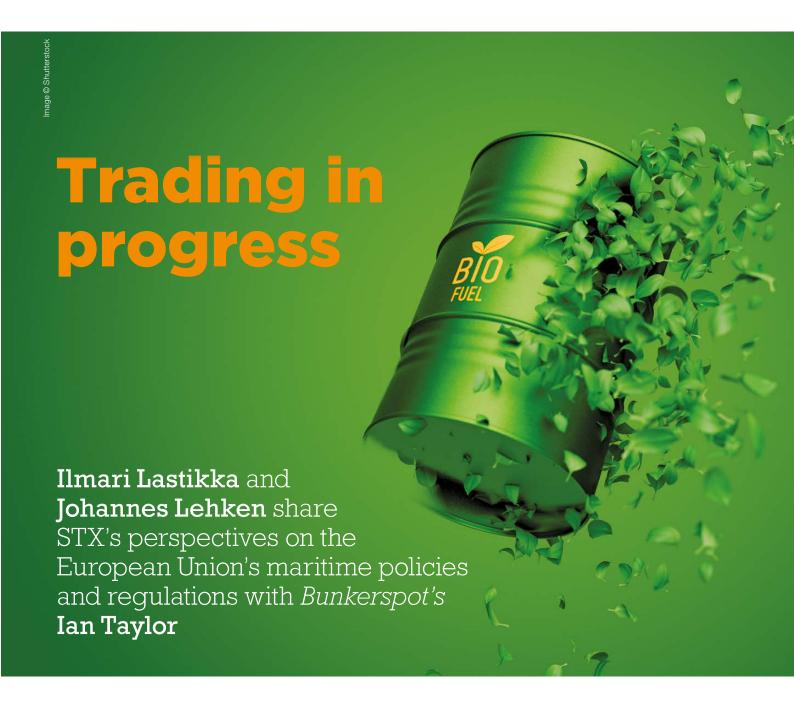
## BUNKERSPOT DOUBLE DECARB CHALLENGE **TOTALENERGIES BRINGING MARITIME** AND AVIATION TOGETHER **INSIDE:** BANKING ON GREEN FUELS PORT STRATEGIES **ONBOARD CARBON CAPTURE GREECE MARKET FOCUS**



The transition to cleaner fuels and energy sources is central to STX's strategy. The Amsterdamheadquartered group describes its global network as 'traders in environment progress, at the forefront of global change away from pollution and natural resources'. And in order do that effectively, STX says that it has to find a path through the 'global regulatory environmental maze'. To find out what this means in practice, we reached out to two of STX's experts: Ilmari Lastikka, Global Head of Policy and Regulatory Affairs; and Johannes Lehken, who joined the group as Head of EU - Policy and Regulation in February this year.

When Johannes joined the group, STX issued a statement in which Ilmari talked about the 'increasing complexity of the

policy landscape'. In the European maritime context, I imagine that this was a reference to both the European Union's Emissions Trading System (EU ETS) and Fuel EU Maritime (FEUM). Can you give us your perspective on the challenges and opportunities presented by those two

'FEUM is a concrete step towards cleaning up a sector that has long been seen as too complex' schemes – both individually and in combination – and what role STX is looking to play in this new environment?

STX strongly welcomes the EU's leadership in decarbonising the maritime sector. Building on a strong foundation of success incentivising low carbon fuels for land transport, FEUM is a concrete step towards cleaning up a sector that has long been seen as too complex, whether due to technical limitations, or lack of jurisdictional clarity. While the EU's ETS ensures neutrality among technology options and all molecules (motivating value chain stakeholders to choose the most efficient pathways to reduce emissions), FEUM adds a needed layer of complexity by focusing on emissions in use (from Tank-to-Wake), as well as being able to promote novel technology producing renewable fuels of non-biological

origin (RFNBOs) through a multiplier application, and potentially a direct mandate from 2034. The main challenges include the availability of sustainable fuels and their scale up.

STX, positioned as an aggregator of low carbon solutions, can address these challenges by offering a diverse portfolio of fuels and expertise in navigating regulatory frameworks, support on building a decarbonisation and transition roadmap through Strive by STX, the climate action arm of STX, and with Vertis, an expert on EU ETS compliance and EUA trader. STX's role as a middle player facilitates liquidity and stability in the market, supporting both producers and users in meeting evolving regulatory obligations while embracing sustainable practices. Alongside the EU's initiatives, the International Maritime Organization (IMO) is also developing its own global regulations on marine fuel usage and emissions. How do you envisage that the EU and IMO efforts will complement each other over the coming years - and do you foresee circumstances in which they may clash and/ or cause excessive complexity?

