



Welcome to Dragon Energy

Proposals for wind energy at Dragon LNG in Waterston

12 May 2022



Today's event



Circa 30-minute presentation followed by a Q&A session



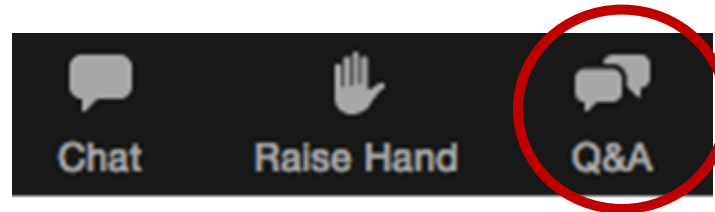
Opportunities for questions & answers



Post-event FAQs will be made available online and in hard copy



Session will be recorded, and recording made available on website www.dragonenergypark.co.uk



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



Questions can be asked afterwards through project Freephone, Freepost, website and email

Session topics

- Wales, Dragon LNG and wind energy – **Richard Hull, Dragon LNG**
- Site and proposals – **Richard Hull, Dragon LNG**
- Planning and EIA process – **Andrew Fido, Infinergy**
- Landscape & visual impact – **John Markwell, Barton Willmore**
- Noise – **Rob Shepherd, Hayes McKenzie**
- Transport & access – **Andrew Fido, Infinergy**
- Community benefits and project timeline – **Marlies Koutstaal, Infinergy**

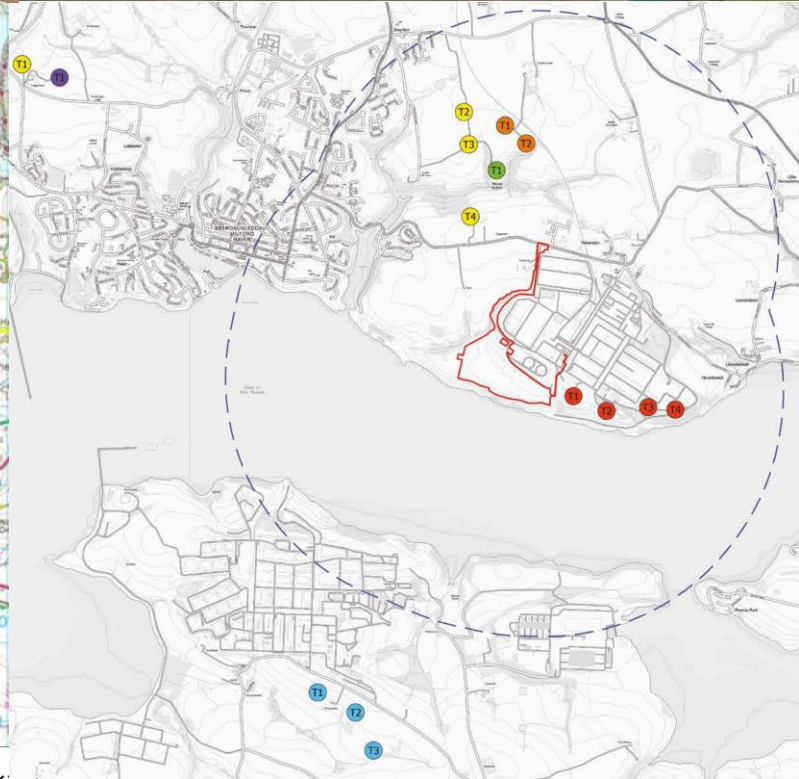
Wales, Dragon LNG and wind energy

- Milford Haven is a key energy hub for the UK. Dragon LNG alone has the capacity to supply up to 10% of the UK's energy need.
- Wind and solar power replace fossil fuels more and more in the energy mix.
- The Haven Waterway has an excellent wind resource.
- The Welsh Government acknowledges the important role of renewables to combat climate change and secure energy supply.
- “Future Wales” sets out the Welsh Government’s target to generate 70% of electricity from renewables by 2030.
- In Policy 32, it says that the Government “*supports operations at Haven Waterway and recognises its location for potential new renewable and low carbon energy-related development, innovation and investment.*”



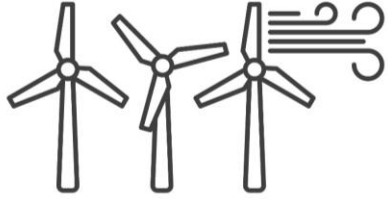
The site

- The site comprises land to the south west, and adjacent to, the Dragon LNG Terminal, Waterston
- The proposed wind turbines would be co-located with a recently consented solar farm, currently under construction
- The turbines would be sited to the west, and broadly in line with the existing Wear Point wind turbines, and to the south of the existing Castle Pill wind turbines



SITE LOCATION

Overview of the proposals



The emerging proposal is for up to **3 wind turbines** of up to

149.9m

(491.8ft) when the blade is in a vertical position.



