Forth Ports PLC

Re: RSE Inquiry Facing up to Climate Change

Introduction
Forth Ports run a group of regionally based ports in the central belt of Scotland and Tayside. Grangemouth is Scotland's largest container port, serving both the Glasgow and Edinburgh Metropolitan Regions. The Port of Tilbury is London's major distribution hub for South East England. We also have a port terminal operation at Chatham in Kent operated under the Nordic banner. We provide marine services, controlling navigation in the Firths of Forth and Tay through the Forth and Tay Navigation Service as well as operating our own towage fleet. We have a Property Division that manages and develops our property assets, a recycling division (Nordic Recycling) and a joint venture renewable energy division (Forth Energy) with Scottish and Southern Energy.

RSE Questions
Forth Ports welcome the opportunity to contribute to the inquiry and as such we wish to contribute the following:

- Do you perceive the changing weather patterns in Scotland and globally as affecting you and/or your organisation? Clearly adverse weather events have the potential to impact on our operations. Severe weather can delay vessels on the routes between ports or can prevent them being worked. Delays create frustrations for vessel scheduling, for crews and for the owners of the cargo on the vessels. Our staff work in all weathers. We have not identified any change of trend in weather, and therefore do not foresee any issues at this time in relation to weather patterns. Precipitation does not directly impact on our operations; wind can have impacts as can extreme tides, whether high or low, if there is a substantial increase in relative sea level in the future (see below) this could also have implications.

- What are the impacts of the Climate Change (Scotland) Act on the goals and activities of your organisation in terms of investment and exposure to risk? Forth Ports PLC established an environment integration committee at around the time that the draft Climate Change (Scotland) Act was consulted upon. The goal of this committee is to pull together the learning points from all divisions of the business. Energy efficiency is one of the primary goals of this group in the interim. This committee has presided over an unprecedented improvement in energy efficiency in our ports business, where we measure electricity per tonne of non-piped cargo handled. Every year the group completes a risk register, environment is one of the headings in the risk register, each heading has a list of scored top risks to the business. We are acutely aware of the potential for climatic changes to impact on our business. As part of examining these risks, the board agreed to fund a Ph.D. student to examine the top perceived climate risk: relative sea level change in the Forth and Tay Estuaries. Our student at Dundee University is working on the data available and at the end of the process we expect to be in a strong position to be able to use this information to inform our ongoing infrastructure investment decisions. This was particularly important because the majority of figures available for relative sea level change for the Forth and Tay tend to be extrapolated from more distant areas and we were keen to develop a strong understanding of the local trends.
What do you plan to do in response to these factors over the next 5-10 years?
We plan to continue to improve our energy efficiency. As part of owning a recycling business, we continue to examine opportunities to improve the proportion of our waste that we recycle or reuse. We also intend to continue to work to increase the amount of coastal shipping from our ports. We see this as a particularly important and valuable service that we can offer to reduce Scottish and UK carbon emissions through modal shift from land based transport means to sea based transport means. Movement of goods on water is considerably more energy and carbon efficient than the movement of goods over land. Our renewable energy business will also focus on delivering renewable energy projects (these can be found at www.forthenergy.co.uk). Finally, investment decisions will benefit from the information that we gain from funding our Ph.D. student at the University of Dundee.

How integrated is your response with other organisations in similar or related fields?
As well as being the Environment Manager for Forth Ports, I also Chair the joint UK Major Ports Group and British Ports Association Environment Policy Group. One of the activities of this group is to share information on environmental issues and approaches used to deal with these issues. Separately, the Chief Executives of all of the member companies of the UK Major Ports Group (of which Forth ports PLC is one) have agreed to share information on energy efficiency in particular.

What are the main barriers to change for you and/or your organisation?
The main barrier to change is inertia. This is mostly found outwith the Forth Ports Group of companies, suppliers and manufacturers of plant and equipment can be resistant to changes that they consider could cause them risk (see below). Whilst this is understandable in today’s litigious society, this needs to change.

