Net Zero Ports – call for evidence

LOGISTICS UK

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Summary

- 95% of goods enter the UK by sea.
- Ports are unable to obtain timely and cost-effective grid upgrades necessary for the maritime sector to decarbonise.
- Ports are nodes in the transport network and do not operate in a transport silo. Decarbonisation of the sector must take a multi modal approach and consider other users of ports.

About Logistics UK

Logistics UK is one of the country's largest business groups, and the only trade association which represents all of logistics. Our mission is to support, shape and stand up for a safe, sustainable and efficient logistics sector. Our membership of more than 20,000 includes global, national and regional businesses and SMEs spanning road, rail, inland waterways, sea and air as well as the customers of freight services, such as retailers and manufacturers. We deliver services, representation and thought leadership, helping members and policymakers to seize new opportunities for the sector and the economy as a whole.

The logistics sector

Logistics underpins our economy and is fundamental to our way of life. It supplies our hospitals, schools, factories, construction sites, shops and homes with everything they need, everywhere, every day – nothing moves without it.

The efficiency of logistics and the productivity of the economy are completely intertwined. Due to this relationship, Oxford Economics found in 2023 that getting the policy and infrastructure environment right for logistics would unlock up to £8 billion a year in productivity-led growth.

However, we are not currently going in the right direction. The UK fell from 4th to 19th place in the World Bank Logistics Performance Index over the past decade, largely as a result of border friction and underinvestment in transport corridors.

Logistics is a major sector in its own right. It contributes more than £170 billion to the economy each year (12% of UK non-financial GVA), is one of the UK's largest employers, providing good jobs with strong career progression – 2.7 million people (8% of the UK workforce) are employed in logistics roles, and its key hubs provide a catalyst for further growth and investment, helping places to thrive[1].

18. Do you agree or disagree that ports will play an increased role in directly providing or enabling third parties to provide the infrastructure that helps shipping to decarbonise? Please state your reasons why.

Agree. Ports already play a fundamental role in directly providing third parties with infrastructure from which they operate, and this role will only increase as the maritime sector decarbonises.

There are already hybridised ferries operating from UK ports which could be using electric power can be but due to a lack of charging infrastructure at the port, they are still running on diesel.

UK ports will play an increased role in enabling third party maritime operators to decarbonise by providing the resources for operators to charge their vessels via shore power. In addition, ports are the first and last point of call for huge volumes of surface freight vehicles including vans and HGVs, which will require charging infrastructure as they transition to electric vehicles – and ports are the logical location for much of that charging infrastructure.

This means that ports will play an essential role liaising with DNOs, CPOs and the wider grid in order to navigate and implement the necessary upgrades needed to enable port-based charging, of ships and surface transport.

[1] Logistics Report 2025, Logistics UK

19. Do you agree or disagree that there is sufficient collaboration between ports, shipping operators and infrastructure providers to decarbonise shipping? Please state your reasons why.

Disagree. Ports are facing significant challenges, especially in relation to obtaining the necessary grid upgrades needed to decarbonise shipping, let alone the grid upgrades they will need to act as charging hubs for vans and HGVs.

Ports are aware of the electrification and energy needs of their shipping operators, and need clear, efficient timelines from infrastructure providers to accommodate these needs. Infrastructure providers are, however, currently unable to efficiently deliver the required upgraded grid connections.

Shipping operators work in collaboration with ports from which they operate, but given the electricity network upgrade challenges and delays, shipping operators are unable to sufficiently and easily charge their vessels where ports have been unable to obtain a timely grid upgrade. Infrastructure providers must be provided with the resources and must be supported and incentivised by government to enact infrastructure upgrades in a timely manner. Without this, the maritime decarbonisation strategy goals cannot be realised.

There is a need for a whole systems approach to decarbonisation. Ports act as a hub in the logistics network; they do not operate in isolation, acting as a first and last point of call for goods entering and exiting the UK. To support this, we want to see greater collaboration between ports and HGV and van operators over vehicle charging needs.

20. Do you agree or disagree that ports have the existing powers to directly provide energy to vessels that leave the port? Please state your reasons why.

Disagree. Ports are unable to obtain timely and cost-effective grid upgrades.