Access would be taken from the **B4325** and the existing West Perimeter Road.

Each turbine would have an installed capacity of up to

4.8 MW

(megawatts)

Enough electricity could be produced to meet up to

39% PER YEAR

of Dragon's on site demand. Combined with the solar farm, approximately **47%** per year.

Expected electricity output per annum: would be up to approximately

49,600 MWh

(megawatthours)

This is the equivalent of the annual electricity consumption of approximately **13,230** average UK homes.

(source: Renewable UK)

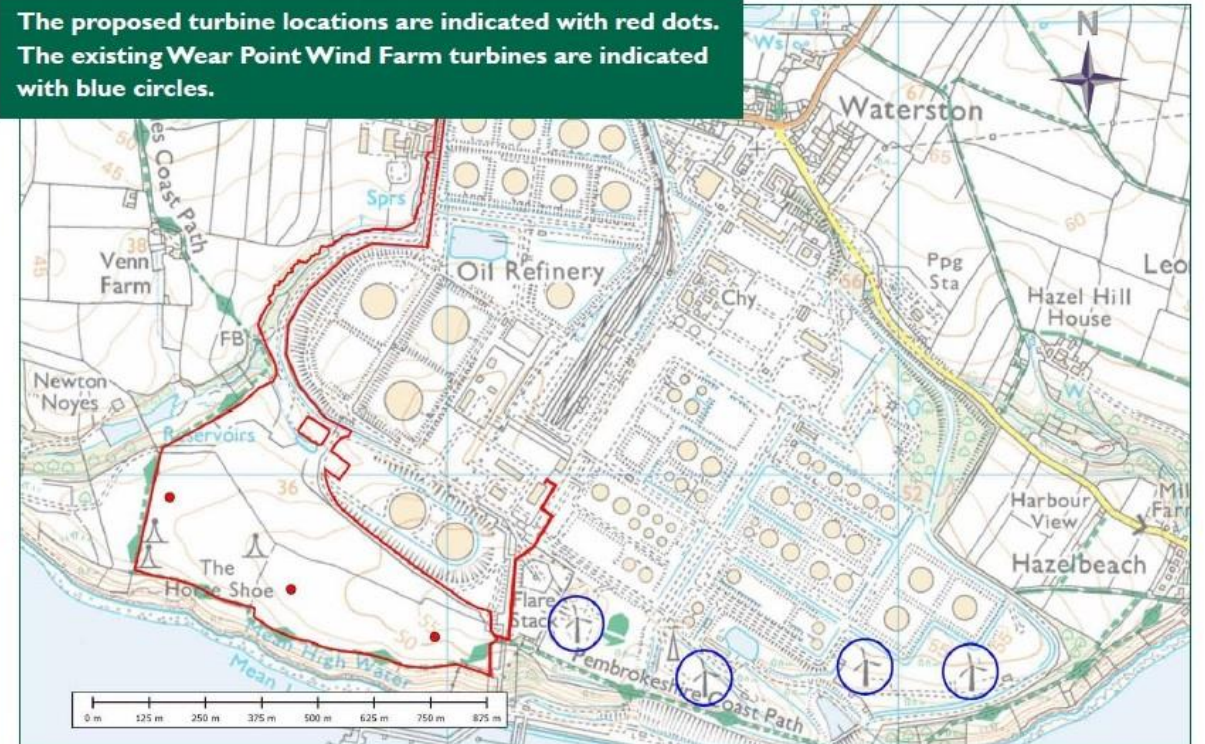
The expected generation of some **49,600MWh** of renewable power will eliminate around

10,530 CO₂

tonnes of Scope 2 CO₂ emissions each year.

(source: BEIS/DEFRA)

The proposed turbine locations are indicated with red dots. The existing Wear Point Wind Farm turbines are indicated with blue circles.