What are the relative merits for your organisation of a carbon tax; emissions trading; energy regulations for performance standards; or incentive schemes?
We believed that it was inevitable that there would be some form of carbon or related taxation beyond the Climate Change Levy. However, such taxes must be relevant, enforceable, practically applied and above all, fair. We have been vociferous in our position criticising the government’s position requiring the ports to be responsible for the emissions of tenants in relation to the Carbon Reduction Commitment (CRC). In the case of Forth Ports this is expected to result in our CRC liability for electricity being considerably larger than if we were only responsible for our own use. To put this into context, of those tenants we supply electricity to, they use four to five times more electricity than we do. Then own the plant and equipment, often also owning their own buildings on our land, in these cases, the tenant has all the control over the energy efficiency of their processes and buildings, we as landlord have none. The government’s usual argument here that the landlord can upgrade lighting, heating, windows and insulation to make a building more energy efficient does not hold true. Furthermore, these aspects are insignificant in the context of energy use from a cement batching plant, pipe coating works or other industrial processes. We were initially under the impression that we would be notifying the government of our tenant on-sales, each tenant would therefore be a participant. However, it would appear we were given this advice in error following the mix up over wording. We now find ourselves in a challenging position, our tenants will be part of the CRC through us, but we will have the liability; financial and reputation. In such a complex scheme, there is no easy
and fair way to pass this burden on to our tenants. We have always said that we are comfortable being part of the scheme for our own use, but believe that the inclusion of our tenants, particularly the industrial tenants is grossly unfair, disadvantaging our selves and our tenants.

Transport – how could your organisation’s transport emissions be cut by 2020, and what are the barriers to achieving this? We have been working to identify organisations that could provide assistance on the energy efficiency of our marine plant (tugs and pilot boats) and our shore based plant (straddle carriers, top lifters, forklift trucks etc.). Until recently this proved rather challenging. The key barrier is the manufacturers warranty. In many cases the manufacturers of engines warn that the fitting of devices to improve fuel efficiency will void engine warranties. Similar discussions have been had regarding fuel types and whether there are different grades of fuel (in particular for our marine plant) that would lower emissions. Issues of warranty may well be a genuine concern to the manufacturer; it certainly makes us think twice before examining options further, as the risks then lie with us if an engine fails when an unapproved device has been fitted (regardless of what has caused the failure).

In Forth Ports we are actively working to reduce our carbon footprint through resource efficiency measures. We have been developing these projects for some years, substantially reducing our energy usage with considerable attention at board level. Forth Ports support activities to reduce carbon, indeed the shipping routes calling at our ports substantially reduce the carbon budget of the UK and we strongly believe that more use of the shipping routes calling at our ports could make a significant impact on the UK’s ability to meet its carbon targets. A recent study by the Edinburgh Centre for Carbon Management (part funded by the Carbon Trust) showed that just three of the many routes from our ports saved more than three times the Forth Ports Group carbon footprint (using the Greenhouse Gas Protocol approach, Scopes 1, 2 & 3) when compared to road transport alternatives. Following further work we have identified that Forth Ports PLC has a carbon leverage in excess of 10:1; we save more than ten times the carbon we emit in conducting our business, just from the limited number of routes and projects we have examined. Furthermore, we are working on a number of potential coastal shipping and barge transport options that will further demonstrate the carbon benefits that can be derived from growing port volumes by diversion from road. We therefore believe that by working in partnership with government and attracting more trade to travel by sea rather than by land we can reduce the UK’s carbon footprint and substantially contribute to the 2050 80% target.

Conclusion
Improving energy efficiency is a core aim of the Forth Ports Group of companies. We have made substantial savings in electricity in particular over the past few years, relative to tonnage of material handled. We are finding barriers, warranties being one, where there is potential to retro-fit devices to existing plant and machinery. Fuel efficiency is only part of the story, we firmly believe that by moving more trade from road and rail to short sea shipping Forth Ports can continue to grow and assist the government in meeting its highly ambitious carbon targets.

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