PORT OF ANTWERP-BRUGES: CHAMPIONING INTERMODAL SOLUTIONS FOR A SUSTAINABLE FUTURE

William Demoor, Chief Customer Relations Officer,
Port of Antwerp-Bruges

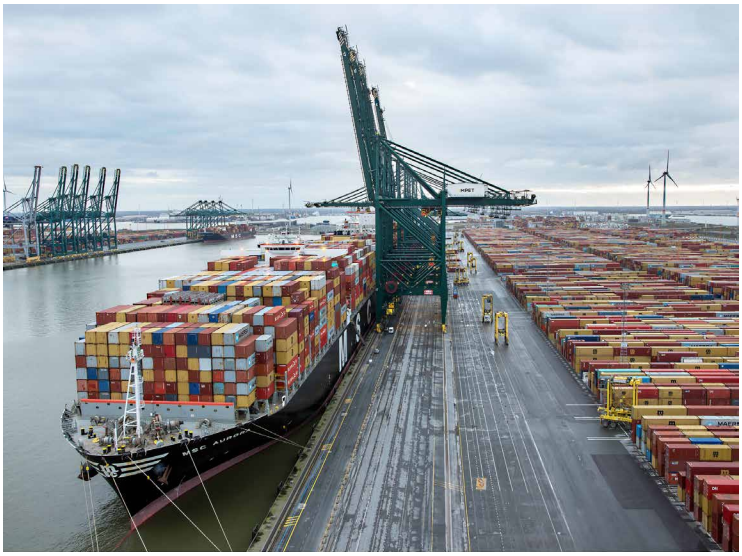
The European Fit for 55 programme aims to reduce CO2 emissions from transport by at least 55 per cent by 2030. What role can and will the Port of Antwerp-Bruges play in this?

Port of Antwerp-Bruges aims to be climate neutral by 2050.

Achieving this is a story of working together with many partners in lots of areas. To give an example: ensuring that ships can bunker (refuel) more **sustainable fuels** in the port must go hand in hand with commissioning ships that sail on them. Meanwhile, such ships have already bunkered LNG and methanol in our port.

Shore power is another example. Shore power ensures that a ship then moored at the quay can connect to a green power "socket" for the electricity it needs. Without shore power, the ship has to run generators to do so. Thanks to a collaboration with other major European ports, there is now a uniform regulation for Europe. On the one hand, this gives certainty to shipowners that shore power will be available and that their investments in suitable vessels are useful and necessary. On the other hand, it ensures a level playing field between ports.

In other cases, we are taking a pioneering role. The Port of Antwerp-Bruges has the first **hydrogen-powered tug**, the Hydrotug. We also recently inaugurated the first methanol-powered tug, the Methatug. Being the first in the world, it was quite a challenge both technically and administratively. But anyone who wants to follow will benefit from our example.



But we are also looking beyond transport. We have the ambition to become a very important player in greening the industry by **supplying green hydrogen**. But if we are going to replace fossil fuels with green energy, we need to ensure that the supply reaches the users, especially the industry. A pipeline between Zeebrugge, where the energy arrives, and the major consumers in Ghent and Antwerp is a first step. But we have the ambition to also supply the industry further in the hinterland with green hydrogen. We need new pipelines for that and for that, we need corridors where pipelines can be built.

We also contribute to sustainable living around the port. The Heat Network Antwerp North in the port now supplies **residual heat** (heat that was previously unused) from Indaver to the Boortmalt malting plant. In the near future, the city of Antwerp will also use some of that heat to heat buildings.