● PROPOSED TURBINE LOCATIONS

© Crown copyright and database rights 2022 Ordnance Survey 0100031673



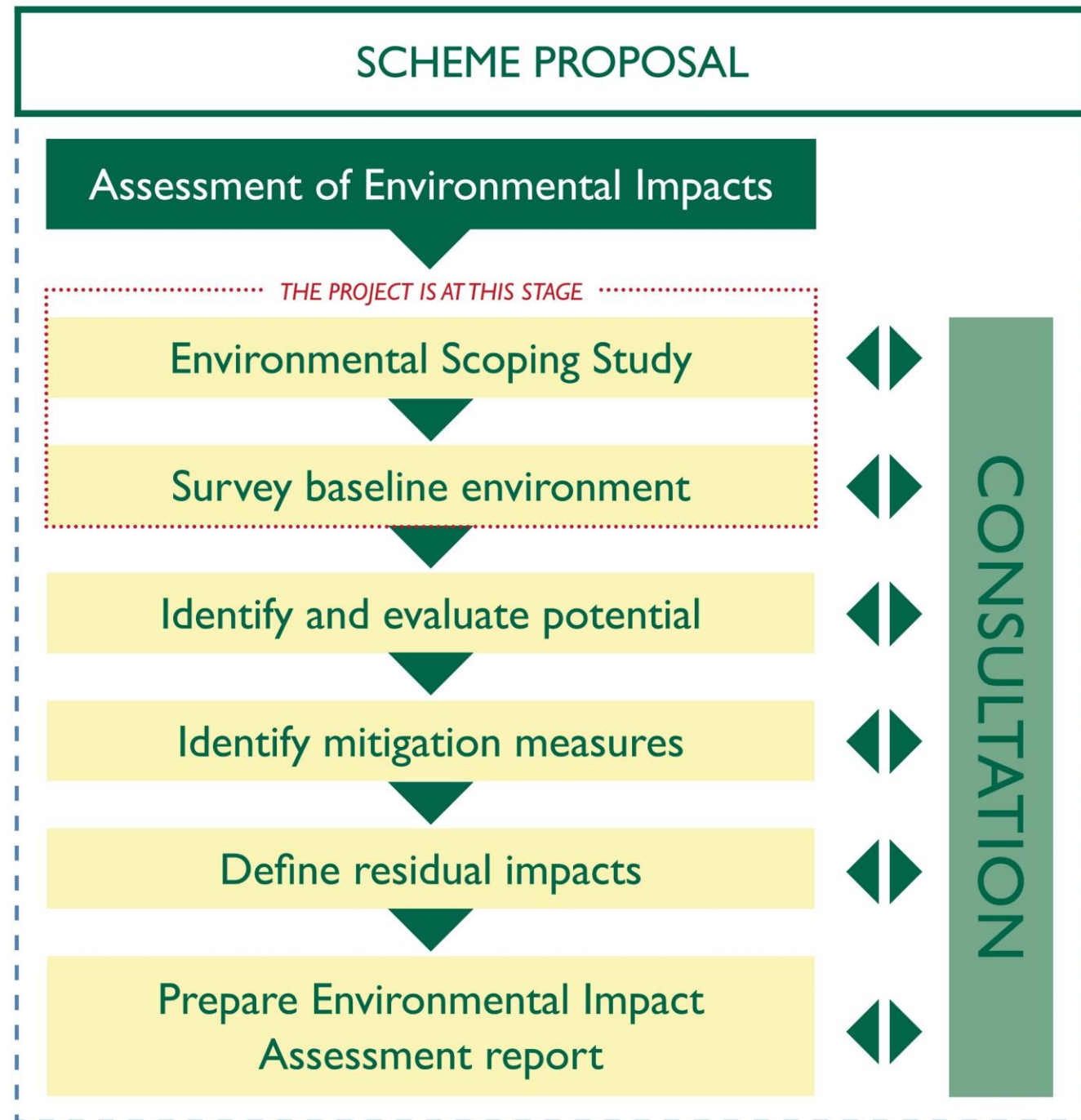
LAND WHERE TURBINES WOULD BE LOCATED



EXISTING WEST PERIMETER ROAD TO PROVIDE ACCESS TO THE SITE

Planning and EIA

- As a project over 10MW, this is a Development of National Significance (DNS).
- The Welsh Government will make the final decision as to whether to approve, with the application administered by Planning and Environment Decisions Wales (PEDW).
- Pembrokeshire County Council will be a key consultee alongside Natural Resources Wales, Cadw, Milford Haven Port Authority and others.
- To inform the planning application, an Environmental Impact Assessment (EIA) is required. This studies potential impacts with the aim to avoid or mitigate any significant ones. Topics include Landscape; Noise; Ecology; Cultural heritage; Transport and access; and Safety.
- Local Councils, communities and professional bodies will be consulted throughout, allowing feedback to be considered and the best possible proposals coming forward.



