment. This will be unobtrusive mesh fencing, and, where necessary and feasible, screened from view by planting. The site will also have security cameras to monitor the equipment. Cameras would have inward-facing viewsheds and will be aligned to capture only the fence and the area inside the fence.

### WHY DO SOLAR FARMS NEED TO BE SO BIG?

Solar farms take up very little space, currently occupying less than 0.1% of the UK's land. In order to achieve the UK's target to reach net zero by 2050, and a decarbonised electricity system by 2035, power generation from larger scale solar farms will be required.

# **DESIGN**.

The proposed development will use traditional solar PV modules or bifacial modules. Bifacial solar modules offer many advantages over traditional modules. Power can be produced from both sides of a bifacial module, increasing total energy generation. The general misconception is that the UK is not sunny enough to optimise solar and full, direct sunshine is necessary. However, these efficient modules have excellent weak light performance meaning more electricity output is seen in weak light conditions such as cloud, dawn and sunset. Therefore, solar can work exceptionally well in the UK, producing power all year round.

Solar PV modules can be arranged, or mounted, in different directions to gain sunlight. We are evaluating three mounting options.

#### **FIXED SOUTH FACING**

All the PV modules in a south facing orientation. This would require the rows of modules to be oriented East to West.

#### **FIXED EAST-WEST**

The modules are mounted in back-to-back rows with one side facing to the east and one to the west. These double, 'hut shaped' rows would run from North to South.

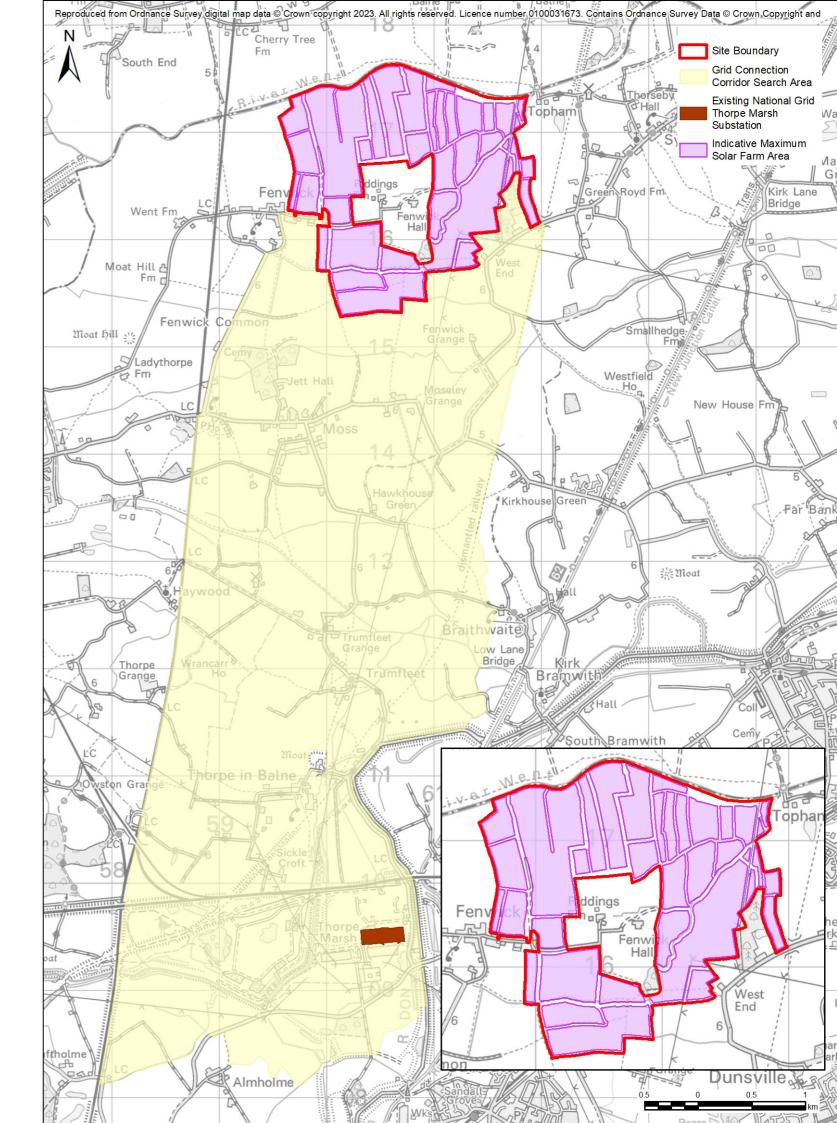
#### TRACKING

The modules would be mounted to tilt to follow the direction the sun is coming from. This maximises the electricity production possible from the same number of modules.

