

# The Great Grid Upgrade

Norwich to Tilbury

**nationalgrid**

# Community newsletter

June 2023

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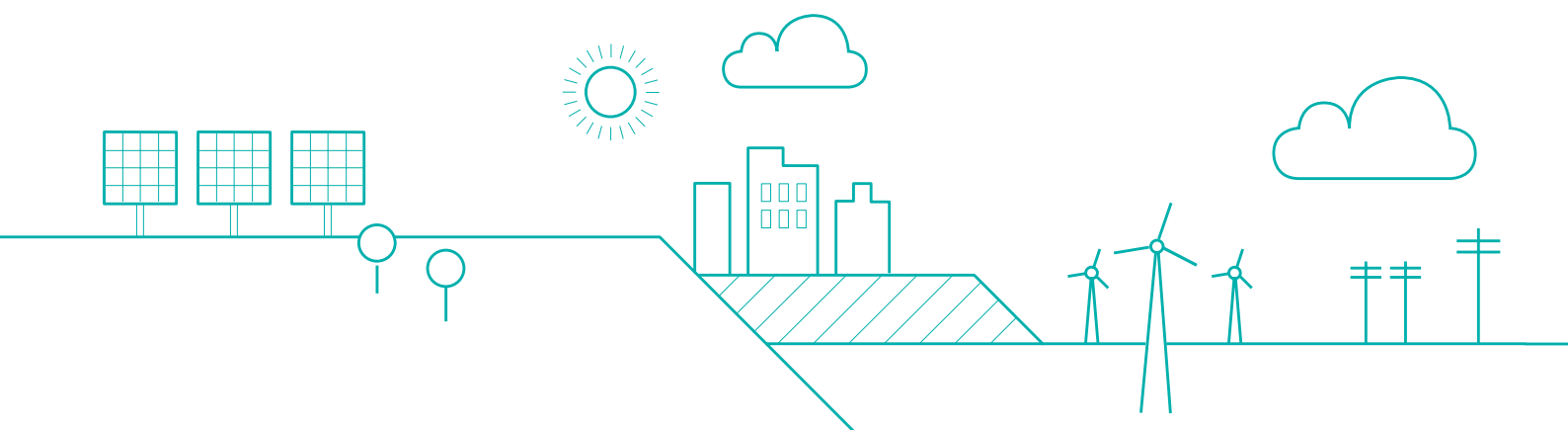
- The Great Grid Upgrade: delivering affordable, low-carbon energy security for Britain
- Updated proposals for new electricity transmission infrastructure in East Anglia
- How you can have your say and shape the plans: public consultation 27 June to 21 August 2023
- National Grid in the community: opportunities for young people

## Norwich to Tilbury

We are proposing to build approximately 183 km of transmission infrastructure from Norwich to Tilbury as part of The Great Grid Upgrade.

We have changed the name of the project from East Anglia Green Energy Enablement (GREEN) to Norwich to Tilbury. All our projects that are part of The Great Grid Upgrade will include specific locations in their names to make it easy for people to understand what and where we are proposing to build new grid infrastructure.

The name of our project may have changed but our focus remains the same – to bring new sources of renewable energy to homes and businesses across East Anglia and the UK.



# Introduction



The way we generate electricity in the UK is changing rapidly, and we are transitioning to cheaper, cleaner and more secure forms of energy like new offshore windfarms. The Government has set out its ambition to increase energy from offshore wind to 50 GW by 2030 – more than enough to power every home in the UK. We need to make changes to the network of overhead lines, pylons, cables and other infrastructure that transports electricity around the country, so that everyone has access to the clean electricity from these new renewable sources.

This is particularly true of East Anglia, where several windfarms are being developed off the coast. In April 2022 we launched a public consultation on how we might bring these new sources of renewable energy to homes and businesses across East Anglia and the UK.

## Developing our proposals

Since our first consultation in 2022, we have been reviewing the feedback received, carrying out environmental surveys and assessments and holding discussions with various bodies.

We are holding a public consultation to hear your views on our updated plans. We want local communities to have the opportunity to access the new jobs, business opportunities and positive biodiversity and environmental improvements that The Great Grid Upgrade can deliver.

We are interested in your views on how the positive benefits of this important infrastructure can be delivered, as well as how we can reduce its impact on the local area.

## Why is Norwich to Tilbury needed?

The Government has set a commitment to reach net zero greenhouse gas emissions by 2050 and an ambition to connect 50 GW of offshore wind by 2030 – enough energy to power every home in the country.

