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Blandford Hill Eco Hub

Online Consultation Event

4 March 2021

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Welcome

Thank you for joining us today

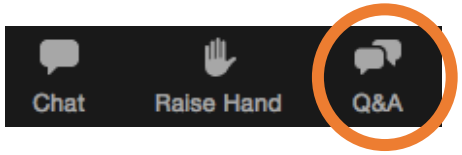
Today's event

Circa 30-minute presentation followed by Q&A session

Opportunities for **questions** and **answers**

Post-event **FAQs** will be uploaded onto www.blandfordhillecohub.co.uk and are available in hard copy

Session will be **recorded** and **uploaded** onto www.blandfordhillecohub.co.uk



Ask questions using the **Q&A button** at the bottom of the screen

Please provide **feedback** through project website or send the leaflet's response form using Freepost

Team and session topics

- **About Naturalis – Matt Partridge, REG**
- **Background and need – Matt Partridge, REG**
- **The proposals – Matt Partridge, REG**
- **The site – Will Whittington, REG**
- **Planning policy context – Owen Horrell, Pegasus**
- **Benefits – Matt Partridge, REG**
- **Questions & Answers**

About Naturalis

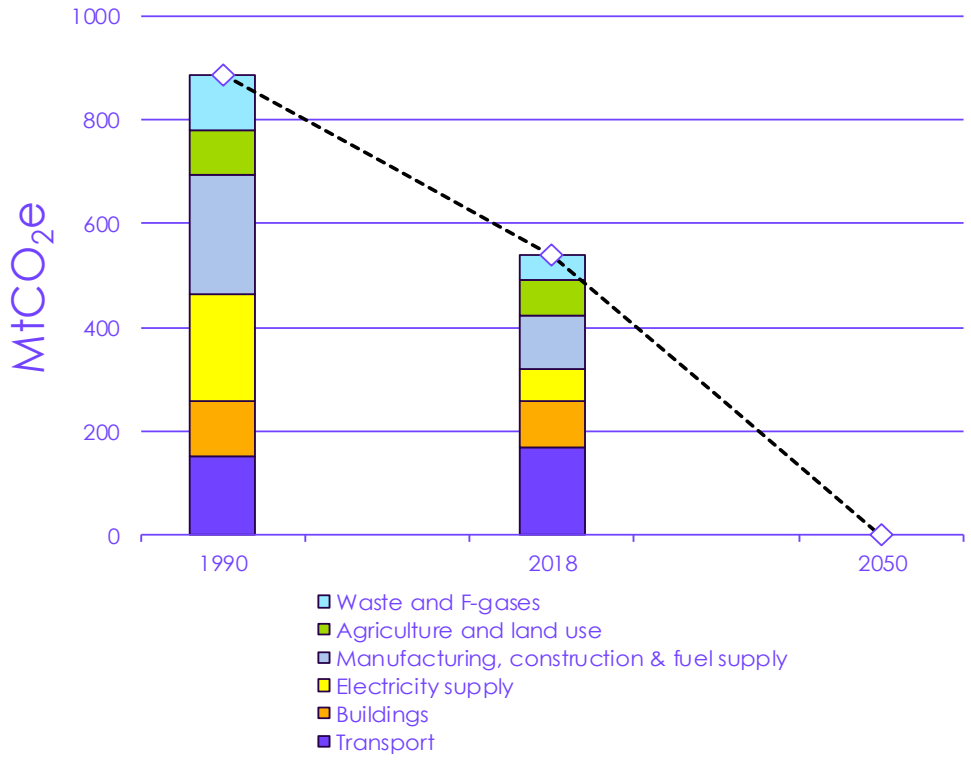
- Joint venture between REG Power Management (REG) and Falck Renewables to roll out green energy projects across the UK.
- Both companies have an established and successful track record in renewables development:
- REG
  - Consented 27 wind and 6 solar projects – 28 operational.
  - 100% planning success for solar farm projects (ranging from 3 to 50MW, some in Greenbelt and AONB).
- Falck Renewables
  - 12 operating wind farms in the UK comprising over 400MW (roughly one-third of Falck Renewables' total global capacity).
  - Listed on Italian stock exchange (market value €1.7billion @ 2 March 2021).
- The Blandford Hill Eco Hub plans are being developed by Naturalis and, if approved, would be built and operated by Falck Renewables.