At this early stage, the layout of the solar modules and the location of the associated technology on the site has not yet been determined.

Recent technology advances have significantly reduced the carbon costs of producing solar modules. As with all manufactured products, some carbon is emitted in the manufacturing process, yet the claim that solar modules produce more carbon than they save is false. The overall greenhouse gas emissions involved in solar power generation is considerably lower than coal or natural gas and research has shown that the carbon payback period for solar modules is only one to four years. This means that over the total lifespan of the project (an average of 40 years) each individual module will generate zero carbon and zero pollution electricity for decades even after the carbon emitted in its production has been paid back.

We will design the solar farm sensitively to minimise visual impacts on local people. Buffer zones and screening will be used in areas where the solar farm is close to residential or commercial properties. A landscape and visual impact assessment will be undertaken to assess the impacts of the scheme, however due to the flat nature of the land at Fenwick we are confident at this stage that the solar PV modules can be largely obscured from public view.



# ENVIRONMENTAL IMPACTS AND MITIGATIONS.

#### **DURING CONSTRUCTION.**

Торіс	Potential Impact	Management		Торіс	Potential Impact
Traffic	There will be an increase in vehicles accessing the site bringing materials to and from the site during construction.We will consult with the local authorities to ensure the site accesses are appropriately located for the area. Any needs for local upgrades will be determined as the scheme designs develop.				Overhead cables can have a visual and landscape impact and in some circumstances introduce an obstacle f birds and bats.
Noise	There is likely to be an increase in noise during construction.	We will monitor the noise from site and if it reaches a predetermined level action will be		Buildings	Some structures will be required on th site.
Air Pollution	The construction and traffic to and from the site may increase dust in the air.	taken to reduce it. There could be up to a total of 20-25 heavy goods vehicle movements a day across the project area. This is a reasonable worst case based on the most rapid build out scenario. Trucks will keep to the existing roads and the access tracks made for this purpose. We will		Module Height	Modules will be mounted approximate 1m above ground at an angle yet to be determined. The mounted solar PV modules will be up to 3.5m above grou level.
		monitor dust and leaving trucks will have their wheels washed when appropriate.		Land	The land use within the solar farm wil change as the land will not be availabl for its current arable agricultural uses.
Visual	There will be minimal visual impact from construction activities. All activities will be at ground level.	Fields will be fenced off during construction work, and existing trees and hedgerows around the fields will not be disturbed so that construction is not readily visible.		Glint & Glare	Whilst solar modules are made to abso the light, they can be deemed to have reflective qualities.
Land	There will be temporary disturbance to soils and agricultural land during the installation of underground cables/ grid connection.	Implementation of good practice soil management measures via a Soil Management Plan so that land is restored to original condition.		Traffic	Increases in traffic during the operation of the solar farm.

#### **OPERATION.**

	Management					
e for	The preferred method is to have the grid connection cables buried below ground and consequently they will not be visible.					
the	To minimise the need for new structures we are looking at ways to re-purpose and reuse the existing buildings on-site.					
tely e vund	The Scheme will involve field boundary enhancement and planting of seed mixes within the solar module area. Planting will also be used where necessary to provide screening and reduce the visibility of modules and other equipment.					
ill ble es.	The land will still be available agriculture through grazing, providing an opportunity to diversify the farming practices in this area.					
sorb e	Planting around the perimeter fences will reduce any potential glint and glare impacts. The modules will also be positioned so as to reduce any reflection that could impact the roads, train lines or public footpaths.					
ion	The site is estimated to only require 1-3 permanent staff, so once operational, traffic to and from the solar farm will be minimal.					

# **CLIMATE CHANGE & ECOLOGY.**

Solar power is affordable, reliable, and low impact. In 2021 solar farms supplied more than 4% of the UK's entire electricity demand. The government has set a target for 70 gigawatts of our power to be generated from solar by 2035, a five-fold increase on existing targets. According to the UN, climate change is the 'defining crisis of our time and it is happening even more quickly than we feared' - we need to create more renewable power.