The existing network in East Anglia currently carries around 4,500 MW of electricity generation. By 2031 we expect between 14,000 and 18,500 MW of new generation and interconnection to connect in the region. This includes:

- new offshore wind farms connecting into Necton and Norwich
- Five Estuaries and North Falls offshore wind farms: both currently in development off the east coast and expected to be in operation by 2030
- Tarchon Energy interconnector: 1,400 MW interconnector between UK and Germany, proposed to connect at the Tendring Peninsula.

In its current state, the high voltage electricity network in East Anglia does not have sufficient capacity to accommodate this new generation.

Our proposals for a new electricity transmission line from Norwich to Tilbury are part of The Great Grid Upgrade – the largest overhaul of the grid in generations.

You can find out more about The Great Grid Upgrade here:





# The Great Grid Upgrade in East Anglia

The Great Grid Upgrade will play a big part in the UK Government's plan to boost homegrown power. It will help the UK switch to clean energy and make sure our electricity network is fit for the future; carrying more clean, secure energy from where it's generated to where you need it.

Along with Norwich to Tilbury, National Grid is developing a number of other projects in the region.

## **Sea Link**

Sea Link, an offshore link between Suffolk and Kent. We will be consulting on the latest proposals later this year.

## **Bramford to Twinstead**

We also propose to build network reinforcement between Bramford substation in Suffolk and Twinstead Tee in Essex. Our application for a Development Consent Order was accepted for examination by the Planning Inspectorate in May (2023).

## **Refurbishing the existing overhead line**

We are carrying out essential work to refurbish the existing 400 kV overhead line that runs between our substations at Bramford and Norwich. This includes replacing all the fittings and wires between the existing pylons. We started work last year and expect to finish by the end of this year.

## **Extending Norwich Main substation**

We need to extend our existing Norwich Main substation to connect two new wind farms (Equinor's Sheringham Shoal and Dudgeon extensions and Orsted's Hornsea 3) over the next few years. We will publish more information when plans have developed further.

National Grid is the company which operates the network of high-voltage overhead lines, underground cables and offshore cables carrying electricity across the country. The grid moves electricity from where it's generated to where it's needed in our homes, businesses and communities.

The proposals presented in this newsletter come from National Grid Electricity Transmission (NGET).

There are different ways to transmit electricity:

- by onshore overhead lines and pylons
- by cables underground
- through offshore cables under the seabed, which connect to onshore overhead lines.

We follow an array of government policy, regulation and industry rules which guide the options we develop. We must consider value for money to bill payers and take into account impacts on the environment. This applies to all grid upgrades across the country.

The Electricity System Operator has recently announced it would carry out an independent 'Study' to assess objectively the options for Norwich to Tilbury and other proposed network reinforcements across East Anglia.

The Study will take a fresh look at the drivers for the network reinforcements, alongside the various considerations that need to be taken into account.

When the Study concludes, we will carefully consider its findings and backcheck our proposals against any recommendations.

We expect to hold a further consultation next year, when we hope to show finalised proposals informed by both local feedback and the outcome of that Study.



# Our Public Consultation

We are still at an early stage of developing our proposals for this project. We have started to develop a preferred draft alignment, which shows potential positions for overhead lines and associated pylons, underground cables, cable sealing end compounds (where overhead lines are joined to underground cables) and connection substations.

We are asking for your feedback on our preferred draft alignment and anything we should consider as we develop the proposals further.

Knowing what matters to you matters to us. Your feedback is important to help us as we develop our proposals in more detail.

**Our public consultation is open from Tuesday 27 June until Monday 21 August 2023.**

On the back of this newsletter you will find a map outlining the route. An **interactive map** is available on our website.

## Useful documents

We have published an updated non-technical **Project Background Document 2023**. This provides an overview of the project, our latest proposals, what we are consulting on and how you can get involved. It also signposts to where to find more detailed technical information.

Our **2022 Non-statutory Consultation Feedback Report** sets out the comments we received last year and how we have taken them into consideration.

The **Design Development Report 2023** is a technical document which explains how our proposals have evolved up to the latest preferred draft alignment.

The **Strategic Options Backcheck and Review 2023** provides an overview of the appraisal approach we have used to date to consider the strategic options. These options are reviewed and backchecked on an ongoing basis as part of our assessment and decision-making process.

You can find these and other documents on our website here:



Or you can call us on **0800 151 0992** to order paper copies of documents.

# Consultation events

You can join us at one of our public events or online webinars. These consultation events are open to everyone and provide opportunities to speak to the project team and find out more about our proposals.

