

# Gembling Solar Power Project



Foston on the Wolds Parish Council Presentation Wednesday 1<sup>st</sup> March 7pm



### **About TEKSS**

- Gulya Isyanova (Head of Development)
- TEKSS is a renewable energy developer working with landowners across the UK to develop highquality, environmentally-sensitive solar power schemes
- Co-developing this project with IM2, a Spanish solar developer with sites in Spain and South America
- Our development team has worked with a wide range of landowners (including farming enterprises, estates and Government organisations) and across different technologies (including onshore wind and subsea interconnectors) and countries
- Our ethos is to develop schemes that not only benefit the wider environment but that also improve local biodiversity, and are designed with local input in order to incorporate considerations of residential amenity
- We aim to engage stakeholders from the early stages of development, to allow for a constructive and lengthy consultation process giving the local community opportunities to input into the assessment and design process



## Site location

- We have identified a site suitable to host a ground-mounted solar scheme and possibly battery storage to the south-east of Gembling
- 600m south-east of the village
- 118 acres
- 3 fields adjacent to the wind farm
- Offset from roads and properties





- The site has the potential to host up to 40 megawatts (MW) of installed solar panels, mounted on steel frames and with a maximum height of 3m (just over 9 ft)
- · Additional equipment on site could include several central inverters and a substation compound
- All cabling would be underground, as we will be connecting into the existing 66kV line
- The existing field and hedgerow pattern will be maintained in fact, new hedgerows and supplementary planting are likely to be added to enhance the screening of the site
- The solar generating equipment will be surrounded by a deer fence approx. 2.5m high and accompanied at regular points with infra-red CCTV cameras (no night-time lighting and trained onto the fence only)
- There will be no artificial/night-time lighting on the site at all
- With regards to routing construction traffic, our priority and intention is to avoid the village of Gembling altogether and access the site via alternative routes, subject to surveys
- The scheme is expected to have a lifetime of 40 years
- We will also explore the potential for the site to host some battery storage (similar containers to the central inverters), dependent on feedback from the local grid network operator





#### **Indicative solar panels**

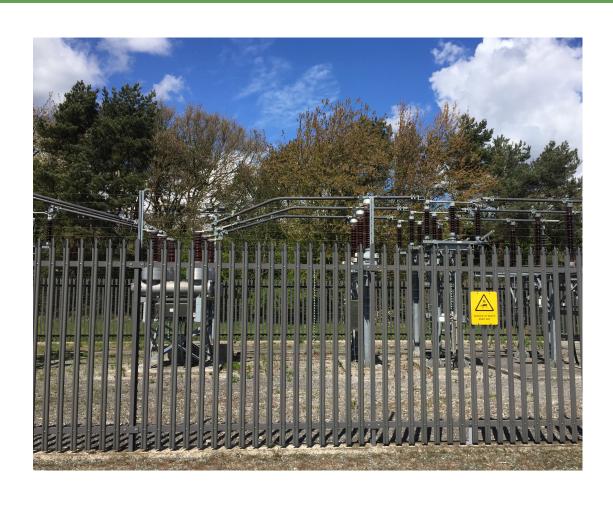
- 3m maximum at the top and typically 60-80cm above ground at the bottom
- East-west rows, spaced approx. 4 metres apart
- Tilted towards the south at approx. 10-30 degrees



#### **Indicative central inverters**

- Approx. 2.5m x 1.5m area and approx. 2.3m high
- Central inverters convert the DC power collected from the solar modules into AC power for connection to the grid
- Internal cooling fans





#### Indicative substation compound

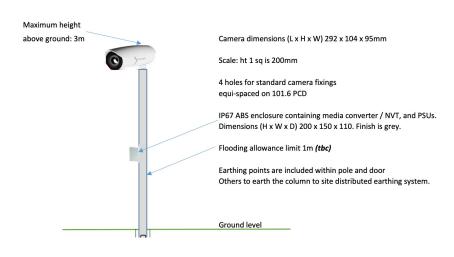
- An enclosed open air area of grid connection equipment, approx. size of 45m x 25m in area.
- Surrounded by a steel palisade fence approx. 2.4m high and a 2m high deer fence.
- The transformer is approx. 4.9m high.