We recognise the importance of environmental protection and betterment as part of our commitment to operating sustainably and responsibly. We procure independent qualified ecologist advice to measure the biodiversity value of each project and to design enhancements to deliver net biodiversity gain. At our solar farms, this generally results in improvements to natural habitats for a range of invertebrates, small mammals, reptiles and birds. Currently the majority of the land at Fenwick is used for arable and pasture purposes which gives opportunities to boost biodiversity through the function of the solar farm.



# HAVE YOUR SAY.

All the information in this brochure and all other consultation materials listed below are available to read on our website at:

To view the accessible version of this information on our website, look for the 🗊 logo at the bottom right-hand side of the screen to select the accessibility features you need.

#### **CONSULTATION EVENTS**

We are holding two consultation events at venues across the local area between 27th June 2023 and 24th July 2023. These are drop-in sessions where you can meet members of the project team, view information and plans, and ask any questions you have. Consultation response forms will be available to complete at the event or take away and return to us by freepost, or you can email it to the project email address. The consultation events will be held at:

Date and time	Location
Friday 30 June 2023 14:00 – 20:00	Fenwick and Mos Doncaster, DN6 (
Wednesday 5 July 2023 14:00 – 20:00	The Old George In

In the event of unforeseen circumstances meaning the consultation events must be cancelled, we will inform people as early as possible of the cancellation. Where possible we will give details of an alternative event via our website. We understand that not everyone is able to come to an event in person. Therefore, we are also holding two webinars. These will be online meetings featuring a short presentation from the project team, followed by a question-and-answer session.

Date and time	How to join				
Monday 10 July 2023 18:00 – 19:00	Go to our web-pag the webinar link.				
Thursday 13 July 2023 19:00 – 20:00	Go to our web-pag the webinar link.				

#### **SHARE YOUR VIEWS**

Feedback from the public and our key stakeholders is crucial to us developing the best solar farm for this area. We want to make sure that everyone has a chance to get involved and share their opinion on the project. To share your feedback and ideas, you can attend one of our consultation events where our project team will be collecting your feedback. Alternatively, you can provide a response online by scanning the QR code below. The consultation closes at 23:59 on Monday 24th July 2023, so please submit feedback before this date. All feedback is important to us. Where possible, we will still consider comments submitted after this date within reason.





oss Village Hall, Fenwick Common Lane, Fenwick, OHG

Inn, Broad Lane, Sykehouse, DN14 9AU

ge at www.boom-power.co.uk/fenwick and click on

ge at www.boom-power.co.uk/fenwick and click on

If you have any questions or would like to request copies of information (including in accessible formats if needed) please contact us using the below details. Please note that phone lines will be open between 9am and 5pm Monday to Friday.

This non-statutory consultation is the first round of public consultation on our proposals. We will compile and consider all of the feedback we receive and use this information, along with environmental assessments that we are undertaking, to refine and improve our plans for the project. We will then hold a statutory consultation where we will share updated plans for the project and again seek your views and feedback, this is likely to be in late 2023.

### 01964 782219 **BOOM-POWER.CO.UK/FENWICK FENWICK.ENQUIRIES@BOOM-POWER.CO.UK**

# **FENWICK FEEDBACK FORM**

To return your completed feedback form, simply tear from
freepost and no stamp is required. Alternatively, you can
fenwick.enquiries@boom-power.co.uk

Title:	Name:
Address: Email:	
I am in fa <sup>.</sup> I am unde	t extent are you supportive of the proposals that you' vour of the proposal ecided he proposal
Discos	
Please us	e this space to provide any comments or feedback or
	looking to support and protect local wildlife habitats support that might be needed.
-	of this scheme, we are exploring the use of a commu tant to you.
5. Have yo Yes	ou attended any of our consultation events? No
6. How in	formative did you find our consultation materials?
Very info	mative
Quite info	ormative
Not inform Did not us	
	otice: Personal details will be held securely and only use d further development of the Scheme. Outside of these p

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m the brochure and post to us by 24 July 2023. This is return your form to our email address:

Postcode: Telephone:

read about in this brochure?

he proposed solar farm shown in this brochure.

the Fenwick area. In the text box below, please share any

ty benefit fund. We would like to understand what projects

or purposes in connection with the statutory consultation, the DCO poses, the Applicant may be required to provide personal details if r if PINS requests original responses. Otherwise, personal details will ivacy Notice at: www.boom-power.co.uk/privacy-policy/

1964 782219 or by email on fenwick.enquiries@boom-power.co.uk



# FREEPOST FENWICK SOLAR FARM