Mendennick Solar Farm, Cornwall (developed by REG)

Climate change

- Climate change
  - UK Government first major economy in the world to pass laws for a “net zero” target by 2050.
  - Dorset Council is one of 300 UK councils to have declared a Climate Emergency.
- What is being done about it?
  - Committee on Climate Change (CCC) advises Government on climate change action and reports progress.
  - CCC analysis shows electricity and transport contributed roughly 40% of the UK’s greenhouse gas emissions in 2018 (transport being the largest single source of emissions).

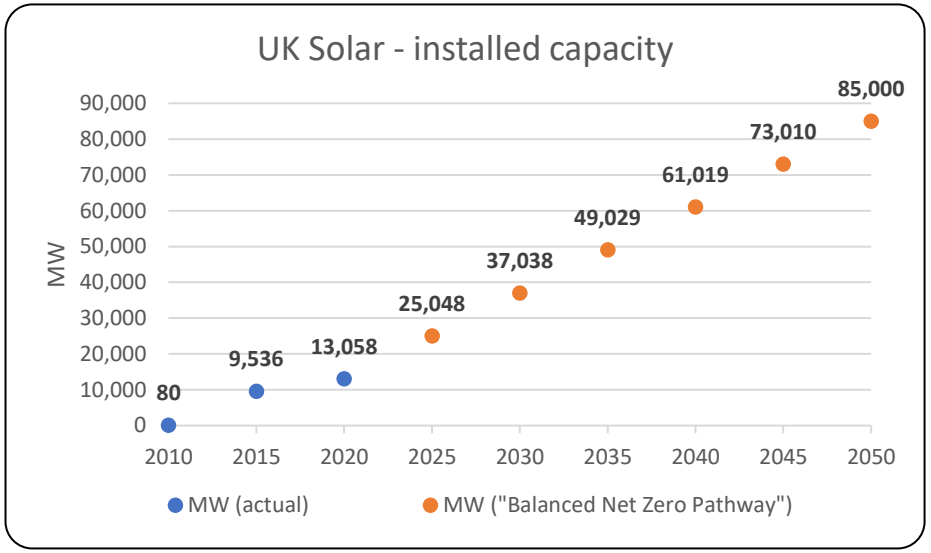
Figure 2.2 To meet Net Zero, emissions must fall in all sectors and at a faster rate than the last thirty years

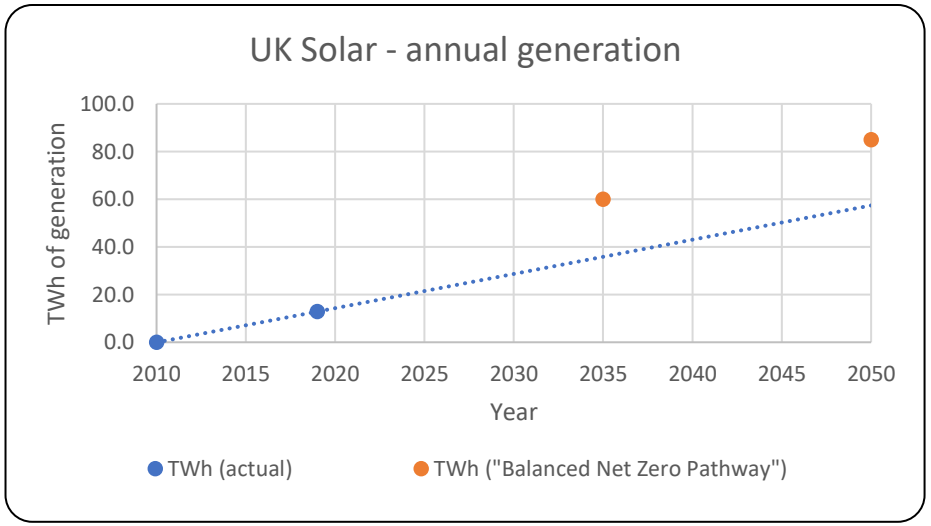


Source: BEIS (2020) *Provisional UK greenhouse gas emissions national statistics 2019*; CCC analysis.
Notes: Net Zero emissions in 2050 will require any residual emissions to be offset by the UK land use sink and greenhouse gas removals.

