Case #13. Maersk and Ocean Shippers Face Climate Change

This case is based on excerpts from the four articles.

The first excerpt is from an article from the Wall Street Journal about the International Maritime Organization that regulates shipping, entitled "For the Shipping Industry, Moves to Cut Carbon Emissions Remain a Struggle."

Shipping companies face a 2050 deadline set by the International Maritime Organization (I.M.O) that seeks sharp cuts in vessels' carbon-dioxide emissions. Photo: adrian dennis/Agence France-Presse/Getty Images

By Costas Parris Oct. 27, 2021 Wall Street Journal

Shipping operators are under pressure from governments and **big customers** such as Amazon.com Inc. to clean up vessels' carbon emissions. But viable alternatives to fossil fuels are just taking shape.

Supplies of methanol and ammonia—two cleaner-burning alternatives to crude-distilled bunker oil—are too limited to power the world's 60,000 oceangoing ships, and those fuels are several times more expensive, companies say.

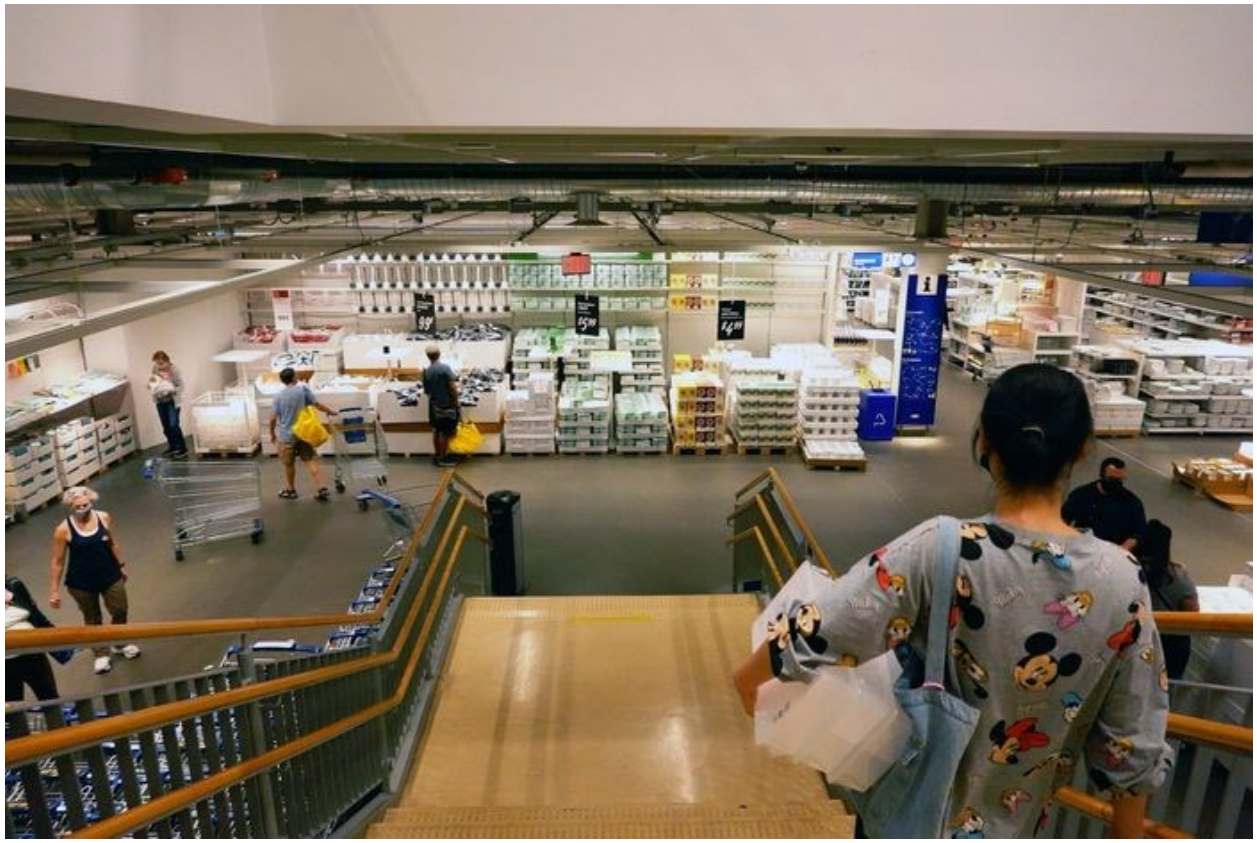
Industry competitors are also split on how soon to start the transition. **Smaller Shipping Companies** worry that **Large Shipping Companies** are able to make investments and borrow money, and a lack of consensus exists in the industry over what cleaner-burning fuel should power future ships.

The **International Maritime Organization (IMO)**, a United Nations body regulating maritime affairs, set a 2050 deadline for shipping companies to sharply cut the amount of carbon dioxide that vessels pump into the atmosphere. Like all UN agencies, it has no formal authority the way nations states do.