Landscape

Impressions of what the Dragon Energy turbines may look like

Photograph A: View from Milford Haven Docks

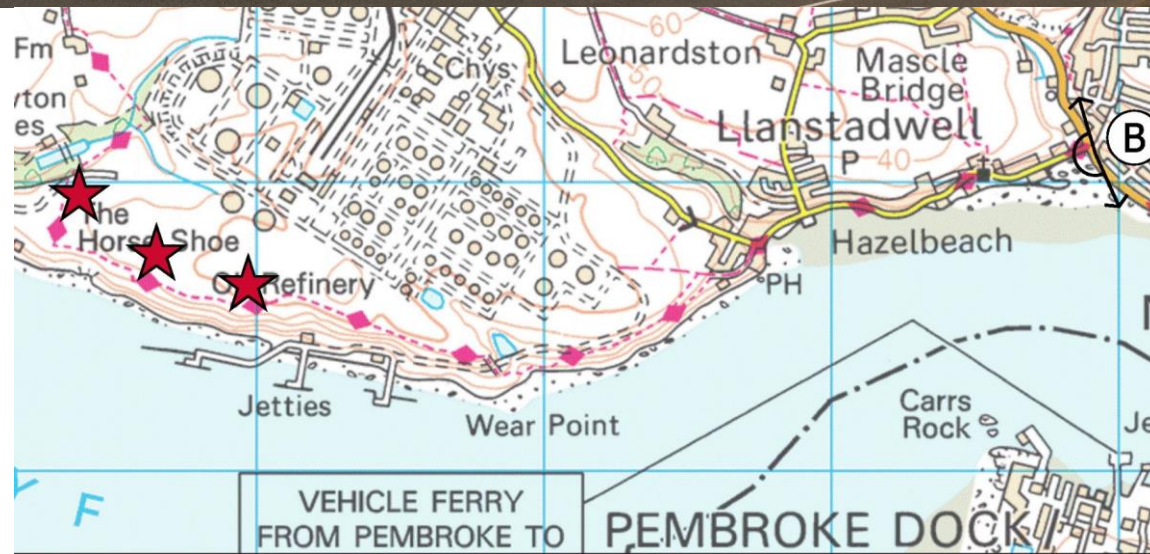




Landscape

Impressions of what the Dragon Energy turbines may look like

Photograph B: View from the B4325 / Pembrokehire Coast Path, Neyland





Landscape

Impressions of what the Dragon Energy turbines may look like

Photograph C: View from Cleddau Bridge

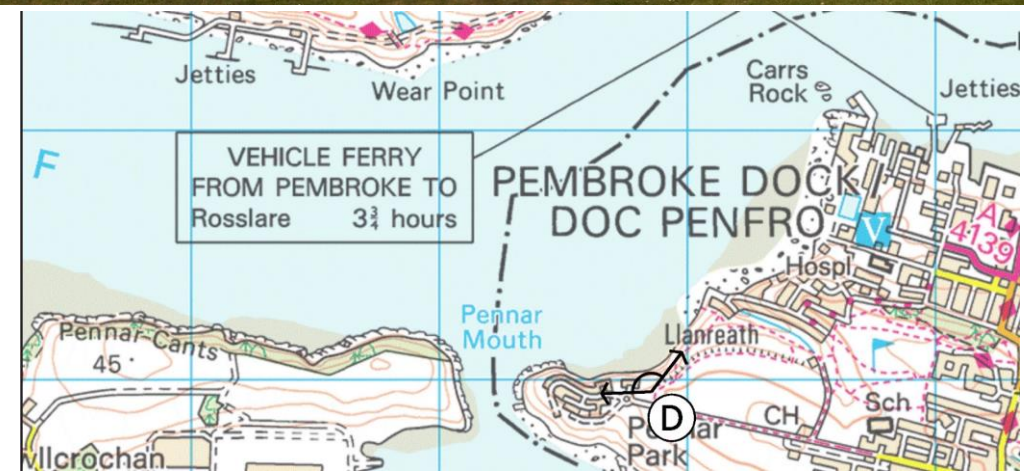
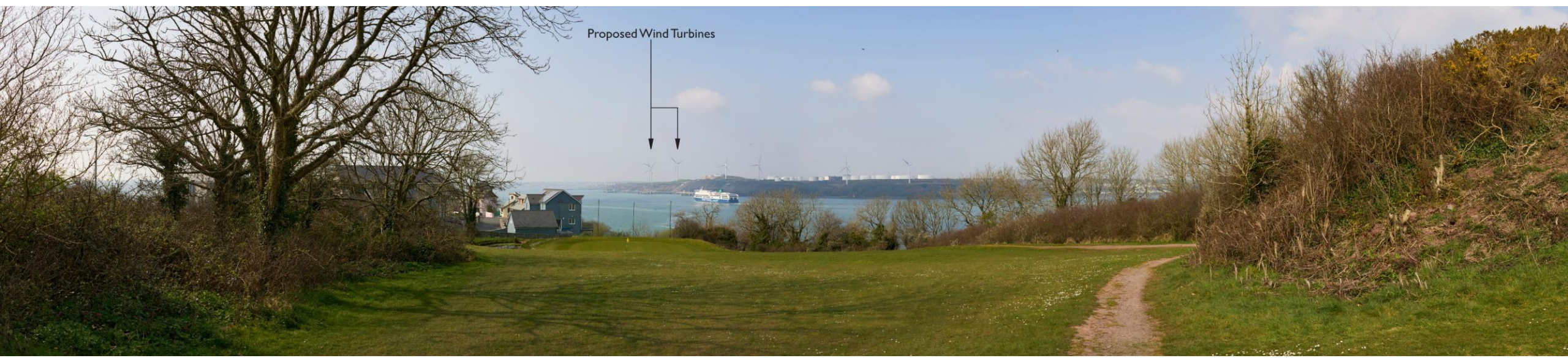