Climate change – solar generation

- CCC: *"Emissions from electricity generation have already fallen by 68% since 1990."* – coal-fired generation replaced by gas/low-carbon generation.
- CCC's "Balanced Net Zero Pathway" *"Solar generation increases to 60 TWh in 2035 and 85 TWh in 2050. On average, 3 GW per year will need to be installed".* In other words:
  - a doubling of the current installation rate; or
  - the equivalent of 4 projects like the Blandford Hill Eco Hub being built every week for the next 29 years!
- *"Solar contributes to decarbonising power at low costs, providing 10% to 15% of generation in 2050."*





Climate change – road transport

- CCC: *"Battery-electric cars offer considerably lower lifecycle emissions than conventional vehicles…"* and *"..the costs of batteries, and therefore of electric vehicles, have fallen dramatically over the past decade."*
- Scottish and Southern Electricity Networks: *"the uptake of EVs is expected to accelerate significantly in the mid-2020s…by 2025 EVs are projected to account for up to 9% of all cars"* (c. 1% today)
- The charts show a huge increase in electric cars and the associated charging infrastructure.

Figure 3.1.b Total electric cars on the road and supporting charging infrastructure in the Balanced Net Zero Pathway

Source: CCC analysis; 2020 figures based on DfT, OLEV, SMMT and Zap-Map statistics.
Includes all small, medium and large cars and all publicly accessible charge points in the Balanced Net Zero Pathway.

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Road vehicles – the electric future

"…we'll invest more than £2.8bn in electric vehicles, lacing the land with charging points…This will allow us to end the sale of new petrol and diesel cars and vans in 2030."

Boris Johnson, Prime Minister, 18 November 2020

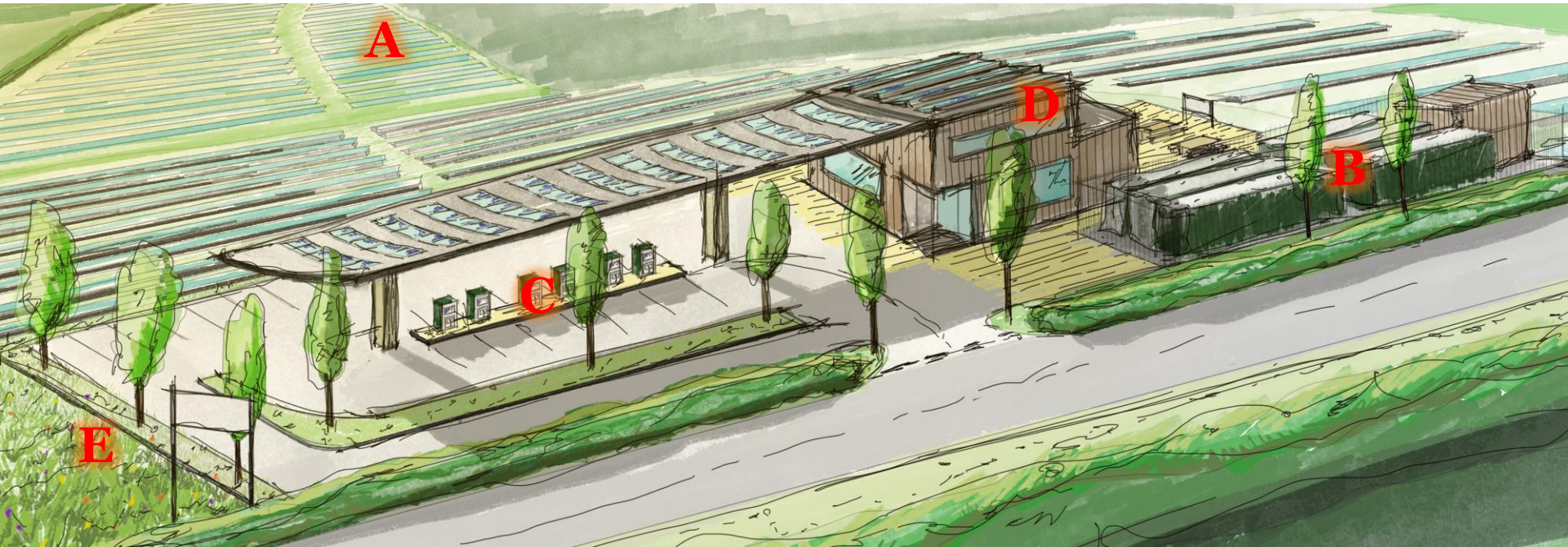
Meeting the target – the challenges:

- ✓ **Car manufacturers offer more EVs -** *"In 2020, electric vehicles (EVs) accounted for 1 in 10 new cars sold, up from 1 in 30 in 2019."* (Grant Shapps, Secretary of State for Transport, 13 February 2021)
- ✗ **"Range Anxiety"** *"One of the main barriers to purchasing EVs is 'range anxiety' - the worry the EV will run out of charge before finishing the journey…"* (Competition and Markets Authority report, 2 December 2020)
- ✗ **Fewer EVs in rural areas** *"There is currently slower uptake of EVs across many of the rural areas…"* (Scottish and Southern Electricity Networks, "Distribution Future Energy Scenarios 2020", 11 December 2020)
- ✗ **Slow rate of installation of EV chargers** *"Our analysis shows that, in the 2020s, the UK needs to install public chargepoints five times faster than the current rate."* Policy Exchange, "Charging Up" (2 February 2021)
- ✗ **Poor EV charging facilities in rural areas** *"As with the enduring problems of broadband…the [EV charging] market misses out large parts of the UK, especially smaller towns and rural areas"* (Simon Clarke MP, 2 February 2021)

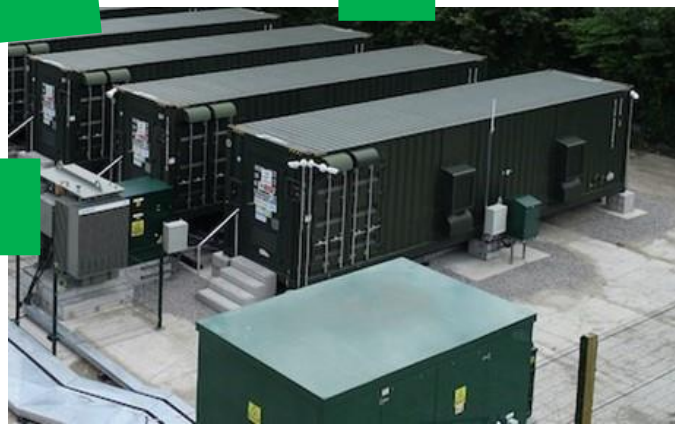
Proposals

- The project comprises:
  - 15MWp solar farm, occupying c. 60 acres (**A**)
  - 3MW battery storage (**B**)
  - At least 12 rapid/ultra-rapid electric vehicle chargers (**C**)
  - Shop, café and lounge area (with toilets and out-door seating) (**D**)
  - Landscape and ecological enhancement scheme (**E**)

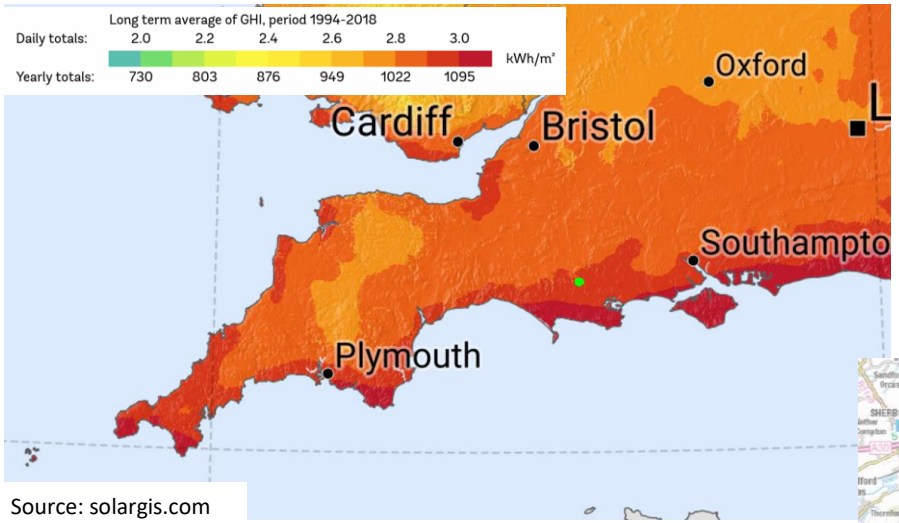
*The solar farm would generate approximately **15.8m kWh (units) per year** - roughly equivalent to the annual electricity consumption of **4,000 homes** or equivalent to a journey of **47 million miles** in a typical EV*