Large Customers (e.g., Amazon, IKEA and Unilever) said last week that they want to move their products on what are known as zero-carbon ships by 2040, a more stringent target than the one agreed upon by the industry. The commitment came days before the November 2021 U.N. Climate Change Conference, also called COP26, in Glasgow, Scotland. It adds to demands by other industry competitors to cut greenhouse-gas emissions.

"It's premature to order ships that will comply with regulations in 2040 or 2050, because there is no clarity on future fuels and how much will be available,'" said Polys Haji-Ioannou, the chief executive of Cyprus-based Safe Bulkers Inc., a smaller shipper which operates 47 ships that run on bunker oil.

Maritime shipping is among segments of the broader global transportation industry that are bracing to make big investments to meet long-range goals on reducing greenhouse-gas emissions.



IKEA wants its products transported on so-called zero-carbon ships by 2040. Photo: Michael M. Santiago/Getty Images

Clarkson Research Services Ltd., a shipping-services provider, has estimated that it might cost the shipping industry $3 trillion to switch to new modes of power. Ships collectively contribute about 2.5% of the world's greenhouse-gas emissions, according to the **International Maritime Organization**, an amount that is comparable to the emissions of some of the largest European Union countries.

A.P. Moller-Maersk A/S (**Maersk**), the world's biggest boxship operator, recently ordered eight methanol-powered ships—slated for delivery in 2024—that can also run on traditional bunker oil. Morten Bo Christiansen, head of decarbonization at Denmark-based

Maersk, said the ships' annual methanol needs are about 10 times greater than the volumes currently available in the market. "It's a huge challenge to get ample fueling supply," he said.

Ship orders in 2021were at multiyear highs: More than 480 were ordered through mid-October 2021, compared with 115 for all of 2020 and 107 in 2019, according to maritime data provider VesselsValue.

But apart from the Maersk order, the rest were for ships that burn conventional heavy oil or have a dual fuel capacity.

"What to order is a big dilemma," said Nils Haupt, a spokesman for large German boxship company **Hapag-Lloyd AG** , who added that the company is opting to use liquefied natural gas. "It's not the perfect solution, but that's what we got," he said.

Banks (including Citigroup Inc., Société Générale SA of France and DNB AS A of Norway) are part of a group that aims to reduce the industry's carbon emissions by extending new shipping loans to owners that will verifiably operate cleaner vessels. The banks have a combined shipping portfolio of about $185 billion, or about half of the global ship-finance market.

Michael Parker, Citi's chairman for shipping and logistics, said the group asked the COP26 delegates to push the **International Maritime Organization (IMO)** toward adopting a net-zero carbon-emissions policy by 2050.

International Maritime Organization (IMO)'s current mandate calls for vessels to be 40% more fuel-efficient over the next decade and cut overall carbon-dioxide emissions in half by 2050, compared with 2008 levels. The group has said that it could adopt earlier deadlines and more stringent emissions cuts when it reviews its strategy in 2023. #

This excerpt is from an article from the New York Times about the International Maritime Organization that regulates shipping, entitled, "Tasked to Fight Climate Change, a Secretive U.N. Agency Does the Opposite." by Matt Apuzzo and Sarah Hurtes, New York Times, June 3, 2021

https://www.nytimes.com/2021/06/03/world/europe/climate-change-un-international-maritime-organization.html

Global ocean shipping produces as much carbon dioxide as all of America's coal plants combined. (Yet t)he organization that sets standards for global shipping, the **International Maritime Organization (I.M.O)**," has repeatedly delayed and watered down climate regulations, even as emissions from commercial shipping continue to rise, a trend that threatens to undermine the goals of the 2016 Paris climate accord.

Ocean shipping, unlike other industries, is not easily regulated nation-by-nation. A Japanese-built tanker, for instance, might be owned by a Greek company and sailed by an Indian crew from China to Australia — all under the flag of Panama…So if the I.M.O. does not curb shipping emissions, it is unclear who will.

A Storm on the Horizon

…(T)he political winds are shifting. The **European Union** is moving to include shipping in its emissions-trading system (See **Appendix A)**. The **United States**, after years of being minor players at the agency, is re-engaging under President Biden and recently suggested it may tackle shipping emissions itself, but to date has not acted in this arena.

(When) delegates met in secret to debate what should constitute a passing grade under (its) new rating system for ships, (u)nder pressure from China, Brazil and others, the delegates set the bar so low that emissions can continue to rise — at roughly the same pace as if there had been no regulation at all. Delegates agreed to revisit the issue in five years.

This excerpt from the website, Globalmaritimeforum, entitled, "Getting to Zero Coalition."

https://www.globalmaritimeforum.org/getting-to-zero-coalition/

The Getting to Zero Coalition is an alliance of more than 140 companies within the maritime, energy, infrastructure and finance sectors, supported by key governments and International Governmental Organizations (IGOs). The Coalition is committed to getting commercially viable deep sea zero emission vessels powered by zero emission fuels into operation by 2030 – maritime shipping's moon-shot ambition. The Coalition is not a governmental agency; it has no formal authority.

