

Community newsletter

May 2026

There's so much to read inside, hear about our latest activities

Welcome to the latest update from National Grid's Grain to Tilbury project, where we're busy building a new tunnel under the Thames and upgrading the electricity overhead lines in the area.

Catch up on our latest news – inspiring future engineers, creating opportunities for local young people, and the story behind Europe's largest shaft-sinking machine.



What's happening?

We're building a new tunnel under the Thames from Tilbury in Essex to Gravesend in Kent. This will host house new 400 kv electricity cables.

We're also upgrading the existing overhead electricity lines between Grain, Kingsnorth and Tilbury.

Why's it happening?

This project is part of The Great Grid Upgrade - the largest overhaul of the electricity grid in generations. It will enable us to carry more home-grown clean energy, while boosting Britain's energy security and helping to meet the growing demand for energy.

By building a new tunnel and upgrading the overhead lines, more power can be transmitted from where it is generated to where it is needed.

Latest news

In March, we launched our Tunnel Boring Machine (TBM)

She's called Caroline (more on that later) and weighs in at 270 tonnes - equal to a loaded Boeing 777. Caroline is on the move, and over the next eight months she'll be constructing the entire 2.2 km tunnel under the River Thames.

To mark her launch, we held an event where we welcomed Minister for Energy Michael Shanks, Local MP Jen Craft, and some of the students who helped name her.

At the start of May, Caroline started tunnelling from Tilbury towards Gravesend. Built for life under the Thames, she can handle the anticipated chalk and flint geology, plus the high water pressures deep below the river.



If you're interested in reading more about Caroline, the engineering involved, or the works in general then visit nationalgrid.com/graintotilbury

Europe's biggest diameter Vertical Shaft Sinking Machine

To create a shaft big enough for Caroline, we used Europe's biggest 'Vertical Shaft Sinking Machine'. She's called Verena and measures 15 m wide in diameter.

Verena has finished her work in both Tilbury and Gravesend, constructing the new 50 m deep shafts to connect the tunnel either side of the River Thames.



Upgrading our overhead lines

Our overhead lines teams have started a programme of replacing and upgrading the existing overhead lines between Grain and Tilbury. The works began in mid-April near the Kingsnorth Power Station.

Over the next six months, they'll make their way along the route making sure the infrastructure is fit for the future.



Stay up to date

We will be sending out regular updates to our mailing list. Sign up today to receive the latest news and progress directly to your inbox. If you would prefer to receive this in the post, please contact the team using the details at the end of this newsletter.

Working in the community

We're proud to share some of the ways we're working with and supporting the local community.



Big Machines, Brilliant Names

Last year, we welcomed over 30 students from St Clere's Secondary School in Thurrock and St John's Catholic Comprehensive School in Gravesend to name both the Vertical Shaft Sinking Machine (VSM) and the Tunnel Boring Machine (TBM) that will construct the new shafts and cable tunnel beneath the River Thames. Students spent the day learning about the engineering behind the machines and their roles in the construction process.

Drawing inspiration from pioneering engineers and the local environment, the winning name for the TBM was Dame Caroline Haslett, honouring one of Britain's most influential women in engineering.

The VSM was named after Verena Holmes, in tribute to the first woman member of the Institute of Mechanical Engineers.



Raising money

Thanks to a brilliant cake sale and generous donations from the team, we raised £1,000 for Thurrock Food Bank, helping to support people in the community who need it most.



Talking Tunnels

We also headed to the Brunel Museum to talk about the tunnel we're building - sharing the story of this landmark project and the engineering behind it.



Coming up: inspiring the next generation and Supporting Local Wildlife

We're delighted to be welcoming 10 students from local schools including to our sites for work experience — giving them a hands-on insight into careers in engineering, construction and project delivery. We're also pleased to be starting to deliver Science, Technology, Engineering and Mathematics (STEM) workshops to young people at Thomas Park Secondary School.

We're heading to local primary schools to run interactive lessons on biodiversity and ecosystems, as well as sharing bug hotels made from excess wood from our delivery pallets — giving materials a second life while supporting local wildlife.

Supporting the local area



22
apprenticeship
opportunities
plus graduate roles



Sharing bug hotels
made from excess
wood from our
delivery pallets
giving materials
a second life
while supporting
local wildlife



11

work experience
placements



Promoting STEM
in schools

We're delivering interactive lessons
on biodiversity, ecosystems and
engineering in local schools

Local careers day

We've taken part in
careers days at local
schools, and will soon
welcome 10 students
for work experience



15

local suppliers



76

local
employees



Community Grant Programme accepting new applications

Due to the very nature of what we do - connecting people to the energy they use - we are at the heart of communities.

Each year we make significant charitable investment in the UK.

The Community Grant Programme funds projects in communities where we are located and working.

We are proud to support initiatives that enhance the communities in which we serve.

Find out more or apply for a grant today:
nationalgrid.com/communitygrantprogramme



Staying in touch

For more information about the project, or to sign up to our mailing list to receive our newsletters, visit nationalgrid.com/graintotilbury or scan the QR code:

- write to us at: **Freepost Grain to Tilbury Project**
(please note that you do not need a stamp)
- email us: contact@graintotilbury.nationalgrid.com
- phone us: **020 3398 1599**.



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