How it works



The site



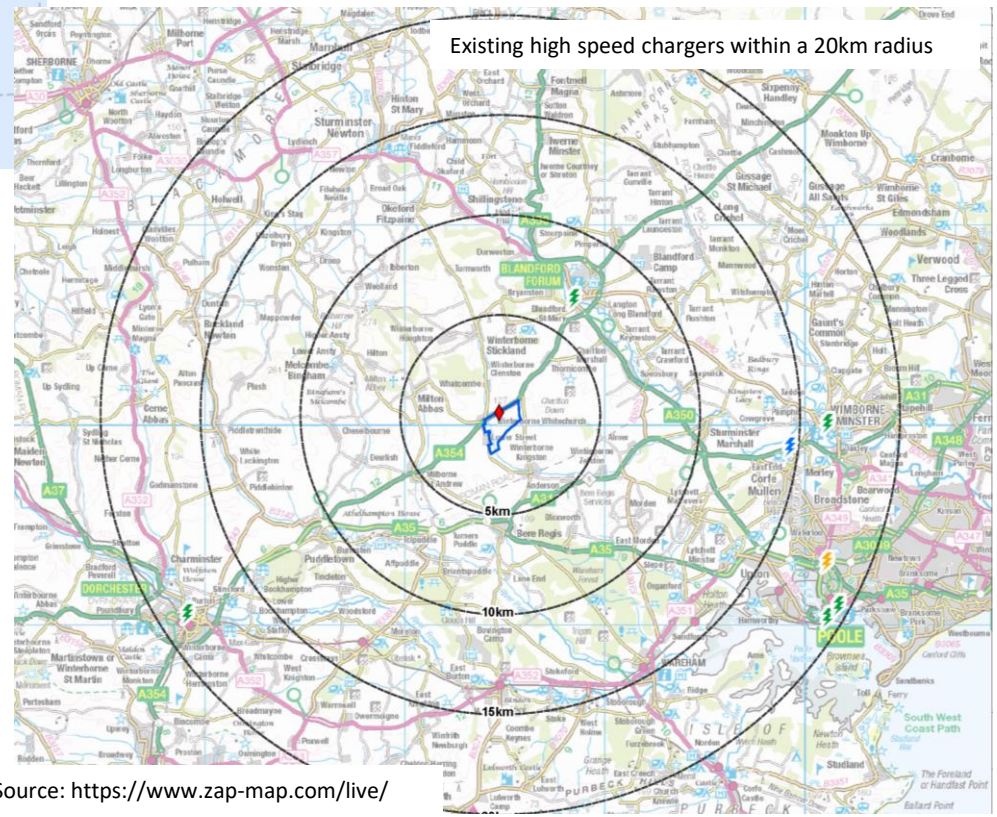
Source: solargis.com

The site has been identified due to:

- Having a high solar irradiance for the UK

- Adjacent to the A354, a primary road route in England with good access for EV charging

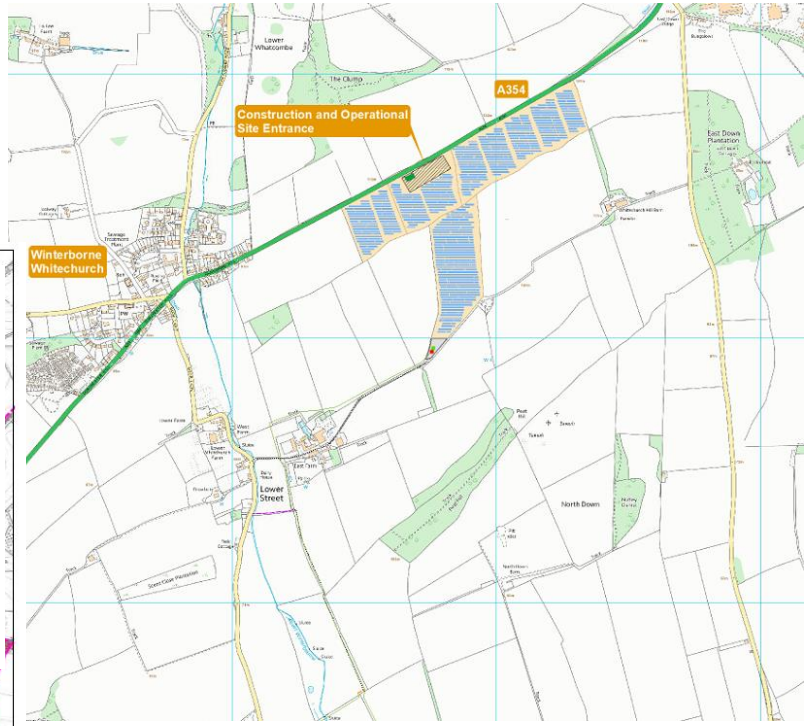
- Being able to increase access to EV charging within the area and ready to meet the demand of rural electric car drivers and those without at home charging facilities