The **Getting to Zero Coalition** builds on the Call to Action in Support of Decarbonization launched in October 2018 and signed by more than 70 leaders from across the maritime industry, financial institutions and other stakeholders, as well as on the Poseidon Principles – a global framework for climate-aligned ship financing – launched on 18 June 2019.

The challenge

International shipping emits 2-3 percent of global GHG emissions, transporting close to 80 percent of global trade by volume. To curb the emissions from shipping, the **International Maritime Organization (IMO)** has agreed on an ambition to reduce GHG emissions

from shipping by at least 50 percent by 2050. To reach this goal and to make the transition to full decarbonization possible, commercially viable zero emission vessels must start entering the global fleet by 2030, with their numbers to be radically scaled up through the 2030s and 2040s. This will require both developing the vessels as well as the future fuel supply chain, which can only be done through close collaboration and deliberate collective action between the maritime industry, the energy sector, the financial sector, and governments and IGO (Intergovernmental Organizations).

Maersk Moves Green

On 24 August 2021, Denmark-based **Maersk**, one of the world's largest ocean shipping companies, announced it had ordered eight vessels which are able to run on carbon-neutral methanol to accelerate the decarbonisation of its fleet and meet increased customer demand for greener transportation.

Maersk has vowed to only order new vessels which can use carbon-neutral fuel as it seeks to deliver net-zero emissions by 2050. As vessels typically have a lifetime of 20-35 years, this means it must have a carbon-neutral fleet by 2030.

The ships, which can each carry 16,000 containers, will be built by South Korea's Hyundai Heavy Industries (267250.KS) and are expected to be delivered by early 2024.The vessels will be 10-15% more expensive than normal ones and will each cost $175 million.

The new ships will be fitted with engines which can run on both green methanol, which is produced by using renewable sources such as biomass and solar energy, as well as normal bunker fuel as there is still not enough carbon-neutral fuel available in the market.

The fourth excerpt is from an article from Vox, entitled, "How to save the planet from the largest vehicles on Earth," documents further the efforts of Maersk

How to save the planet from the largest vehicles on Earth

by Umair Irfan Apr 21, 2022, Vox

https://www.vox.com/recode/22973218/container-shipping-industry-climate-change-emissions-maersk

"This is a sector (ocean shipping) that's not used to public accountability, or even public awareness," said Dan Hubbell, campaign manager at the **Ocean Conservancy**. "It's mainly out of sight, out of mind."

However, shipping companies say they are starting to feel the pressure to decarbonize. The Danish firm Maersk, one of the largest container shipping companies in the world, operates more than 700 ships. It initially set a target of achieving net-zero greenhouse gas emissions by 2050, but earlier this year, Maersk decided to move up its deadline to 2040. The company also aims to cut its emissions per container 50 percent by 2030. At the terminals it controls, Maersk wants to cut emissions by 70 percent by 2030.

These targets are far more ambitious than any government has sought, especially given that the company doesn't currently have any zero- or low-emissions ships on the water. "It's going to be insanely challenging, no doubt," said Jacob Sterling, head of decarbonization innovation and business development at Maersk.

Sterling explained that while environmental restrictions on shipping are weak now, they likely will ratchet up in the future. As a recent report on maritime fuels from the Ocean Conservancy explained, "The US has key trade routes that drive its economic prosperity, all of which are vulnerable to disruption by climate regulations if the operators on these routes do not proactively approach this fuel transition."

Like the giant container ships they operate, shipping companies are slow to change direction. So Maersk is trying to anticipate the restrictions that may lie ahead and start preparing now. "If we don't change that, our business is at risk," Sterling said.

Another factor is that their customers are pressing them to cut their emissions. More companies are measuring the environmental impacts of their supply chains and finding that shipping is a major contributor. Maersk's employees were also agitating for the company to do more on climate change, according to Sterling.

However, Maersk's targets are far ahead of the technology. Right now, there isn't a way to move a container ship across an ocean without emitting greenhouse gases. "When we set the first ambition in 2018, we quite honestly didn't know how to do it," Sterling said. But after investigating the possible approaches, companies like Maersk say they have a path to zero.

How they plan to do it

Because costs are paramount, the shipping industry has a built-in incentive to be as efficient as possible: to carry more goods farther with less fuel. In fact, many container ships are already using fuel conservation strategies like slow steaming. This is where a ship sails significantly slower than its rated cruising speed. It makes journeys longer, but it uses much less fuel for a given distance. A 10 percent reduction in speed may lead to a 19 percent reduction in greenhouse gas emissions.

Another tactic is scale. Container ships are massive because the more containers you can pack onto a ship, the lower the fuel cost per container and, generally, the smaller the environmental footprint. But efficiency is not enough to cut emissions with overall demand growing. The ships themselves are also hitting the practical limits of size. So cutting greenhouse gas emissions further will require decarbonizing the ships themselves.