## Public information events

Date and time	Venue	Date and time	Venue
<b>Thursday 6 July</b> 2-7pm	<b>The Brentwood Centre</b> , Doddinghurst Road, Pilgrims Hatch, Brentwood, CM15 9NN	<b>Thursday 13 July</b> 2-7pm	<b>Langham Community Centre</b> , School Road, Langham, Colchester, CO4 5PA
<b>Friday 7 July</b> 2-7pm	<b>Diss Youth &amp; Community Centre</b> , Shelfanger Road, Diss, IP22 4EH	<b>Monday 17 July</b> 2-7pm	<b>The Civic Hall</b> , Blackshots Lane, Grays, RM16 2JU
<b>Saturday 8 July</b> 11am-4pm	<b>Lawford Venture Centre 2000</b> , Bromley Road, Lawford, Manningtree, CO11 2JE	<b>Tuesday 18 July</b> 1-6pm	<b>Tasburgh Village Hall</b> , Grove Lane, Tasburgh, NR15 1LR
<b>Monday 10 July</b> 1-6pm	<b>Tibenham Community Hall</b> , Pristow Green Lane, Tibenham, Norwich NR16 1PX	<b>Wednesday 19 July</b> 2-7pm	<b>Copdock and Washbrook Village Hall</b> , Old London Road, Copdock, IP8 3JN
<b>Tuesday 11 July</b> 11am-4pm	<b>Blackbourne Community Centre</b> , 71 Blackbourne Rd, Elmswell, IP30 9UH	<b>Thursday 20 July</b> 2-7pm	<b>Witham Public Hall</b> , Collingwood Road, Witham, CM8 2DY
<b>Wednesday 12 July</b> 2-7pm	<b>Chelmsford City Racecourse</b> , Chelmsford, CM3 1QP	<b>Friday 21 July</b> 2-7pm	<b>Basildon Sporting Village</b> , Cranes Farm Road, Basildon, SS14 3GR

## Online webinars

Date	Time
<b>Wednesday 5 July</b>	1-2pm
<b>Tuesday 25 July</b>	7-8pm
<b>Saturday 12 August</b>	10-11am
<b>Thursday 17 August</b>	10-11am

To join one of our online webinars, please register on our project website, over the phone, or by emailing us.

# How to give your feedback

There are many ways to give us your feedback on our proposals:



**Complete the online feedback form**



**Complete a paper feedback form at one of the events listed above**



**Post a paper copy of your completed feedback form to FREEPOST N TO T (no stamp or further address required).**



**Email us at [contact@n-t.nationalgrid.com](mailto:contact@n-t.nationalgrid.com)**

**The deadline for feedback is 11.59pm on Monday 21 August 2023.**

If you have difficulty writing down your feedback, a member of the community relations team will be available to take comments at the public consultation events or over the phone.

If you would like a paper copy of the **Consultation Feedback Form**, this is available at our public information events, or from the information points listed on our website.

If you would prefer to receive these documents through the post, or you need information in another format, please get in touch.

**Freephone: 0800 151 0992**  
(lines are open Monday to Friday 9am-5pm)

**Email: [contact@n-t.nationalgrid.com](mailto:contact@n-t.nationalgrid.com)**

We will carefully consider all feedback received and report it in a Feedback Report, which will also set out how we have had regard to your comments.

# National Grid in the community

An important part of The Great Grid Upgrade and the transition to a low carbon economy is to make sure local communities have the opportunity to access new jobs, business opportunities and the positive biodiversity and environmental improvements that will be delivered. We are interested in your views on how the positive benefits of this important infrastructure can be delivered, as well as limiting its impacts.

## Net Zero Norwich – the Beryl Bike Partnership

To help tackle high pollution, we have partnered with Beryl, the UK's leading microbility provider, to support the bike, e-bike and e-scooter sharing scheme in Norwich. The collaboration will help to reduce traffic congestion and carbon emissions, improving mental and physical health and air quality in the city and beyond. Nearly 1,000,000 electric journeys have been taken in Norwich since the scheme was launched.

### Opportunities for young people

As part of our consultation, we want to reach out and speak with young people to hear your thoughts on our project and provide an opportunity to influence our proposals. We will be holding youth-focused events during the consultation period. Go to our project website for details.

## Grid for Good

Our project teams in East Anglia have been working with Grid for Good, National Grid's flagship programme that provides training and employment opportunities for young people. As well as career coaching and masterclasses for the energy sector and its recruitment process, we also provided tips for preparing for interviews and assessment centres.

We've reached over 300 students from four schools across Norfolk, Suffolk and Essex already this year, with more activities to come.

## Our work with the University of East Anglia

We met with engineering students at the University of East Anglia for their 'SELECT Partnership' event in March. Joined by employers from across the region, participants were tasked with carrying out mock interviews to support student employability. Students left knowing more about the types of National Grid jobs available to them through our Higher Apprenticeships and Graduate programmes.