Ports have sufficient energy to decarbonise their own scope 1 and scope 2 emissions, but rarely have the infrastructure and necessary upgrades to support the decarbonisation needs of shipping operators, let alone the grid upgrades they will need to act as charging hubs for vans and HGVs. This challenge is exacerbated by the various types of operators and their charging needs. Some ferries require a turnaround time of 45mins, which would require around 30MW to be provided during that time, leading to peak time energy demand of around 160MW which is similar to a large city. This level of energy supply is not currently available at ports, and therefore not available to operators.

Ports have received quotes for upgrades upwards of £200m, and a wait time of more than 10 years. This makes it difficult for UK ports to remain competitive, and the risk is that without the provision of the necessary charging infrastructure for operators, the UK will lose out on business as shipping operators look to move to ports where their charging needs can be met. The impact of this on the UK economy will be hugely detrimental. The government must prioritise the needs of ports to decarbonise their operations.

21. What measures could government take to increase certainty about the adequate supply of infrastructure at ports and the subsequent demand for use of that infrastructure?

Commit to subsidising grid upgrade costs at ports.

The EU provides significant subsidies to EU ports for Onshore Power Supply (OPS) projects. This funding provides the financial confidence to ports to obtain grid upgrades and charging infrastructure. Given the high costs of infrastructure upgrades in the UK, the UK government should commit to subsidising these costs to make the decarbonisation of the maritime industry financially viable.

Commit to reviewing and subsidising the cost of electricity at ports.

There is concern from ports that the high cost of electricity (due to high standing charges, lack of tax relief and the potential impact of a move to zonal pricing) will mean the investment that a port makes to obtain the grid upgrade will not produce a good return, and they will lose money on the investment. The EU funding under the Connecting Europe Facility (CEF) programme provides tax breaks for ships using OPS due to the reduction in emissions. A similar policy of tax breaks for shipping operators who decarbonise should be considered and implemented by the UK government.

Provide clear targets for the maritime sector on the route to net zero, including timelines for funding.

The maritime sector is still waiting for clear targets within the route to net zero, including phase out dates, a defined fuel of the future and standardisation of equipment. Logistics UK is calling for certainty over the future for logistics decarbonisation, underpinned by a logistics decarbonisation roadmap developed between the government and the logistics sector. This must include how shore power can be achieved at key UK ports. Consideration must be given to how industry can fund its decarbonisation efforts. Any additional costs will likely slow progress. Logistics UK strongly recommends finances raised from the UK ETS are ring fenced for use to support the decarbonisation of maritime.

22. Do you agree or disagree that introducing an emissions at berth requirement will be effective at reducing at berth GHG emissions and air pollutants surrounding ports?

Only with support from the government. The logistics sector is committed to decarbonising; however, the industry operates on tight margins. Any additional taxes, such as for emissions at berth, will negatively impact the sector's capacity to invest in future low or zero carbon fuels, thereby making it harder for the sector to reach net zero ambitions. The uptake in shore power is dependent on many factors, including new infrastructure, increased grid capacity and technological advancement. The UK ETS must therefore be implemented as part of a package of levers to help with the net zero transition, or it risks undermining progress and the IMO's direction of travel. Once these levers are implemented, then an introduction of an emissions and berth requirement could be implemented.

24. In your opinion, does the government need to direct ports towards a certain default technological solution (e.g. electrification) for ports to meet the emissions at berth requirement, whilst enabling other technologies where appropriate through exemptions?

The ports sector needs a clear mandate and direction from government. If the government directs ports towards a technological solution, then funding must be provided by the government for ports to move their operations in that direction.

Electrification of ports in the UK is dependent on timely grid connections. In the interim, the Maritime Decarbonisation Strategy has highlighted the need for the use of zero emission fuels. There should be a clear pathway for the maritime sector for the use of these fuels, including timelines for phase out, which should work in conjunction with the availability of grid upgrades at the ports. This would enable grid upgrades to be carried out, without penalising ports and shipping operators. Support is also required to encourage the production of these fuels, as the logistics sector needs confidence that there will be sufficient supplies.

