



How we connected 4KM of pipe across the sea

The Greenlink initiative is a key component of the UK and Ireland's commitment to reducing carbon emissions and transitioning to renewable energy sources. With the installation of the high voltage underground cables, the project is expected to significantly reduce greenhouse gas emissions by enabling the transmission of clean energy between the two countries.



Supports growth
of low carbon
energy



Safe installation
of high voltage
underground
cables



4KM of pipe
work welded



Potential to power
380,000 homes*

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Thermofuse Pipelines, a trusted power infrastructure company, was chosen to assist with the welding of polyethylene pipes that would be used as cable ducts to establish a seamless power exchange system between Pembroke, South Wales, and Wexford, South Ireland.

This project aimed to install high voltage underground cables, housed within protective ducts, enabling the UK and Ireland to draw power from each other as needed.

Beginning above ground, the cables traverse the seabed before resurfacing on the other side and connecting to substations. This integration with the main grid ensures efficient and reliable power distribution, while meeting the energy demands of both nations. This project is part of Greenlink, a vital subsea and underground electricity interconnector, considered one of Europe's most important energy infrastructure initiatives. Greenlink brings numerous advantages, including employment opportunities, enhanced energy security, and the seamless integration of low carbon energy sources on both sides of the Irish Sea.

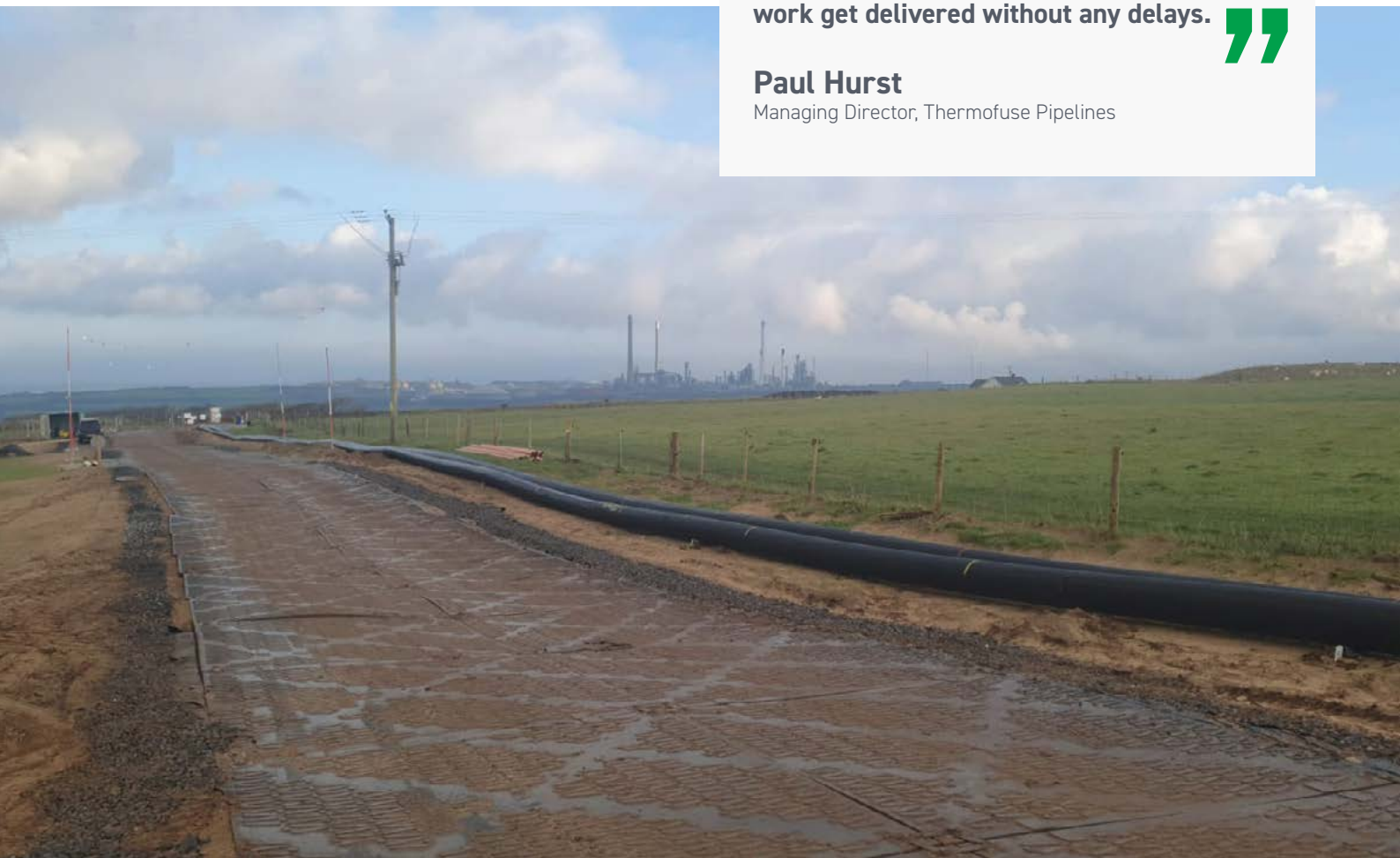
Our equipment and services supplied at a glance

- Tracstar T500 + all accessories required to weld 355 PE pipe.
- Welding container to protect welding equipment from weather.

“ The service provided by Sunbelt Rentals from the start to finish was excellent, they appreciated the importance of the project and due to the remote location of the work they ensured we would be covered with support at every stage of the job. All deliveries were carried out without any delays and the equipment used was in very good condition. We had a key contact at Sunbelt Rentals for the duration of the project and this helped the work get delivered without any delays. ”

Paul Hurst

Managing Director, Thermofuse Pipelines





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Challenges

Throughout the project, a number of challenges were faced, including:

Exposure to the elements: The project involved working in an environment exposed to various weather conditions, which required appropriate equipment and measures to ensure worker safety and the integrity of the cables.

Working inside a farmer's field: The project required navigating and working within a small field owned by a farmer. This necessitated careful planning and coordination to minimise disruptions and ensure the efficient welding of cable ducts.

Limited space for pipeline installation: The available field space posed a challenge for snaking the pipeline before tracking it to its final position. The restricted area required precise positioning and manoeuvring of equipment.

Solution

To overcome these challenges, we provided the necessary equipment, including the T500 Tracstar, facilitating butt fusion welding of the 355 O/D polyethylene pipe. This equipment also allowed for easy tracking of the ducts into their desired end position using a system of pipe rollers. Our expertise and equipment selection were driven by thorough site visits and continuous coordination with the project team.

Result

The successful collaboration between Thermofuse Pipelines and Sunbelt Rentals resulted in the successful welding of cable ducts that would later be used for the installation of underground cables, marking a significant milestone in the development of the power exchange system between the UK and Ireland. This project plays vital role in the broader Greenlink initiative, benefiting both countries with enhanced energy connectivity and low-carbon energy integration.

“ The Thermofuse Pipelines team approached us to provide equipment for the Greenlink project and support the pipeline connection in both Southern Wales and Ireland. With strategic planning from our senior management team and exceptional execution by our operational team, the project was completed successfully. Thermofuse were delighted with the equipment and support provided by our utilities team throughout the process, further strengthening the strong working relationship between Thermofuse Pipelines and Sunbelt Rentals. ”

Gavin Iredale

Operations Support Manager – Utilities

