

JOURNEY TO NET ZERO AUTUMN 2023



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00. INTRODUCTION

Forth Ports has an unmissable opportunity to support the delivery of the country's net zero ambitions.



Charles Hammond OBE Chief Executive Officer



In October we launched our commitment to net zero. Forth Ports is a key player in the maritime industry, seizing the opportunity to shape a sustainable and prosperous future. We have made our commitment to achieving net-zero emissions and creating new energy and environmental jobs in emerging industries.

In a world where environmental sustainability and historical commemoration intersect with the promise of a bright future, we stand at the forefront of a transformative journey.

This year marked the 75th anniversary of a pivotal moment in British history—the arrival of the Empire Windrush in Tilbury, a testament to our country's rich history of cultural diversity and resilience.

Our vision for the future is to cultivate a diverse and highly skilled workforce, tapping into the innovation and fresh perspectives of our young talent. We firmly believe that they are the workforce of the future, and we are committed to empowering them to reach their full potential.

In this edition of RE:PORT, you will see how history, sustainability, and innovation intertwine, painting a portrait of Forth Ports dedication not only to its growth but also to a brighter future for all.

01. BULK AGGREGATES

The Port of Tilbury and Walsh/GRS entered into a long term commitment to create a green construction hub. GRS built a new dockside aggregate washing plant, one of the greenest available.

Both the Port and GRS are committed to reducing the impact construction has on the environment, and this partnership will create a greener supply chain for aggregates in London through, rail, barging and the use of greener secondary aggregates such as the aggregate brought in from Cornwall recovered from the arisings which were originally derived from Cornish china clay mining.

The aggregate derived from china clay waste has been recognised by green building rating systems as one of the most sustainable alternatives to primary aggregates and independently evaluated to reduce emissions from 47-75% when compared to an equivalent primary aggregate.

The partnership at the Port will create a supply chain for this material into London, an area where it was previously not viable to use this aggregate in construction projects.

The use of the river to transport aggregate significantly reduces CO2 emissions compared to transport by road - as one 1000 tonne barge movement is equivalent to 50 lorry movements, which provides a CO2 emissions reduction of up to 95%

The Port's bulks rail facility has huge scope for expansion over the coming years, supporting Forth Ports drive to Net Zero, with a single 1500 tonne train removing 75 lorry movements from the road, a CO2 emissions reduction of up to 76%. This is another fantastic opportunity to create greener supply chain within the aggregate and construction industry supplying London.

The Port is committed to using the latest technology within the aggregate industry to reduce our scope 1 emissions from handling cargo to ensure that we deliver our commitment to Net Zero.

02. THE ECOLOGIST

"My role as ecologist for the Port of Tilbury began at the start of the Tilbury2 project where I was the Ecological Clerk of Works (ECoW) for the construction phase. During the site preparation works we relocated large numbers of reptiles, enticed the Port's badger clan to relocate to a sett we constructed, re-homed bats and a colony of water voles; and translocated some of the most ecologically interesting substrates (with associated invertebrate inhabitants) left from the previous owners of the Tilbury Power station site.

The common British reptiles including the grass snake, common lizard, slow worm, and adder were all moved to a new habitat that we had enhanced with log piles and overwintering features called hibernacula. These were all constructed from the trees which were cut down for the construction of Tilbury2 so the waste from the ecological clearance was reused as much as possible."

Noel Sweeney, Ecologist



03. DIRECTOR OF ENERGY

"As Director of Energy, I work across the energy team, Forth Projects and the wider port teams."

"I am responsible for harnessing the huge potential of the £120+ million developments in the Ports of Leith and Dundee. To do this successfully, I need to think not only about our business for the next 24 months but also for next 24 years and beyond as the renewables market becomes a core part of the UK economy. I imagine what our customers' future needs be will be and how the fastpaced renewables industry will evolve so that we can design and deliver creative solutions to support this.

I am also very conscious of the huge environmental difference that our business will make as we transition to a net zero economy.

Communicating our vision to potential customers is essential so port tours and presentations are a regular feature of the job. I am also mindful of the impact of some of the current building work in Dundee and Leith on our local communities and it is important to me that our local communities understand our plans and what this will mean to them. To help with this, I meet local MPs and MSPs and city councillors to explain our environmental ambitions.