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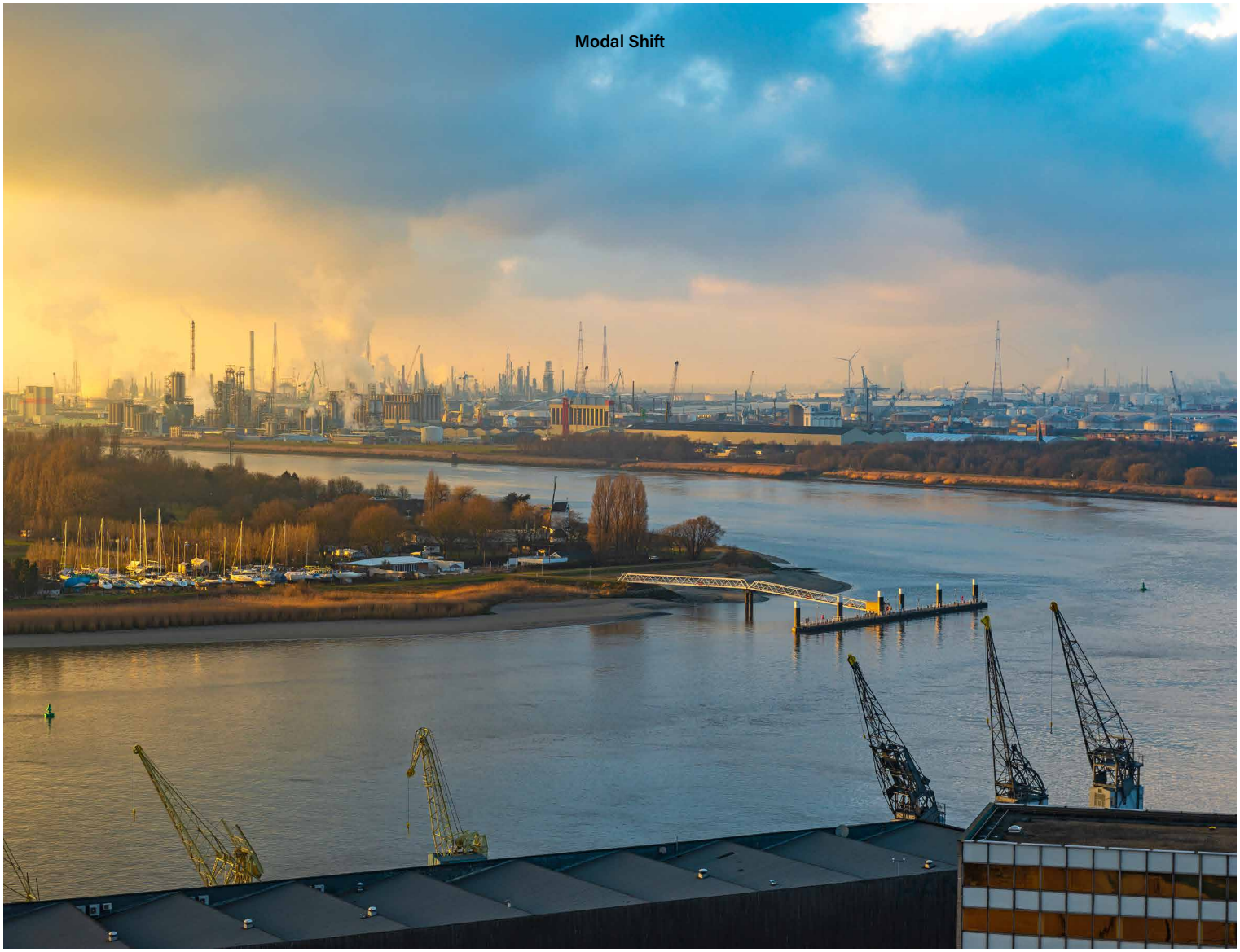

CAN MODAL SHIFT CONTRIBUTE TO YOUR CLIMATE AMBITIONS?

Yes, very much. For example, if you look at the modal split of the entire port area in Antwerp, you will see that inland navigation accounts for almost half of all goods transported to and from the port. This means that barge transport delivers or picks up around 100 million tonnes of goods at our port every year.

Modal split port area Antwerpen	
Inland navigation	**48%**
Road transport	**32%**
Pipelines	**15%**
Railway	**6%**

But more than the numbers, we look at the effects of cargo transport. Our aim is to improve mobility around the port areas, so that cargo flows to and from the port can grow without negative effects on the environment. We do not want to exacerbate the congestion problem on Flemish motorways and, moreover, the impact of transport on the environment (such as noise and emissions) must be reduced.

All modes play a role in this. A modal shift to rail and inland navigation can help, but so can green (and quiet) trucks that drive at night when there is little other traffic.

WHAT ARE THE MAJOR BOTTLENECKS IN MAKING FREIGHT TRANSPORT MORE SUSTAINABLE AND HOW CAN THEY BE SOLVED?

It is often a chicken-or-egg story. Are there few electric trucks because there are few charging stations or vice versa? We are trying to break through that and ensure that truck parking spaces in the port areas in Antwerp and Zeebrugge have charging stations.

In addition, of course, it is also about costs. The European obligation to provide shore power at container terminals and cruise terminals requires huge investments. The same goes for the greening of inland navigation and emission-free trucks. Several European countries are choosing to accelerate these evolutions with extensive financial support.

Last but not least, the supply of sufficient green electricity must also be ensured.

IF WE LOOK AT LAND TRANSPORT, SHOULDN'T ROAD TRUCKING SIMPLY BECOME MORE EXPENSIVE OR DISCOURAGED IN OTHER WAYS?