Ports are modelling the amount of future power that will be required from their operations and the operations of tenants and shipping operators. There are concerns around the amount of power that will be needed for larger cruise ships and ferries, due to the intensity of the power needed. Therefore, a variety of technology solutions will be required, given the variety of power needs facing the industry.

25. When developing the requirement, what can the government do to ensure it improves/protects air quality surrounding ports?

The government needs to ensure that port decarbonisation is not addressed in a silo. As 95% of goods enter and exit the UK through ports, there is a funnelling of logistics through these areas. To protect air quality of surrounding ports, the government should not only provide funding for charging infrastructure and grid upgrades for shipping operators, but also for other commercial vehicles which will need to use this infrastructure whilst at ports, including electric HGVs and low carbon fuels (LCFs), as well as rail electrification where relevant.

Where ports already own the surrounding land, and have space to expand, the government should fast track planning processes to both encourage and enable ports, where they are able, to expand green energy production for their decarbonisation efforts. The planning process is lengthy, and ports are already looking for ways to increase the amount of energy they can gain access to without waiting 8 to 10-years for an upgraded connection to the grid. The government must do more to support ports to install and develop green energy infrastructure on existing land.

The government can also liaise with DNOs, CPOs and National Grid to ensure that these functions are adequately supported and resourced to ensure that grid and infrastructure upgrades are actioned in a timely and cost-effective manner.

Shore power and charging at berth opportunities offers significant advantages over running vessels' auxiliary engines. One of the main benefits of a move to shore power is the reduction of emissions, including nitrogen oxides (NOx), sulphur oxides (SOx), particulate matter (PM), and greenhouse gases like carbon dioxide (CO2). As an additional benefit to lowering emissions, shore power also minimises noise pollution from ships' engines, improving the quality of life for nearby communities, and for workers who are exposed to the noise pollution regularly for long periods. Port decarbonisation must not be the sole focus, and decarbonisation and charging infrastructure provision for HGVs and LCVs must also be prioritised and made available in order for the benefits to communities to be fully realised, and economic opportunities won.

Additionally, the need for fast charging and quick turnarounds at ports which operate ferry services and have limited waiting space must be considered, as an increase in congestion and waiting times would have a negative impact on local communities.

26. From a regulatory perspective, what do we need to consider to support the decarbonisation of at berth emissions from shipping?

- The UK has high standing charges for electricity and gas. This additional cost will have a hugely negative impact on the profit a port is able to make. Given logistics companies operate on small margins, these standing charges have a disproportionate impact on their profitability.
- Planning for green energy infrastructure needs to be streamlined and simplified for ports.
- Green shipping corridors need to be defined more clearly. What is the government's expectation from shipping operators and ports?
- Zero emission fuels need to be more clearly defined in terms of what their role will be for the maritime sector and wider logistics sector, and their supply for the sector earmarked. Competing demand for zero emission fuels, including the SAF Mandate, reflects future competition across the logistics sector for the supply of these fuels. The government will need to intervene to ensure there is an adequate and sustainable supply of zero emission fuels for all parts of the sector.

27. How should government define high frequency services with short turnaround times at ports, for the purpose of an at berth requirement? Please explain your rationale and any supporting evidence.

Ferry services between Dover and Calais should be within the definition of high frequency services, as the emission for this type of route should not be ignored. However, due to the significant operational challenges for ports like Dover where these high frequency ferry services have a turnaround of 45min, and the operational disruption would be massive if this time needed to be extended, greater support is required for these types of routes. Any delay in operations out of Dover, and any increase in dwell time, ultimately impact the entire UK supply chain, increases road traffic congestion significantly, and therefore negatively impact air quality, and would impact the timely arrival of goods and services both into and exiting the UK. This would have far reaching economic consequences. Dover will therefore require significant grid upgrades (up to 160MW peak power) and high voltage systems which will need to be automated for health and safety reasons. This huge increase in power comes at a much higher price than many other ports across the UK and therefore support will be needed to facilitate this. It is also vital that the connection and power transfer happen within the 45 minute turnaround, because technology is still in the development stage to allow this to happen on the scale required a Dover an extended timeline for compliance is likely to be required to allow technology to develop sufficiently.