It is our stated ambition to be a market leader in the renewable sector with the Forth Ports Energy brand known in both UK and International markets and we attend community events, conferences and award dinners to showcase the opportunities that we can offer. I am invited to speak at conferences such as the Offshore Wind Conference and lots of other panel discussions and local events.

A big part of my role is the art of the possible (sometimes the impossible!) and from a Forth Projects perspective, I am really lucky to enjoy the support of Euan Fenelon, Nick Dorman and Alan McPherson whose combined technical, windfarm and marine expertise help deliver the big projects such as the NnG wind farm . I particularly enjoy putting my engineering degree to good use as we run various calculations and scenarios to ensure that we have thought through and addressed safety, engineering and marine issues.

It is a very exciting time for the Energy and Forth Projects Teams and I know that we are all really proud and excited to be in the vanguard of this evolving and enormously rewarding sector. "



David Webster Director of Energy, Forth Ports



04. NEW PLANT & EQUIPMENT

Forth Ports has recently transitioned part of its plant technology and vehicles fuel source to Hydrotreated Vegetable Oil (HVO) fuel, which is a second-generation biofuel made from vegetable oils and residue animal fats from food processing.

HVO can be blended with regular mineral diesel at differing ratios but Forth Ports has decided to use the most environmentally friendly and carbon neutral option which is HVO100 – 100% mineral fuel free.

The source of the feedstock is crucial to ensure deforestation is not taking place. Supply chain due diligence and certification is carried out to verify the raw product is sourced from used material and not virgin crops.

HVO fuel is a fossil-free alternative that can be used as a direct replacement for regular mineral diesel, without any modifications to the tanks of vehicles and plant technology, that include tug tractor units and reach stackers . The use of HVO fuel allows Forth Ports to dramatically lower its carbon footprint and reduce the emissions of its operations, helping it work towards its aim of being the greenest port in the UK and net zero by 2042.

In fact, the use of HVO fuel reduces the carbon emissions of vehicles and plant technology by up to 90% compared to the use of regular diesel. Forth Ports' decision to switch to HVO fuel is a significant step towards reducing carbon emissions in the transportation sector. The use of HVO fuel can help reduce these emissions significantly. This strategy represents a major increase in Forth Port's fuel budget which is significantly more than regular diesel. However the company is committed to its net zero targets and promises and has made the decision to transition.

HVO fuel is a second-generation biofuel that is made from used vegetable oils and residue animal fats from food processing. The process of producing HVO fuel involves hydrotreating vegetable oils and animal fats with hydrogen gas at high temperatures and pressures. This process removes impurities such as sulfur, nitrogen, and oxygen from the feedstock, resulting in a cleanerburning fuel that produces fewer emissions than regular diesel.

The use of HVO fuel has several benefits over regular diesel. First, it is a renewable energy source that can be produced from waste products such as used cooking oil and animal fats. This makes it an attractive alternative to fossil fuels, which are finite resources that are becoming increasingly scarce. Second, HVO fuel produces fewer emissions than regular diesel, making it an environmentally friendly alternative for transportation fuels. Third, HVO fuel can be used as a direct replacement for regular diesel without any modifications to the tanks of vehicles and plant technology.

Forth Ports' commitment to switch to HVO fuel is part of a broader trend towards reducing carbon emissions in the transportation sector. Governments around the world are implementing policies to encourage the adoption of cleaner-burning fuels such as HVO fuel. In conclusion, Forth Ports' decision to switch to HVO fuel is an important step towards reducing carbon emissions in the transportation sector. The use of HVO fuel can help reduce greenhouse gas emissions significantly while providing a renewable energy source that can be produced from waste products. As governments around the world implement policies to encourage the adoption of cleaner-burning fuels such as HVO fuel, we can expect to see more companies adopt the HVO option.