#### **Indicative security fence & indicative CCTV**

- Up to 2.5m high deer fence
- Likely to have mammal gates to allow wildlife to carry on traversing the site
- Accompanied at regular interval with infrared CCTV cameras





## The benefits of this particular site

- 40 megawatts of installed solar panels can generate enough green electricity to power over 14,500 homes
- This would offset around 8,800 tonnes of CO2 annually
- The selected fields are very well screened with existing hedgerows and trees along some of their boundaries. These are to be retained and enhanced as part of the scheme. The existing landscape pattern will be maintained and preserved.
- Additional planting will also be added to screen the site further a landscape/planting plan will form part of the planning application and will be based on the analysis undertaken in the Landscape & Visual Impact Assessment, as well as community input.
- We have secured a viable grid connection on the local 66kV network.
- The project presents an opportunity to bring significant net gains for local biodiversity by creating many acres of additional and varied habitat for local plant and animal species. The site will be seeded with a wild grassland mix, creating a meadow habitat, leading to the creation of biodiverse habitat and improved soil quality. Supplementary habitat features will also be added, based on input from ecologists and the local community.



### Site assessment

- The site will be assessed via a number of technical and environmental surveys, with guidance from relevant officers at East Riding of Yorkshire Council.
- Studies will include:
  - Ecology, habitats & biodiversity
  - Cultural heritage
  - Flood risk
  - Arboriculture
  - Topography
  - Landscape & visual impact
  - Agricultural land classification
  - Transport & access
- As we obtain detailed information from these assessments, they will provide us with constraints that we can incorporate into our design considerations.
- Community input may also lead to additional studies or assessments, depending on the issues identified



# Planning process

- We are hoping to submit a screening letter to East Riding of Yorkshire Council in the near future (est. spring 2023) which will seek confirmation from the Council whether the proposal falls under the Environmental Impact Assessment regulations (EIA) or not
- Typically solar schemes are not considered to be EIA
- We hope to be in a position to submit a planning application in the second half of this year at the very earliest



## Consultation

- As well as the parish council and the local ward councillors, we have contacted local residents in Gembling
- We have a project website which is being kept up to date on the project as it evolves: gembling.tekss-energy.com
- It is expected that as more assessments take place and we gain clarity on the site design, consultation events will take place to discuss these findings with the local community to seek your input
- This could include some issue-specific community surgeries (e.g. to share details of a viable access route that avoids the village) and a full public exhibition prior to the submission of any future planning application
- It is hoped that by approaching stakeholders in the earlier stages of the project, we create a constructive consultation process and provides the local community with an opportunity for input into the assessment and design process
- Residents are encouraged to contact us directly with any queries or concerns
- East Riding Council will also run a formal consultation on the proposal after a planning application is submitted



### Timeline

#### To date:

- Spring & summer 2022 Commenced preliminary studies and requested Pre-App Advice
- Autumn 2022 Commenced consultation
- Winter 2022/23 Seasonal ecology studies completed, detailed grid assessments ongoing
- **Spring 2023** All environmental assessment works currently on hold, with full focus currently on grid

#### The rest of the development timeline (indicative):

- Spring & summer 2023 Submit an EIA screening request, kick off the full suite of environmental and technical assessments
- Autumn 2023 (at the earliest) Submit planning application
- Winter 2023/2024 Planning decision
- Spring 2024 (indicative) Discharge planning conditions (at the earliest)
- Second half of 2024 (indicative) Construction (at the earliest)



### Construction

- Typically a 4-month period that includes:
  - Site and track preparation
  - Piling steel support frames into the ground
  - Ducting for the cabling (underground)
  - Building/installing the central inverters and the substation compound
  - Installing the security (deer) fence and (infrared) CCTV cameras
  - Installing the solar panels (the bulk of the construction work)
- All construction traffic will be managed via a Construction Traffic Management Plan (CTMP) the
  plan will be devised with input from the highways officer at East Riding of Yorkshire Council and local
  residents.
- The process will also be informed by a Construction Environmental Management Plan (CEMP), which will ensure that our construction programme avoids, minimises or, if need be, mitigates effects on the environment and surrounding area.
- Construction will take place during set hours as agreed with East Riding of Yorkshire Council.



## Operations & Maintenance

- The scheme is expected to have a 40 year operational period (as per planning permission)
- Typically there are monthly maintenance visits usually accessed by a small team in a small vehicle (e.g. 4x4).
- Quiet operation
- Management of hedgerows to an appropriate height (usually 3m)
- Ongoing ecological and landscape planting maintenance plan (for the full lifetime of the scheme, ensured as a planning condition)
- No artificial/night-time lighting
- After the 40-year period, the scheme is decommissioned essentially the construction process in reverse
- Land reverts to agricultural use (no impact on agricultural land grade status as a result of the solar scheme, i.e. it does not become brownfield)



## Contact details

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