Landscape

Impressions of what the Dragon Energy turbines may look like

Photograph D: View from South Pembrokeshire Golf Club, Pennar

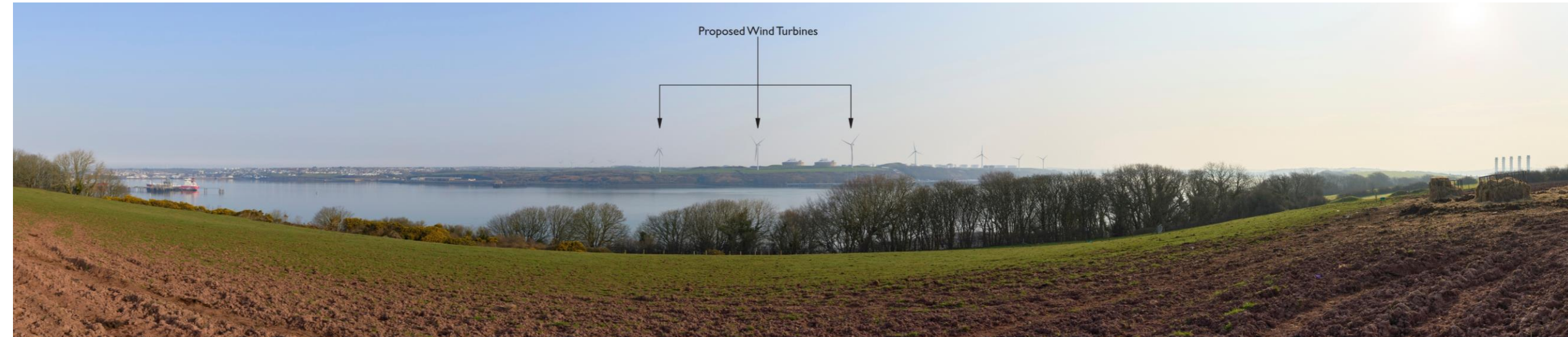




Landscape

Impressions of what the Dragon Energy turbines may look like

Photograph E: View from Pembrokeeshire Coast Path, near Pembroke Refinery

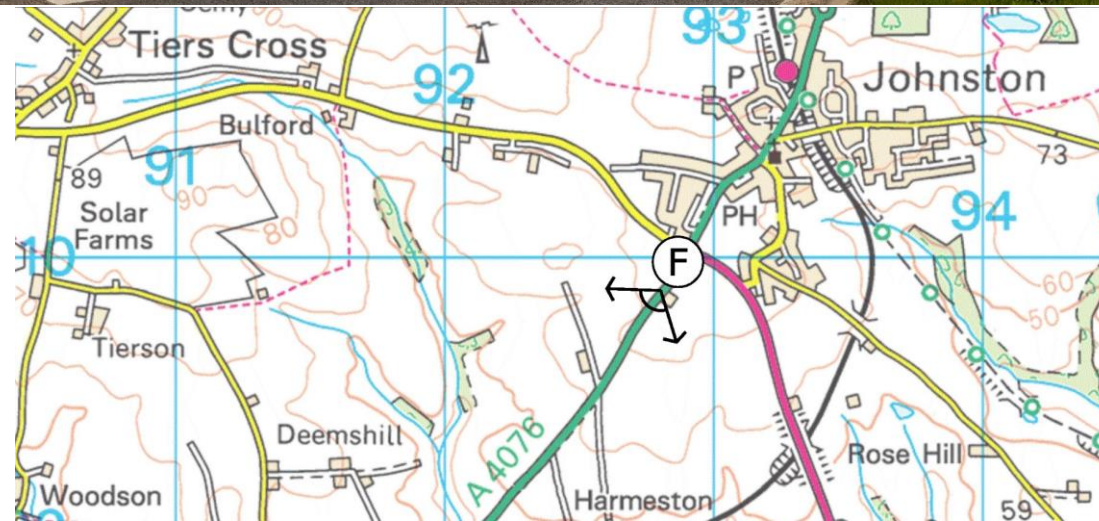




Landscape

Impressions of what the Dragon Energy turbines may look like

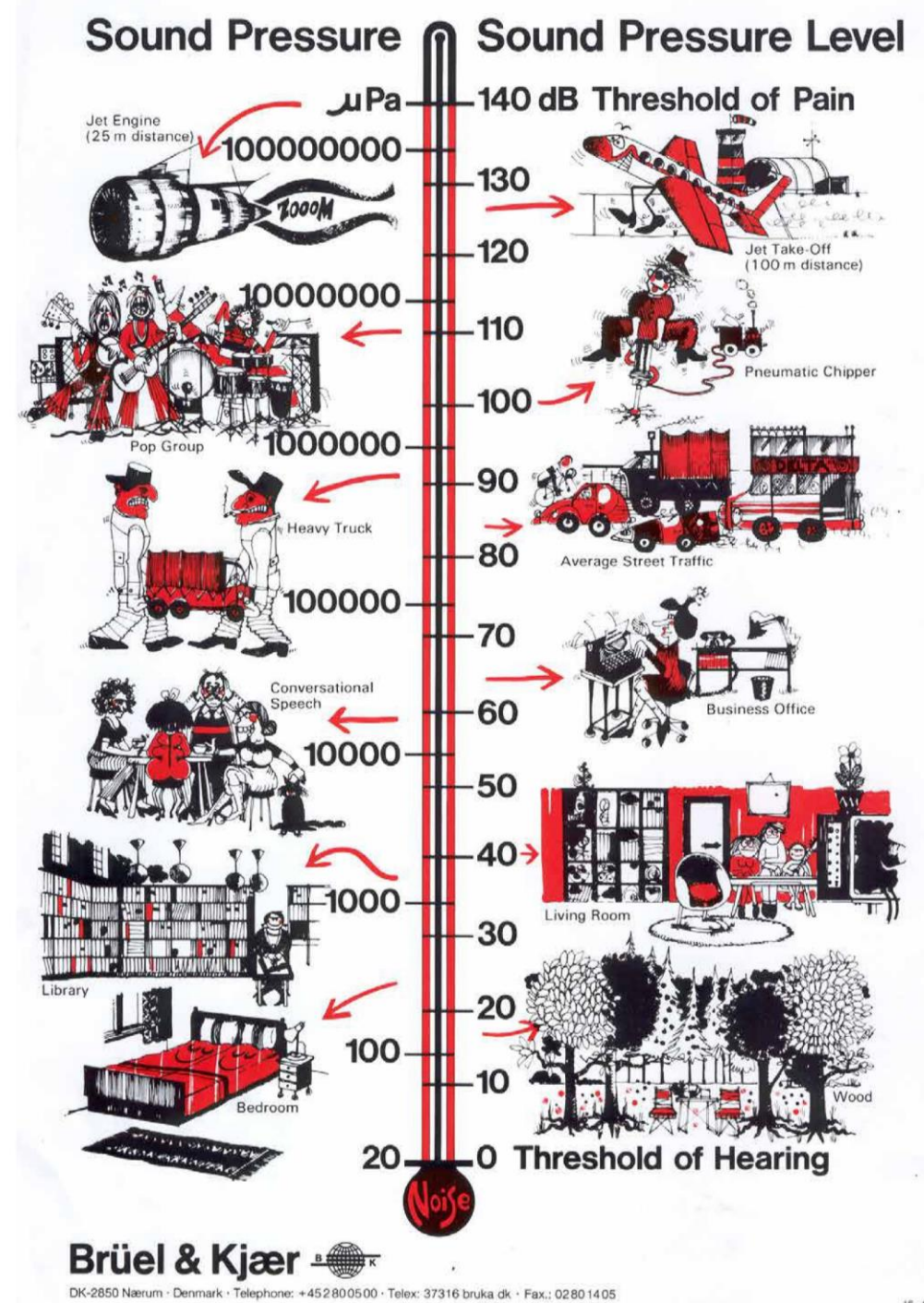
Photograph F: View from Milford Road, near Johnston





Noise

- Wind farm noise is assessed using ETSU R 97, “The Assessment and Rating of Noise from Wind Farms”.
- Noise levels are calculated at nearby residential properties and compared to noise limits derived from background noise which already exists in the area, without the wind turbines operating.
- To monitor and record the background noise, noise monitoring equipment is set up and left for a number of weeks to gain a representative dataset. For Dragon Energy, noise monitoring is currently underway and the results will become available later in the planning process.