For container ships, there are a few options. Most companies are betting on running their fleets on cleaner fuels that more closely match their existing operations.

Some firms are switching to liquefied natural gas. The largest LNG-powered ship, the Jacques Saadé, is almost as big as the Ever Ace. Natural gas burns more cleanly than fuel oil, producing vastly less air pollution and 20 percent less carbon dioxide. However, natural gas is still a fossil fuel. It increases greenhouse gas levels in the atmosphere when it burns, even more so if it leaks since methane, the dominant component of natural gas, traps heat far better than carbon dioxide.

More companies are measuring the environmental impacts of their supply chains and finding that shipping is a major contributor

To achieve truly zero climate impact, one approach is to use biofuels made from sources like plants. Since plants take in carbon dioxide from the air as they grow, burning them leads to no net increase in carbon dioxide in the atmosphere — at least in theory. The main appeal is that biofuels can match existing fuels in chemical structure. Biofuels can thus be drop-in replacements for existing fuels, so much of the current global shipping fleet and infrastructure wouldn't have to change. But they still produce air pollution. And there may not be enough biofuel sources in the world to meet global demand for shipping fuels, which tops 330 million metric tons per year.

Maersk is particularly bullish on ”green” methanol, a type of alcohol that burns cleaner than existing fuels. One way to make it is to combine captured carbon dioxide and hydrogen produced from water powered by renewable energy. Another is biomass gasification, where steam breaks down biomass into its hydrogen and carbon components that are then reassembled into methanol. Like biofuels that mimic fuel oil, methanol emits carbon dioxide when it’s burned, but the process is only recycling the carbon dioxide that was previously in the air rather than adding to the overall total.

This method offers several advantages. Methanol produces minuscule amounts of air pollutants compared to heavy fuel oil. It’s also a liquid, so it can use much of the existing fuel hardware. According to the ICCT, 88 out of the top 100 ports already have the infrastructure in place to support methanol.

“As we see it, methanol is the only solution that is ready and scalable now,” Sterling said. Maersk is planning to launch its first methanol-powered ship in 2023, a 172-meter long “feeder” that can carry 2,100 containers.

Most methanol today, however, is made using fossil fuels, so Maersk is also partnering with companies to produce the green methanol it will need.

Other companies like shipbuilder Samsung Heavy Industries and engine-maker Wärtsilä are exploring ammonia as a clean shipping fuel. Like methanol, companies can make ammonia using renewable energy, except the raw materials for ammonia are water and air. And unlike methanol, ammonia doesn’t emit carbon dioxide when it’s burned. Ammonia can also run fuel cells to generate electricity in addition to burning in conventional internal combustion engines. Samsung is working with partners to build its first ammonia-powered tanker ship in the next few years.

 An aerial view of containers and ships at the Port of Los Angeles in San Pedro, California. Close to 90 percent of cargo in the world travels via container ship. *Qian Weizhong/VCG via Getty Images*

The downside is that ammonia is a gas, making it trickier to handle than liquid fuels. Ammonia is also toxic. When it's burned, it can produce chemicals that contribute to smog. And while it doesn't emit carbon dioxide, it can produce nitrous oxide, a greenhouse gas that's even more potent.

Hydrogen is another possible fuel for shipping. It's also mostly made from fossil fuels at the moment but could potentially draw on renewable energy. It can run fuel cells and internal combustion engines as well, with the added bonus that it's non-toxic. Some Japanese companies, including Kawasaki Heavy Industries, are seeking to have their first hydrogen engines on the seas by 2025.

Methanol, ammonia, and hydrogen are all less energy-dense than heavy fuel oil, so ships that use them will need larger fuel tanks to cover the same distances, cutting into cargo space.

There are other niche clean shipping technologies as well. Some companies are investigating a return to wind-powered ships. And the first autonomous battery-electric container ship set sail last year in Norway, but the 262-foot vessel carries just 120 containers per trip, tiny compared to leviathans like the Ever Ace.

Battery technology is unlikely to scale up to decarbonize the largest ships on the seas, given the cost, weight, size, and charging times that would be needed. Electricity is also only as clean as the generators that make it. Batteries are still useful on the road, but on the seas and in the air, hydrogen and ammonia are far more promising fuels, according to the Ocean Conservancy's fuel report. However, wind and battery technologies may prove useful at smaller maritime scales where their drawbacks don't loom so large.

With so many competing technologies, though, it's hard to tell what will power the ships of the future. "Ultimately, we don't know where we're going to end, fuel-wise," Sterling said.