05. HEALTH & SAFETY

National Hard Hat Recycling Scheme: A blueprint for change

Every year, the UK discards millions of end-of-life hard hats, most of which end up in general plastic waste streams. Unfortunately, traditional recycling methods often fail to give these discarded hard hats a second life, undermining our efforts to minimize waste and embrace sustainability. The National Hard Hat Recycling Scheme offers a beacon of hope, leading the way in reimagining how we handle hard hat waste. By diverting these safety essentials from landfills to recycling plants, this initiative not only reduces waste but also contributes to the creation of new plastics, forging a path toward a more sustainable future.

At Forth Ports, our commitment to sustainability extends beyond our own operations. We champion initiatives like the National Hard Hat Recycling Scheme that demonstrate that the journey toward a greener, more responsible future is a collective effort. With each innovative step, we move closer to a world where sustainability and responsible practices are not just principles, but a way of life.

Frontline Walk: The Western Front

From the 12 to the 13th of October Steve took part in the *Frontline Walk: The Western Front.* He walked 100km following in the footsteps of those who fought on the Somme and Passchendaele battlefields during the First World War, commemorating the sacrifices made by those who fought in WWI whilst helping to support the soldiers and veterans of today.

Steve's family lost a generation of young men on these battlefields and his Great Grandfather was taken prisoner there in 1914.

It was a huge honour for Steve to visit these historic places and say a very personal thank you as well as being a physically and emotionally tough challenge, all for a great cause: ABF The Soldiers' Charity, the National Charity of the British Army, supporting soldiers, veterans and their families when they need it most. You can still donate using the link: chant

Steve Marchant

Group Health and Safety Employee Engagement Manager





06. NET ZERO - LAUNCH EVENT

Forth Ports commits its operations to be carbon neutral by 2032 and Net Zero by 2042

Forth Ports, has set out its commitment and the actions it is taking to achieve a net zero carbon operation by 2042 at an industry launch event in Edinburgh on the 4th October. At the event a film was launched which demonstrates Forth Ports ambitious vision of achieving carbon neutral emissions (Scope 1 and 2) by 2032 and creating an infrastructure platform to help accelerate the UK's path to a decarbonised economy with full net zero carbon emissions being achieved by 2042.

Commenting at the launch event, Charles Hammond OBE, Group Chief Executive of Forth Ports. said:

"With our firm commitment to carbon neutrality by 2032 and achieving net zero carbon emissions by 2042, we are driving progressive change in the maritime industry and beyond. Our ambitious vision reflects our dedication to environmental stewardship and our crucial role in supporting the UK move towards a decarbonised economy for the generations of the future.

"Our existing major investment in green energy, coupled with our commitment to floating wind, the next generation of renewable energy, and our collaborative approach deerscore our determination to play our part in driving the transition to a decarbonised economy to achieve meaningful and lasting environmental change."

Mairi McAllan MSP, Cabinet Secretary for Net Zero and Just Transition, said:

"I welcome the commitment from Forth Ports, to achieving carbon neutrality by 2032 and net zero by 2042. I have visited Forth Port's Grangemouth facility, and what was made clear to me was the critical role that ports play in our economy. It is encouraging, then, to see such a key operator show leadership and commitment to maintain and grow that role in Scotland, as we transition to net zero.

"This commitment builds on impressive achievements to date, and I look forward to seeing Forth Ports' full net zero plan being rolled out and how, working collectively, we can help deliver our ambitions for a just transition to net zero."

The Rt Hon Alister Jack MP. Secretary of State for Scotland said:

"Forth ports, one of the UK's largest ports groups, becoming net zero by 2042 is a welcome commitment. The leadership they are showing demonstrates what can be achieved by one of Scotland's major infrastructure hubs. Forth Ports is a partner in one of Scotland's two new freeports, each backed by £26m from the UK Government, and Hook forward to hearing more about their plans."





07. NET ZERO NATION

Grangemouth Net Zero Accelerator briefing at Forth Ports.

On 6th July, Forth Ports hosted an event at the Port of Grangemouth to show businesses how they can get on board the "net zero accelerator".

This programme, supported by the Grangemouth Future Industry Board is designed to help support the decarbonisation of the supply chain in Grangemouth and support the local community in more rapidly heading towards a low carbon future. Jacqueline Ireland, Forth Ports senior procurement manager, *said*:

"Our target is to be a carbon neutral company by 2032 and Net Zero by 2042. We are well on our way towards that within the business, but also need to work closely with our partners and supply chain to achieve this.