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The IMO's drive to promote low carbon fuels in maritime, like the carbon intensity indicator (CII) (a continuous indicator of how environmentally friendly the ship's operations are), is pivotal for sustainability. For example, this indicator pushes many to bunker biofuels or upgrade vessels for better ratings. However, unclear compliance mechanisms pose challenges for European companies. Expected by 2025, these measures will need precision to avoid administrative complexities. Even though the IMO scope is wider than the ETS and FEUM and also addresses a framework on energy efficiency and water management, collaboration between the EU and IMO is vital for a harmonised approach to sustainability. The 81st session of the IMO's Marine Environment Protection Committee (MEPC 81) continued early discussions on the GHG fuel intensity requirements and has addressed a potential GHG pricing mechanism, which are meant to be applied globally and may affect the European legislation depending on the upcoming final decisions. A strong IMO commitment is crucial to prevent conflicting regulations that could fragment the market. Aligning international efforts will streamline processes for a smoother transition to greener practices in the maritime industry. Currently, I believe that STX has a strong focus on biofuels - but over the coming decades the maritime transport sector is expected to see a significant increase in the take-up of methanol and ammonia as fuel. What level of involvement does STX have in developing markets for these commodities/fuels - and how do you expect that this may change (particularly with regard to the maritime sector)?

STX is fully committed to enhancing its biofuels platform with a strong presence in synthetic fuels, including RFNBO. Key hires in early 2024 focus on developing the RFNBO business and aligning it with existing products. Due to the nascent state of hydrogen technology and infrastructure, and leveraging expertise from the biofuels sector, STX sees more immediate opportunities in derivatives like synthetic methane, methanol, and ammonia, rather than hydrogen itself.

Our portfolio approach, complemented by the optionality in FEUM, makes the maritime sector particularly attractive for these fuels. Providing a multiplier for RFNBO without immediate mandate attempts to balance incentives for RFNBO adoption without excessive capex demands on a cost sensitive industry. STX aims for a comprehensive suite of bio and synthetic fuels to meet diverse fleet needs across technologies and regions, remaining agile to market shifts driven by technology and policy.

In the next decade, biofuels are expected to dominate as the most cost-effective compliance route until a potential 2% RFNBO target is enforced. Traditional vessels on VLSFO lack a direct path to RFNBO compliance, with only significant penalties in 2034 justifying engine replacements with methanol or ammonia-ready ones. LNG-powered vessels have an advantage, with no physical barrier to RFNBO uptake, particularly if costs, including the multiplier, are competitive with biogas. Turning to some recent developments in the European bio-related fuels sector, the European Commission recently announced its intention to exclude the automatic certification of biomethane and biomethanol-fuels produced in third party countries outside EU gas grids within the Union Database. Some industry stakeholders, including SEA-LNG and the Methanol Institute, have said that this move could potentially compromise the



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mass balance transfer process which a growing number of maritime stakeholders are using to decarbonise their operations. What is your opinion on the EU's intention, and the concept of mass balancing generally?

The Commission aimed to streamline mass-balancing within the EU, recognising the EU grid as a unified unit. However, the exclusion of third countries from this framework, despite biomethane traditionally being considered a local product, caused unforeseen disruptions. The Union Database, serving as a centralised EU registry, should simplify cross-border transfers and trading by applying consistent rules across Europe, reducing reliance on national registries and bilateral agreements.

Mass-balancing is essential for aligning biomethane supply and demand in Europe. Recognising the EU grid as a single mass-balancing unit was a crucial initial step to facilitate cross-border trading within the EU. Eliminating the need for physical flows enhances efficiency and reduces environmental impact, contributing to climate goals. Do you believe that the adoption of lower emission fuels is now picking up sufficient momentum – in maritime specifically, but also across the transportation sectors? What more do you think could be done,

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## particularly in terms of market-based measures, to support and accelerate the process?

In the journey towards sustainability, expanding the EU ETS to include maritime and introducing FEUM marks a significant milestone. While acknowledging swift legislative changes, ambitious targets are needed to drive investment for low-carbon adoption to ensure its alignment with the Paris Agreement.

While the biofuels industry is poised to meet more demanding targets, the addition of RFNBO to RED III presents new challenges. Producers seek clarity and stability in compliance pathways, particularly with the volatility of multipliers. Balancing strict obligations with aggressive GHG reductions may offer a viable compromise.

Despite potential policy limitations, encouraging signs emerge from voluntary initiatives. Market forces and a growing eco-conscious consumer base are driving the adoption of low-carbon solutions. Our recent partnership with Hapag Lloyd exemplifies our commitment to innovative solutions in this evolving landscape.

As regulations guide investment decisions, the focus now shifts to the pace of adoption. It's no longer a question of *will* the industry embrace biofuels, but rather *how fast* it will do so. As we navigate this transition, it's essential to harness collective momentum, not just through ambitious legislation, but also by incentivising voluntary action. Efforts such as the Science Based Targets initiative (SBTi) and the ongoing review of the Greenhouse Gas Protocol's Corporate suite are pivotal in fostering corporate climate commitments.

- Ilmari Lastikka, Global Head of Policy and Regulatory Affairs
- ♣ Johannes Lehken, Head of EU – Policy and Regulation
- STX Group

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