The shipping industry's climate ambitions are sailing into uncharted waters

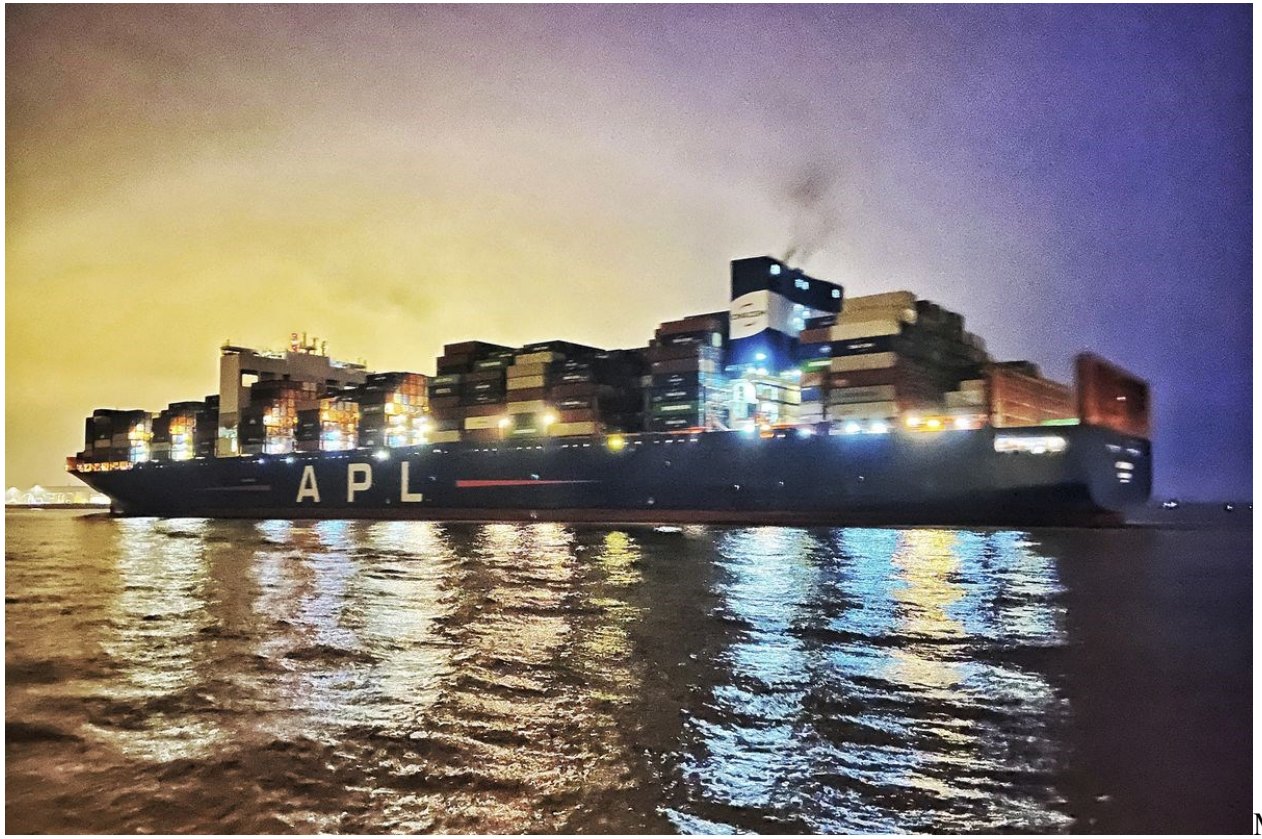
The challenge for all of these technologies is that they are in their infancy, so not only do they need to improve drastically, they also need to scale up and drop in cost. For clean fuels, shipping companies are developing their fuel supply chains from scratch, and these have to be completely decarbonized, too. "The fuel is only part of the story," said ICCT's Comer.

Turnover is another concern. Container ships are designed to last decades, so even while cleaner ships set sail, their dirtier brethren will share shipping lanes with them unless older ships are phased out ahead of schedule.

Then there's the issue of money. It can be tough to convince some banks and investors to spend a lot of cash now on technologies that might not pan out. To help facilitate the transition to cleaner shipping, the IMO put together the Poseidon Principles. These are guidelines for financial institutions to ensure their product go toward shipping projects in line with the IMO target for cutting greenhouse gas emissions from the sector. To date, the principles have 27 signatories, accounting for half of global shipping finance. For its part, Maersk is financing some of its transition by selling $500 million worth of green bonds to investors.

And while some companies are moving ahead of regulations, others are stuck in the doldrums. "I'm not so worried about industry leaders like Maersk," Comer said. "I'm more concerned about how we are going to get bulk carriers and chemical tankers to zero

emissions.” These types of cargo ships are usually chartered rather than owned by a given company, and the charterer pays for the fuel, so they have little incentive to pay more to reduce their impact on the climate.



Methanol, ammonia, and hydrogen are alternatives to heavy fuel oil, which would help global shipping achieve zero emissions. *Soeren Stache/picture alliance via Getty Images*

International climate regulations for shipping are also hard to ratchet up since they have to have buy-in from just about every country in the world.

All the while, international shipping ebbs and flows with the global economy as a whole. If there is massive growth in the coming decades, there will also be a surge in demand for shipping. If there's a downturn, even leading shipping firms will face pressure to cut their costs and pull away from their low-carbon targets.