We are pleased to be supporting this program to both contribute and learn the Net Zero best practices that will create a greener future."

Overall, the event had a great turn out, with great enthusiasm shown to be part of this initiative.



08. HERITAGE RESTORATION

We are working towards a February 2024 submission to the National Lottery Heritage Fund, asking for £3.4M to allow access all year round to the Grade II* Riverside Station with a new café space and outdoor seating and creative lets, alongside an exhibition to tell the stories of those who lived, worked and travelled through Tilbury. If successful in securing investment, we anticipate these works to be completed in 2026.

Alongside these building works, we will also run an education programme with schools covering skills and training opportunities for heritage, transport and logistics, and a public event programme.

Part of the design process is that we want to create a building with impeccable environmental credentials, including low energy use, waste minimisation, low carbon emissions and green energy generation.

The Environmental Sustainability consultant will work with the client design team, consultants and contractors to promote sustainability through the design, development and delivery of the project. Areas of focus will include, though are not limited to;

- The development of a sustainability strategy for Tilbury on the Thames Trust to include policies and procedures which will inform and steer the development of the trust as a sustainable organisation beyond the completion of Back on Track.
- Design and specification of M&E systems, to optimise energy use, and minimise environmental impact. This to include provision for low carbon heating and energy solutions.
- Support the design process, to minimise waste and maximise use of recycled materials where possible.
- Support the construction process to minimise emitted carbon & construction waste.



09. LEITH COMMUNITY FUND

Empowering small community groups

Established with the aim of fostering community development, the Leith Community Fund has been a vital funding source for local organisations and projects since its inception. It acts as a financial supporter, a facilitator of community cohesion, and a catalyst for positive change. The importance of such a fund cannot be overstated, as it has already empowered many small community groups to address local issues and bring innovative ideas to life.

One of the fund's most significant contributions lies in its ability to foster inclusivity and participation within the Leith community. By supporting a wide range of projects, from educational and environmental programs to cultural and family support events, the fund ensures that there's something for everyone to get involved in.

Many community groups, that have benefited from the Leith Community Fund, have a keen focus on sustainability and environmental initiatives as part of their project. The Water of Leith Conservation Trust is helping create a sense of place around the Water of Leith and the original docks, just one of the organisations that goes above and beyond in its commitment to conservation, education, volunteering and creates an environment where people meet, exercise, talk and enjoy nature. Advocating these spaces helps address isolation one of the key objectives for the Leith Community Fund, and a project like this plays a significant role in making Leith a good place to live.

The impact of this fund extends far beyond the financial support it provides; it's about nurturing a sense of community, fostering inclusivity, and empowering local residents to create positive change. At its heart are the people who have helped set up and deliver this fund and they continue to work with small community groups and the activities they deliver, shaping the future of Leith for generations to come.

10. HARBOUR MASTER

Case Study: Scott Cameron - Harbour Master, Forth & Tay

Scott Cameron has worked Forth Ports for eight years, In his current position as Harbour Master for Forth & Tay, he shoulders a significant responsibility for ensuring the safety of navigation in an expansive area covering approximately 300 square miles.

Responsibilities:

- Safety of Navigation: As the Harbour Master, Scott's primary responsibility is to guarantee the safety of navigation for all vessels operating within the Forth area.
- **Conservancy:** Working closely with his colleagues in the conservancy team to arrange critical activities such as dredging to maintain water depths, regular surveying to inform the water depths on all berths, approaches, and channels, and sharing of findings.
- Vessel Traffic Control: The safe movement of vessels is a key priority. This is achieved by controlling vessel movements through a state-ofthe-art Vessel Traffic Services (VTS) centre.
- Overseeing Marine Operations: There are often non-standard operations taking place within Forth

Ports area of jurisdiction, these require a great deal of planning to make certain that they are carried out in a safe and efficient manner.