As the Port of Antwerp-Bruges, we are strongly committed to the modal shift of freight flows. A

number of our staff are constantly working on identifying cargo flows from different companies that can be bundled. With this, they enter into discussions with rail and barge transport providers to then provide transport services for these. Ultimately, it is then up to the companies themselves to make the decision to change means of transport. For companies, a whole range of factors come into play there: price, reliability, flexibility, speed, etc.

Moreover, one should not forget that not all companies can have their goods dropped off or picked up on the doorstep by barge or train. For the first or last leg, transport by truck is still needed. And any transfer of goods from one means of transport to another obviously has to be paid for.

There are also external factors that can disrupt reliability, such as the recent frequent railway strikes in Germany or low-water levels for inland shipping.

Nevertheless, there are opportunities for bundling, for example through inland shipping. The truck deposits the goods at a barge terminal far enough outside the port and the goods go to the port by barge. This keeps the truck out of traffic jams. The Flemish government will soon launch subsidy programmes that could partly offset the additional costs of switching to multimodality.

Also very important is a smoother information flow. We need to ensure that a container going from one mode to another does not have to be registered in a different system each time.

For large volumes that have to travel a long distance, rail and inland waterways are fully-fledged alternatives. Just look at the dozens of container trains that leave Zeebrugge or Antwerp every day in the direction of Italy, Germany, Poland and so on. In inland navigation, there are both ships and trains that transport chemicals between our chemical cluster and the chemical companies on the Rhine.

And speaking of chemicals, pipelines are also a very important transport mode.

Finally, don't forget that more than half of the trucks on our highways simply pass through Belgium: from Germany and Eastern Europe to the Channel Tunnel and vice versa, or from Spain to Scandinavia and vice versa. So modal shift is not a story of Belgium, Flanders or the ports alone.

IN ROAD TRANSPORT, HOW MUCH BENEFIT CAN WE EXPECT FROM E-TRUCKS OR ALTERNATIVE FUELS SUCH AS HYDROGEN?

Whether it becomes green electricity or green hydrogen, in terms of sustainability it is a big step forward.

For transport over relatively short distances, for example in urban distribution, electrification has begun.

For long-distance transport, we see a strong evolution in both technology and the network of charging stations. Electric trucks can drive further and further, and charging is getting faster and faster so that it can be done during the

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driver's mandatory rest periods.

But there is certainly a future for green hydrogen as a fuel.

ABOUT THE AUTHOR:

William Demoor started working for the Antwerp Port Authority in 2006 as consultant Port Real-Estate. He has worked in different departments of the Port Authority and has specialised in fore- and hinterland policy, concession policy and general port management.

In 2011, William started working for Port of Antwerp International (PAI) and focused on the port sector in South Asia, specifically India, resulting in an equity investment of Port of Antwerp International in the Indian port sector.

For a short period in 2013, he became Manager of the Investment Department of the Antwerp Port Authority after which he took the position of Senior Advisor to the President of the Antwerp Port Authority.

In 2017 William became responsible for Customer Relations, and therefore is in charge of the commercial development of the port platforms in Antwerp and Zeebrugge, sustaining the intermodal accessibility of the port platforms, trade facilitation and the development of supply chain solutions through digitisation. Sustaining close relations with POAB's customers remains key in this approach.

ABOUT THE PORT:

With an overall throughput of 271 million tonnes per year, the Port of Antwerp-Bruges is a critical hub in worldwide trade and industry. The port is a crucial link for the handling of containers, breakbulk and the throughput of vehicles. The Port of Antwerp-Bruges is home to 1,400 companies and accommodates the largest integrated chemical cluster in Europe. The port provides, directly and indirectly, a total of around 164,000 jobs and generates an added value of €21 billion ($22.7 billion).

The ambition for the Port of Antwerp-Bruges is clear: to become the world's first port that reconciles economy, people and climate. As well as growing sustainably, the port also aims to focus on its unique position as a logistics, maritime and industrial centre and to take the lead in the transition to a circular and low-carbon economy. Together with the port community, customers and other partners, the Port of Antwerp-Bruges is actively seeking innovative solutions for a sustainable future. High on the agenda is its responsibility for the environment and the surrounding society.

The port sites of Antwerp and Zeebrugge are operated by the Antwerp-Bruges Port Authority, a limited liability company of public law with the City of Antwerp and the City of Bruges as its shareholders. The port employs 1,800 people. Vice-Mayor of Antwerp Annick De Ridder is President of the Board of Directors, and the Mayor of Bruges Dirk De fauw is the Vice-President. Jacques Vandermeiren is CEO and President of the Executive Committee, which is responsible for the port's day-to-day management.

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