Maersk's Sterling acknowledged that the effort to decarbonize could run aground. "I'm sure that there will be setbacks," he said. But by declaring its targets publicly and reporting their progress, Maersk hopes to hold itself accountable for its targets.

If the shipping industry does land on cleaner shores, though, it would solve one of the most difficult climate change problems. Other industries like trucking and aviation could then piggyback on the economies of scale of cleaner shipping fuels and curb their own emissions. From there, the world can chart a better course toward a cleaner future.

MAJOR ACTORS IN THE CASE:

Maersk

(Other) Large Shipping Companies (like Maersk and Hagen-Lloyd**)**

Small Shipping Companies

International Maritime Organization (IMO)

Big Customers (e.g., Amazon, IKEA and Unilever)

Banks (including Citigroup Inc., Société Générale SA of France and DNB AS A of Norway**)**

Getting to Zero Coalition

Transport & Environment

United States

European Union/Commission (EU/C)

CASE QUESTIONS

1. **(4) Summarize the power situation Maersk and the ocean shippers, big or small, face in the case. Summarize key elements, leading to a concluding statement about position, positive or negative, of (a) Maersk and big shippers and (b) small shippers, i.e., a "summary" of your summary in power terms.) (maximum 150 words)**
2. **(3) Diagram your most likely scenario on how policy and decision-making regarding pollution from ocean shipping will unfold globally (without specific actions on the part of big shippers).**
3. **(1) What public policy model do you think will best describe how policy and decision-making regarding ocean shipping will be made in the European Commission**
   (maximum 30 words)

4. **(5) Referencing where appropriate your foregoing answers, is there a viable strategy for (a) (3) (2) Maersk and the big shippers, and (b) the small shippers to survive if there is major legislation in the EU requiring them to abandon bunker fuels and shift to green energy sources? If yes, explain. If not, explain why not. (maximum 80 words for each)**
5. **(2) Create a supporting argument for each of the following assertions Pay attention to the underlined phrase.:**
   a. (1) that Maersk has moved to the "sustainability" stage, including incorporating "triple bottom line" thinking, and has moved no further, i.e., is not yet at the "creating shared value" stage.
   b. (1) that the Maersk has now reached the "creating shared value" stage in its development (meaning it is creating "shared value" for all of its potential stakeholders.)
   (maximum 30 words for each)

   NOTE: You will need to revisit the definitions for each of these stages in Module 4 to make your judgments. The easiest way to approach this question is to develop your criteria for each stage and then read through the case seeking supporting evidence that the company is at that stage.)
   (maximum length: 30 words for each)

Appendix A. EU strategy to reduce CO_2 emissions from shipping

https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=LEGISSUM:20010301_1&from=EN

The European Union (EU) has an ambitious agenda to tackle climate change. Up until now, every form of transport, except the international maritime sector, has been contributing to the objectives the EU has set itself. Moves are now under way for shipping to start playing its part.

ACT

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Integrating maritime transport emissions in the EU's greenhouse gas reduction policies (COM(2013) 479 final of 28.6.2013).

SUMMARY

WHAT DOES THE COMMUNICATION DO?

The EU makes it clear that it fully supports international efforts to reduce maritime greenhouse gas (GHG) emissions. In parallel, the EU is taking its own initiatives. The communication sets out a gradual approach for including shipping in its overall target to reduce GHG emissions.

KEY POINTS

This gradual approach contains the following three steps.

- 1.

Applying an effective monitoring, reporting and verification (MRV) system. This would establish reliable data on shipping's GHG emissions. Ship-owners would be able to use whichever reliable methodology they wished. A proposed regulation sets out the scope and operational features of such a system.

- 2.

  Setting intermediary reduction targets. Legislation already exists for all other industrial sectors and forms of transport to contribute to the EU's target of cutting GHG emissions by at least 40 % below 1990 levels by 2030. This could be extended to shipping. The 2011 White Paper on transport established a reduction target of 40 % (if feasible, 50 %) by 2050, compared to 2005, as an aspirational goal for maritime shipping.

- 3.

  Using market-based measures (MBMs). These could require a vessel to pay into a compensation fund or to exchange allowances within the EU's emissions trading system, depending on the level of emissions it produces.

BACKGROUND

EU shipping accounts for 4 % of all EU GHG emissions. However, these are set to increase significantly in the future - possibly by 50 % by 2050, compared to 2010 levels. Reducing these emissions will not only help tackle climate change, but it will also reduce fuel consumption and a vessel's operating costs.

For more information, see the European Commission's website on reducing emissions from the shipping sector.

RELATED ACT

Proposal for a Regulation of the European Parliament and of the Council on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport and amending Regulation (EU) No 525/2013 (COM(2013) 480 final of 28.6.2013).

Appendix B. EU's supposedly 'green' shipping law will lock in fossil fuels

https://www.transportenvironment.org/press/leaked-eu%E2%80%99s-supposedly-%E2%80%98green%E2%80%99-shipping-law-will-lock-fossil-fuels

Transport & Environment is an NGO focused on all forms of transportation.