- **Pilotage:** Scott works closely with the pilots; verifying that they are adequately trained and qualified to pilot vessels safely in and out of ports and terminals on the Forth.
- Knowledge of Vessel Types: Given the diversity of vessels calling at the ports, Scott must possess an in-depth understanding of the specific requirements and characteristics of each type of vessel.
- Legal Compliance: Scott is well-versed in various areas of legislation and regulations, including environmental laws, health and safety regulations, pilotage requirements, conservancy obligations, towage regulations, and security protocols.
- Emergency Planning: The nature of shipping means there is an inherent level of risk however through creating and developing emergency plans, carrying out exercises and working with other agencies, Scott makes sure that Forth Ports are prepared for any eventuality.

11. FREEPORTS

Forth Ports is a central partner in the Thames Freeport and the Forth Green Freeport. Both partnerships have a golden thread to their vision, which chimes with the group's strategic vision for change – the acceleration of Britain's low carbon logistics capacity, low carbon energy generation and low carbon fuels.

Although both public-private sector partnerships are at different stage, their vision will help accelerate Scotland's and the South East's path to a net zero economy, through targeted investment in new port infrastructure, future skills programs, connectivity and innovation.

Thames Freeport is the country's first freeport to embark on its multi-decade plan to become a hub for global trade and investment.





The key sector proposition strategy being implemented by a dedicated team aims to attract over ± 4 billion of inward investment, which in turn will lead to over 20,000 net new additional jobs. As the Freeport develops, its commercial focus will pivot from logistics and warehousing to advanced manufacturing and added value operations adjacent to the ports.

In less than two years, Thames Freeport has attracted over £600 million of inward investment. This has resulted in 1,020 net new additional jobs. With a strong pipeline of qualified leads, the future bodes well.

Both freeports are progressing plans to decarbonise supply chains, through the creation of new partnerships to deliver the alternative fuels of the future, alongside expanding regional rail capacity..through strategic investments to help recast logistics supply chains by taking trucks off the road network and offering truly end-to-end delivery solutions.

The Forth Green Freeport partners are currently preparing the outline business case to submit to the Scottish and UK Governments shortly.

The consortium has appointed Dame Susan Rice as the inaugural Chair of Forth Green Freeport.

12. DRAGON BOAT RACE

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Forth Ports were the main sponsors of the annual St Columba's Hospices Dragon Boat Races, hosted at Port Edgar Marina, near Edinburgh. Not only did the 'Forth Ports Mad Hatters' sponsor the charity event, but competed in the races and bought home first place!

The Forth Ports team were up against local businesses, who came from across Scotland. It was a great day filled with healthy competition and excitement, everyone had a great time! St Columba's Hospices gives everyone who needs it the very best hospice care. They are an independent charity at the heart of the local community, offering free, flexible and personcentred palliative care and support to patients and their families.

This year the Dragon Boat races were able to raises thousands of pounds and the Forth Ports team were delighted to bring home the winning trophy.



13. WINDRUSH DAY

Windrush Day, was celebrated on the 22nd June, it holds a special place in the hearts of many, as it marks the day when the HMT Empire Windrush docked at the London International Cruise Terminal in Tilbury, in 1948. This event symbolizes the arrival of the Windrush generation and their significant contributions to the UK.

Windrush Day is more than just an event; it's a celebration of the Windrush generation, the thousands of individuals who journeyed from the Caribbean to the UK to help rebuild the nation after World War II. The Cruise Terminal in Tilbury was their first point of arrival, making it a poignant and fitting location to host these celebrations.

One of the community aspects of Windrush Day celebrations at the Cruise Terminal is the reunions it facilitates. Individuals who arrived on the Windrush on June 22, 1948 and many others who have family connections, return to Windrush Day this year celebrated the 75th Anniversary attracted people from all over the UK. It serves as an opportunity for people to learn about the rich history and culture of the Windrush generation through dance, music, food, and storytelling. Many local schools came and took part in dance classes and history lessons gaining a deeper understanding of the significant role this generation played in shaping our nation.

Holding Windrush Day celebrations at the London International Cruise Terminal in Tilbury is not merely a local event; it's a recognition of our shared history, the importance of diversity in the UK, and a chance to celebrate the incredible contributions of the Windrush generation.

Thank you to everyone that came along and took part in celebrating the 75th Anniversary of the arrival of the HMT Empire Windrush in Tilbury.





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