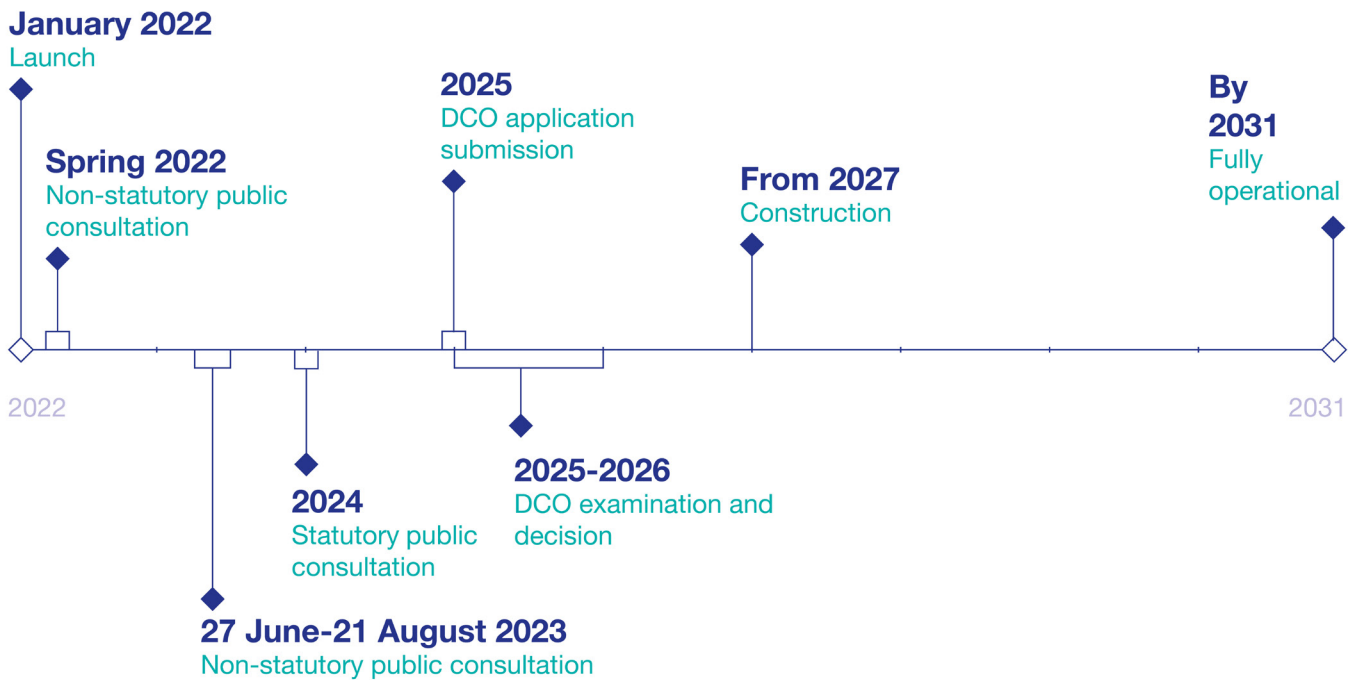
Find out more about the Grid for Good scheme:



Find out more about careers, apprenticeships and student placements with National Grid:



# Project timeline



As our current plans propose more than 2 km of overhead line, we expect the project would be classified as a Nationally Significant Infrastructure Project under the Planning Act 2008. This is a special type of planning application known as a Development Consent Order (DCO).

## Where to find out more

[nationalgrid.com/norwich-to-tilbury](https://nationalgrid.com/norwich-to-tilbury)

0800 151 0992

[contact@n-t.nationalgrid.com](mailto:contact@n-t.nationalgrid.com)  
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Call us to request paper copies of the materials.





- What do our current proposals include?**
- Overhead lines and pylons
  - Extended underground cables from the south of the Dedham Vale AONB
  - New substation on the Tending Peninsula to connect new offshore wind farms
  - Works at existing substations to connect in the new reinforcement
  - Change of technology from overhead line to underground cables near Great Horkesey, approaching Tibury Substation and from of Farsstead

As a result of feedback and further assessments that have been carried out, we have made some changes to our proposed plans, both inside and outside of the 2022 preferred draft corridor.

**Pylon design**

Different pylon designs in use in the UK include:

- Standard lattice
- Lower height lattice
- T-pylons



We will be carrying our further assessments on pylon design.

**Work at existing substations**

We would need to connect into the existing substations at Norwich Man, Bramford and Tibury.