According to **Transport & Environment (T&E) a**n EU law intended to drive the uptake of clean fuels by ships will actually lock in the use of fossil fuels for decades, according to a leaked proposal, making the European Green Deal goal of decarbonisation by 2050 impossible. **Transport & Environment (T&E)**, which obtained the documents, said the European Commission could still fix the law by excluding liquified natural gas (LNG) and crop-based biofuels and providing incentives for green e-fuels like renewable hydrogen and ammonia.

More than half (55%) of the energy used by ships calling at EU ports could be LNG and biofuels by 2035, according to T&E's analysis of the proposal's 'climate' targets. This is despite LNG offering minimal emissions reductions and releasing methane - a global warming gas up to 36 times more potent than CO2. Most biofuels are worse for the climate than the fuels they replace, and those that do offer emissions savings are not available at scale.

Faig Abbasov, shipping programme director at T&E, said: *"This supposedly green fuels law would push the cheapest alternatives, which are also the most destructive. Counting fossil gas and biofuels as green will lock shipping into decades of further pollution while we should be promoting renewable hydrogen and ammonia. There's still time to kick out fossil fuels and stop the European Green Deal turning shipping's transition into an ecological disaster."*

Biofuels would provide one-fifth of the fuel of ships calling at EU ports in 2035, according to the analysis of the draft law. If all of it comes from used cooking oil (UCO), this would drive up demand by EU transport for UCO by an additional 5.1 Mt in 2030, further increasing the gap with what can be supplied sustainably to Europe. The EU's own auditors have raised concerns about imports of UCO because of inadequate systems to stop virgin oils like palm, which drive deforestation, being passed off as used.

Faig Abbasov said: *"It's not too late to save the world's first green shipping fuel mandate. The EU Commission should exclude LNG, crop biofuels and, at a minimum, apply the same sustainability criteria for waste biofuels as under the Renewable Energy Directive.*

There also needs to be incentives for the uptake of e-fuels, green hydrogen and ammonia, such as dedicated sub-targets or multipliers to boost their competitiveness."

Smaller Shipowners want 'polluter pays' principle at core of carbon pricing proposal

The **European Commission** is revising the European Union Emissions Trading Scheme (EU ETS) directive in line with the European Green Deal and it plans for the first time to include international maritime emissions.

Small Greek, Italian and Swedish shipowners, along with **T&E**, have put their weight behind calls for the **European Commission** to put the 'polluter pays principle' at the core of its maritime carbon pricing proposal. In a letter to the **Commission**, the coalition demands that the soon to be introduced maritime ***Emissions Trading System (ETS)*** is both ambitious and tailor-made for the industry.

The current European Union ***Emissions Trading Scheme (EU ETS)*** - puts a cap on the carbon dioxide (CO2) emitted by business and creates a market and price for carbon allowances. It covers 45% of EU emissions, including energy intensive sectors and approximately 12,000 installations.

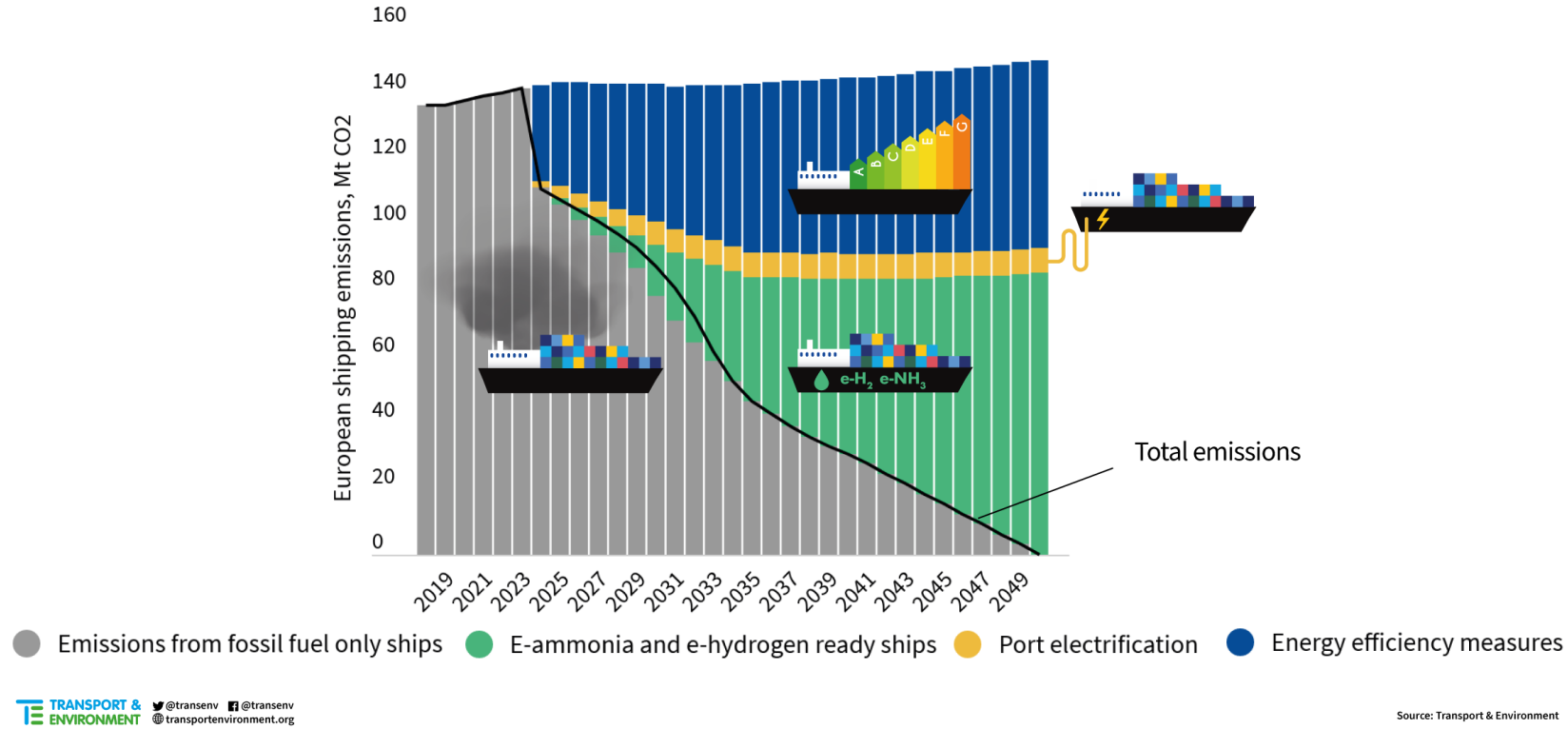
The coalition launched by T&E has grown steadily, encompassing a wide range of shipping interests from progressive to more traditional. What they all have in common, says T&E, is the desire for carbon pricing rules that are clear, fair and crafted in such a way that is both good for the planet and does not undermine the smooth running of international shipping.