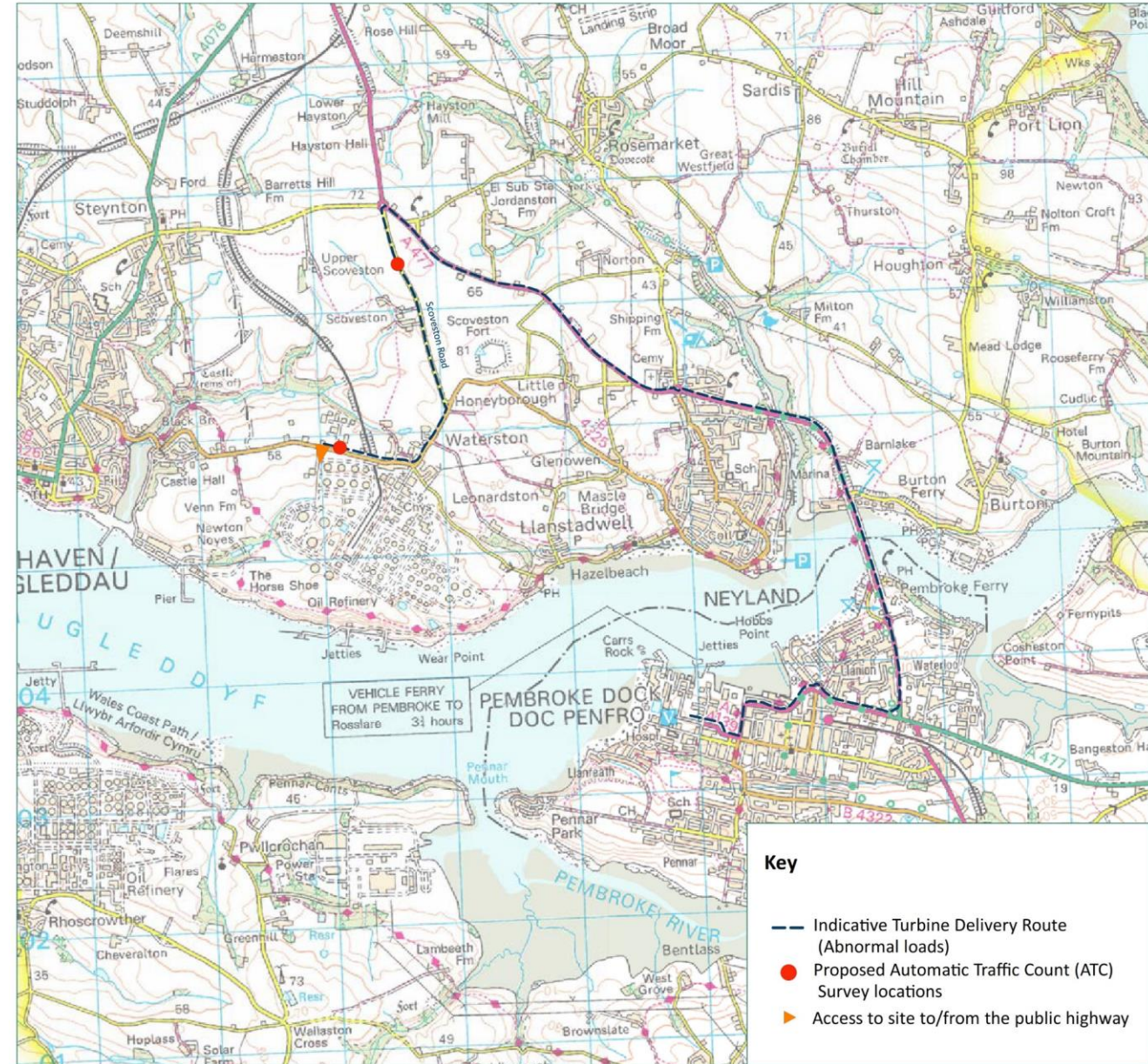


Transport & access

- The turbine components would be delivered to the site using the existing road network. The use of public roads will require further consultation with the appropriate bodies.
- Initial site visits and route modelling and inspection suggest that turbine components could be delivered to site from Pembroke Dock and then the A477 Cleddau Bridge, Scoveston Road and the B4325 through Waterston village to site.