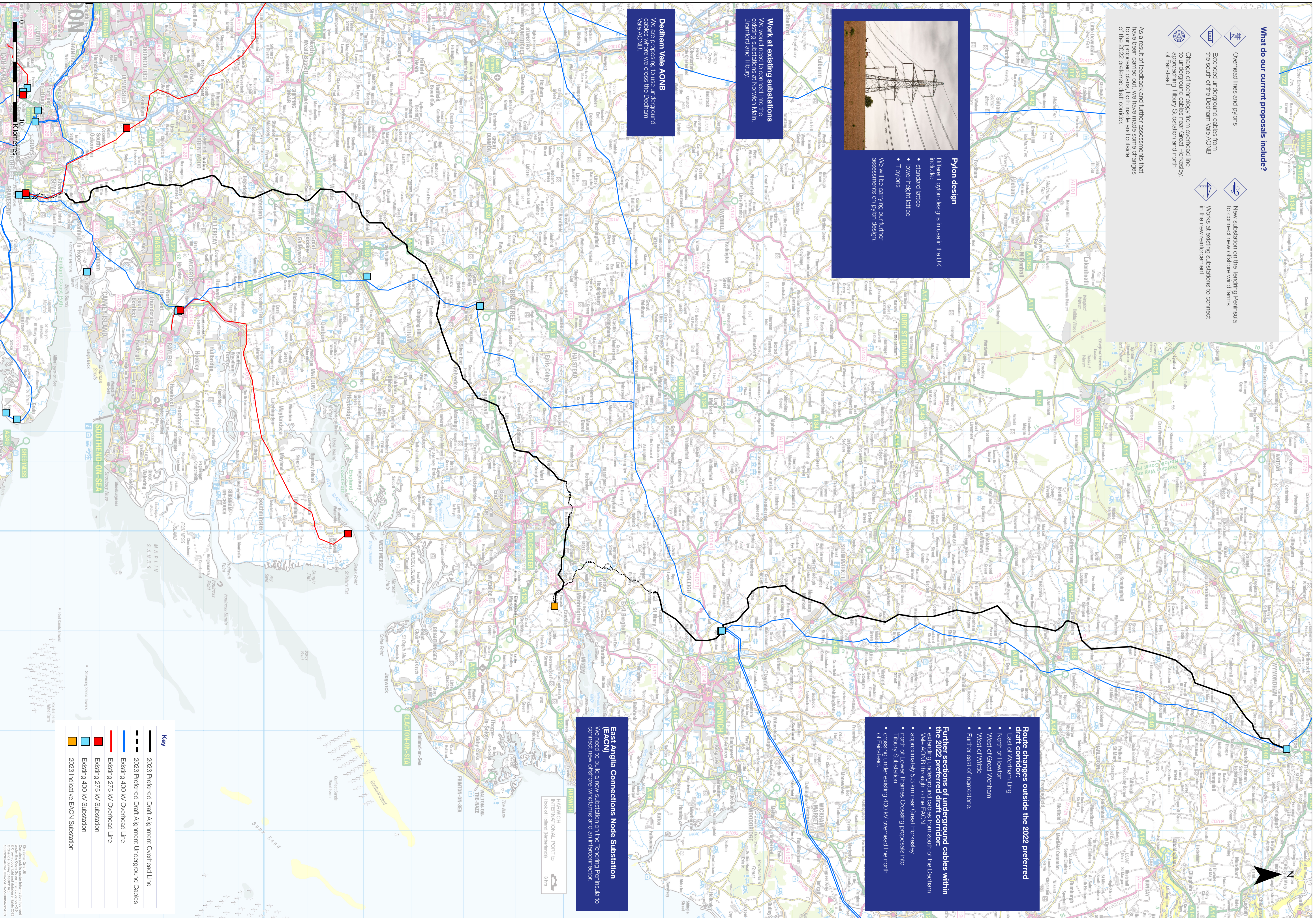
**Dedham Vale AONB**

We are proposing to use underground cables where we cross the Dedham Vale AONB.

- Route changes outside the 2022 preferred draft corridor:**
- East of Werham Ling
  - North of Fowton
  - West of Great Werham
  - West of Writtle
  - Further east of Ingatesione.
- Further sections of underground cables within the 2022 preferred draft corridor:**
- extending underground cables from south of the Dedham Vale AONB through to the EACN
  - approximately 5.3 km near Great Horkesey
  - north of Lower Thames Crossing proposals into Tibury Substation
  - crossing under existing 400 kV overhead line north of Farsstead.

**East Anglia Connections Node Substation (EACN)**

We need to build a new substation on the Tending Peninsula to connect new offshore windfarms and an interconnector.



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