Faig Abbasov, shipping director at T&E, said: "*This is a chance to put shipping on a path to decarbonisation. Our unique industry-NGO coalition underlines how important it is that the EU doesn't waste it. The ETS should not be limited to voyages within the EU but also cover voyages between the EU and third countries. An intra-EU only ETS would reduce the environmental effectiveness of the measure and place the burden unfairly on short-sea shipping companies."*

Beyond scope, the coalition has also asked the Commission to rule out free emission allowances to avoid punishing **smaller companies** that have less capacity to take advantage of the system. This, they say, would ensure both environmental effectiveness and a level-playing field. They also back the European Parliament's proposal of establishing an "Ocean Fund" which will channel ETS revenue into research and development and the deployment of green fuels, among other things.

This comes as a new report shows that deploying enough e-fuels to account for 7% of shipping fuel by 2030 would put EU shipping on track to decarbonise by mid-century. Modelling by T&E points to a clear path which involves modest deployments of e-fuels combined with efficiency measures such as wind-assist and speed optimisation.

7% e-fuels by 2030 would kickstart the decarbonisation of EU shipping



TRANSPORT & ENVIRONMENT @transenv @transenv transportenvironment.org

Source: Transport & Environment

Faig Abbasov added: “We have shown that decarbonising shipping is doable. But the uptake of green fuels like e-ammonia won’t happen unless shipping companies are required to deploy them. As well as an ambitious ETS, the EU should mandate 7% e-fuels by 2030 as part of the forthcoming FuelEU maritime legislation.”

Appendix C. U.S. Regulation Air Pollution from Shipping Pollution

Oceana Petitions the U.S. Government

Working with **Earthjustice, Friends of the Earth and the Center for Biological Diversity**, the NGO **Oceana** (www.oceana.org) petitioned the **U.S. Environmental Protection Agency (USEPA)** to regulate shipping emissions in October 2007. The EPA did not respond so in July 2008 Oceana, along with the coalition of environmental groups and attorneys general from various states, filed a letter warning the **USEPA** of impeding litigation if it does not respond to the petition.

Oceana made the following recommendations to reduce global ship emissions:

- Shipping fleets should implement technical and operational measures to reduce global warming pollution immediately. Such measures include speed reductions, weather routing, fuel switching and specialized hull coatings.

- Fleets should begin to implement longer-term measures to reduce global warming pollution, such as fuel-efficient design of new ships and engines created specifically for slow steaming.

- The IMO should set international emission standards to reduce global warming pollutants from the shipping industry.

In subsequent years, Oceana has mmade its main focus the heath of the coeans, not the pollution from maritime shipping.

In 2021, the advocacy for US government action to reduce maritime air pollution was taken up by an NGO coalition, **Shipitzero.com**, led by a Seattle-base NGO, **STAND.earth**(STAND.earth.org).

Clydebankdeclaration

Biden’s First Mover Coalition

https://europe.oceana.org/en/shipping-pollution-1