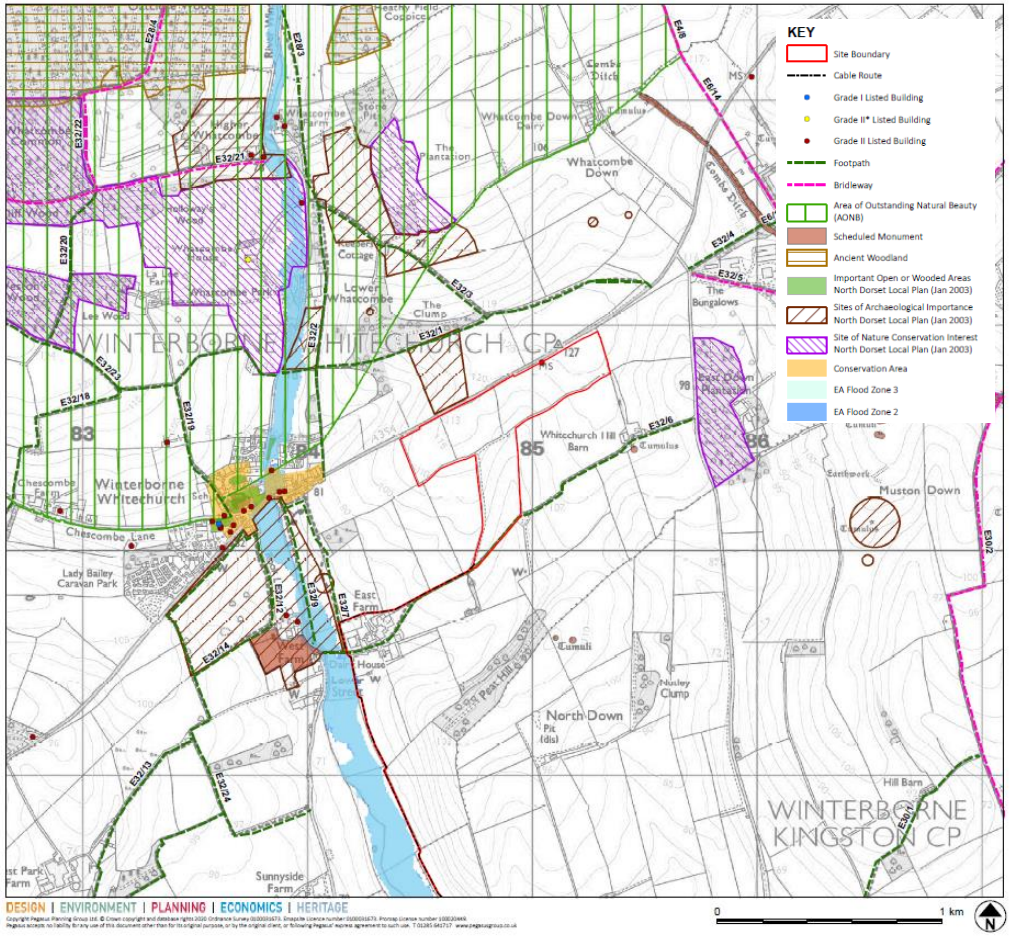


Source: https://www.zap-map.com/live/

The site

- A viable grid connection, c 1.75km to the south of the site



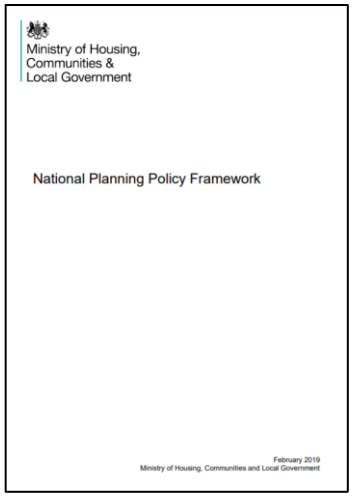


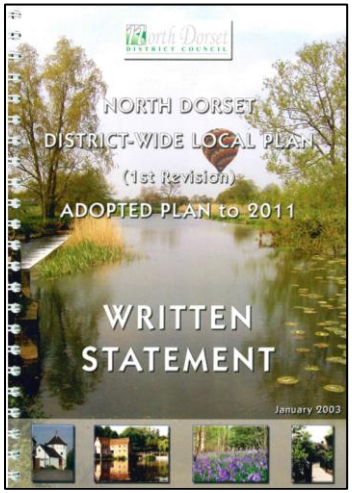
- Outside of local and national designations

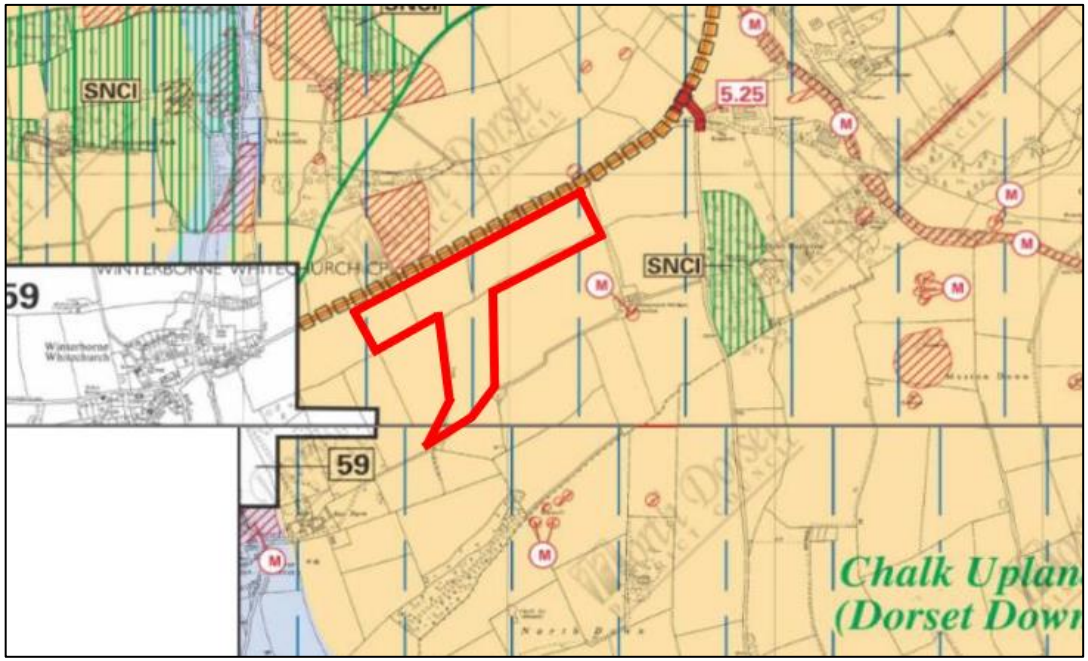
- Suitable land classification for solar farm developments, graded ‘good to moderate’ land

Planning policy context

- Planning Policy is set out at a National and Local level.
- Generally, Planning Policies are supportive of appropriately sited renewable energy proposals, such as the Blandford Hill Eco Hub scheme.
- A Planning Statement will be submitted as part of the application.
- Pre-application discussions have been held with Dorset Council.







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Benefits

- **Boost local, clean, renewable energy generation** - the eco hub would produce clean electricity roughly equivalent to the annual electricity consumption of 4,000 homes.
- **Reduce greenhouse gases** – the project would make an important contribution to national greenhouse gas reduction targets and help address the Climate Emergency that was declared by Dorset Council in May 2019.
- **"Plug" a local gap in existing EV charging facilities** – provide a new, modern charging station for local EV owners, now and in the future.
- **Reduce local air pollution** - by supporting the uptake of EVs in Dorset, the project would help reduce local air pollution from vehicles with air pollution being *"the biggest environmental threat to health in the UK"* according to Public Health England.
- **Provide new, sustainable, local job opportunities** – at the eco hub café/shop.
- **Community benefit** – supporting local initiatives (eg solar panels on the Dunbury CofE Academy roof, speed camera in Winterborne Whitechurch etc).

Questions and Answers