Construction Access - abnormal loads

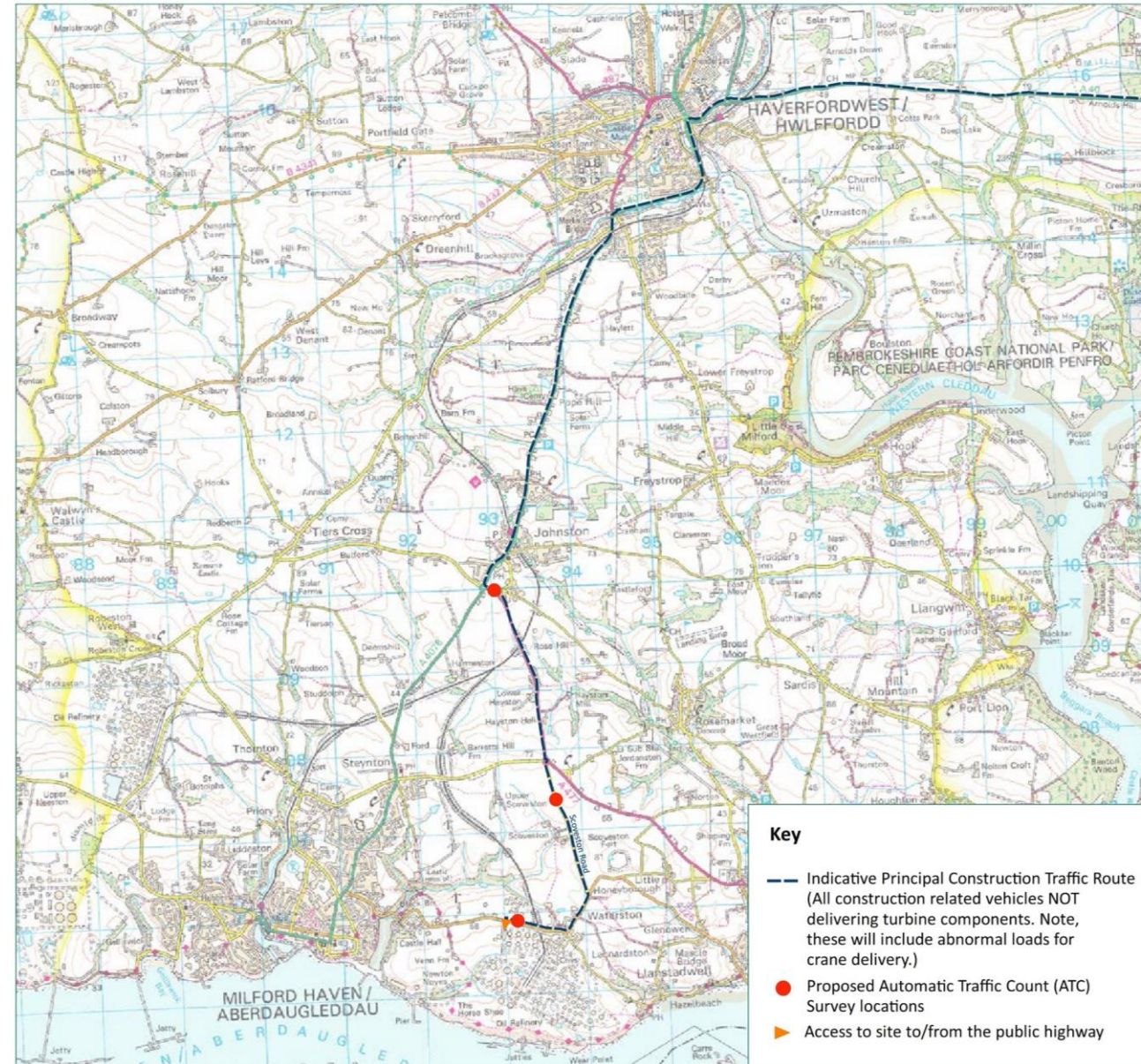


Transport & access

- General construction traffic is anticipated to take an alternative route and will not be permitted to travel west on the B4325 beyond the site access junction due to the sinuous geometry and unsuitable vertical alignment at Black Bridge.



Construction Access - principle construction route



Community benefits

- Onshore wind brings economic opportunities to Wales. Should the UK increase onshore wind capacity to 30 gigawatts (GW) by 2030, Wales could:
 - Secure around £4.4billion of Gross Value Added (GVA)
 - Create around 3,000 Welsh jobs*

**source: RenewableUK Cymru, 2021*

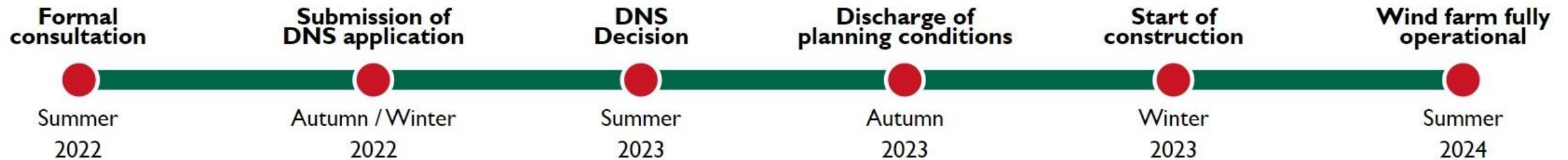
- Local businesses could benefit from the construction of Dragon Energy, for example by securing contracts for the ground works, mechanical engineering works, aggregates supply and internal access track construction.
- Dragon LNG are looking at opportunities for community benefits, and would be delighted to receive any ideas of how this could be achieved.
- Suggestions can be provided through our consultation channels: project website, Freephone number, Freepost address and project email address.



Project timeline

- As a first step, an EIA Scoping Request has been submitted at the end of April 2022 to Planning & Environment Decisions Wales (PEDW), which is part of the Welsh Government
- Informal consultation is being undertaken

Indicative Timeline



Questions and answers

Thank you for listening. Please ask us any questions you may have



Please keep in touch after this event:

- **Freepost:**

Freepost Infinergy Ltd

- **Freephone:**

0800 980 4299

- **Email:**

info@dragonenergypark.co.uk

- **Website:**

www.dragonenergypark.co.uk