28. Do you agree or disagree that high frequency services with short turnaround times at ports should be captured in any future emissions at berth requirement?

The emissions produced from routes of this nature also need to be tackled and reduced and should not be ignored, but as mentioned above due to the complex issues for these routes greater support from government and longer timelines for compliance may be required to combat operational impacts of this requirement.

30. What are the barriers that ports face in becoming zero or near zero GHG emission refuelling hubs? Please state your reasons why, including any safety barriers.

The main barriers include the financing of these projects, the future profitability of these projects given competition with other countries (e.g. a lack of tax relief and more expensive electricity costs in the UK compared to neighbouring EU countries), a lack of space and land, and delays in obtaining the planning permissions and grid upgrades.

32. What are the potential markets and end use sectors that can be supplied when a port becomes a zero or near zero GHG emission refuelling hub? Please set out whether these are domestic and/or for international export markets.

Beyond the maritime sector, other end use sectors include the logistics sector. Logistics is a fundamental sector which underpins the UK economy. Ports operate within the transport network and are key to enabling other sectors to decarbonise due to their essential entry and exit position for the UK economy. The government should prioritise the decarbonisation of ports to become zero or near zero GHG emission refuelling hubs due to their function as a hub through which goods and services are funnelled.

Operators within the logistics sector, including those operators of LCVs and HGVs, must have access to charging infrastructure at ports as the use of electric commercial vehicles increases in line with the ZEV Mandate and the Climate Change Committee's pathway for surface transport. Public charging infrastructure and the strategic placement of this charging infrastructure is critical to the long-term success of the decarbonisation of logistics, and the UK government's Net Zero by 2050 ambition.

It would also be beneficial to see the electrification of the rail network connecting UK ports to the wider geography. If ports succeed in becoming a refuelling hub for zero and near zero GHG emission refuelling, this should also be applied to rail operators.

33. What are the potential growth opportunities of ports becoming zero or near zero GHG emission refuelling hubs?

The UK must remain competitive with the EU and other nations. The economic growth opportunity of decarbonising ports is significant, but also essential for the UK to remain globally competitive. Should UK ports face delays and high costs in obtaining the necessary charging infrastructure and grid upgrades, there is a risk that shipping companies may need to plan to charge their vessels elsewhere. This holds a risk that once UK ports obtain the infrastructure, shippers do not choose to utilise the charging infrastructure in the UK, hence resulting in stalled growth and stranded asset risk. If the UK government takes a progressive and innovative approach by unlocking grid upgrades for ports which are both timely and cost-effective, this opens up the UK a huge international market opportunity, and will spearhead the use of charging infrastructure at UK ports, boosting local and national economies.

35. What is the estimated cost of installing electric charging infrastructure for vessels (boats or ships)?

One of our members reports this to be in excess of £214 million.

36. What transport and storage infrastructure for fuels are available at ports and what do you see as the barriers to safely repurposing this infrastructure for alternative fuels such as hydrogen, methanol, and ammonia?

Barriers to this include having enough qualified, trained and skilled people to undertake the required work as well as barriers around production and cost of fuels.

38. What actions can ports take to help their tenants decarbonise and reduce wider environmental impacts?

Tenants at ports can include haulage companies, depots, logistics parks and shipping operators.

Where port operators are tenants, it is often the landowners who are the electricity providers. Landowners should instigate conversations about green energy procurement and decarbonisation with their tenants. Landowners should also work with tenants and instigate dialogues regarding decarbonisation and future energy needs, for example procuring information from tenants about future energy demand. This kind of dialogue would help landowners to liaise with the grid to procure upgrades and sufficient energy to the port in order to meet the needs of tenants.

However, it is the grid and infrastructure providers, not the landlord, which ultimately determine what can and cannot be achieved at the port.

39. What barriers do ports face in helping their tenants to decarbonise?

It is grid capacity, grid upgrades and procurement of necessary charging infrastructure which ultimately determines how quickly a port and its logistics operations, and the operations of its tenants, can decarbonise. Excessively long connection wait times and grid infrastructure upgrade delays are huge barriers to decarbonisation for tenants. Huge costs to ports to obtain necessary grid infrastructure are also significant barriers to decarbonisation.

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