



UPWIND SHIPPING HOLDINGS LTD

Upwind Shipping Holdings Ltd

Social Stock Exchange Impact Report Year 1

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UPWIND SHIPPING HOLDINGS LTD
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Table of Contents

1. CEO Overview	3
2. Social Purpose and Context	5
3. Who Benefits	12
4. Activities and Operations	14
5. Stakeholders	17
6. Evidencing Social Value	21
7. Risks/Opportunities Analysis, Externalities & Other Issues	24

1. CEO Overview

Upwind Shipping Holdings (USH) operates at the vanguard of environmentally-conscious dry bulk shipping. We are seeking investment to build a world-class, clean fleet that will capitalise on an inevitable supply-and-demand gap in dry bulk ships. This will deliver both financial and social value to stakeholders in the global dry bulk shipping market.

a. Organisational Summary

How shipping has to change

Shipping has historically been a dirty business and recent economic pressures have only made this worse. The downturn in shipping post-2008 led to companies sacrificing environmental responsibility in order to maximise profits. But the global dry bulk shipping industry is now at a crossroads. Imminent environmental regulations will encourage a global market shift away from environmentally harmful cost-cutting practices and create a supply-and-demand gap for cleaner ships.

The global shipping industry has three significant environmental impacts: contribution to climate change, air pollution and harm to marine life. According to the UN's International Maritime Organization, shipping contributes 3.1% of global CO2 emissions annually. That's more than Germany.

Shipping Fuel Oil – known as bunker fuel – can have a sulfur content as much as 3,500 times diesel in cars. This sees shipping contribute 15% of global sulfur dioxide (SOx) emissions and 13% of Nitrogen oxides (NOx) emissions. And the high particulate matter in the fuel is a further concern. This air pollution is linked with a number of health concerns including asthma, lung disease and premature death.

Finally, underwater ecosystems and marine life are impacted through poor marine management practices that see ships carry and release non-native species into new waters, adversely affecting local biodiversity and marine health. All of these issues are subject to new IMO regulations or voluntary programmes that will necessitate a step-change in the environmental performance of cargo vessels.

How Upwind can build value for all stakeholders

Based in Greece, USH is a commercial shipping company seeking to lead the way in responding to these environmental drivers. We seek investment to acquire, design and operate a 'clean' fleet to serve the global dry bulk shipping industry.

The USH fleet will be specifically optimised to limit environmental impact. USH ships will adhere to the latest International Maritime Organisation (IMO) regulations and operate with greater efficiency. The resulting clean fleet will be more attractive to charter, as it will help our clients both reduce costs, meet these higher environmental standards and reduce shipping's adverse impacts.

We have an existing customer relationship with Empros Lines Shipping Co., Sp. S.A. (Empros), who will be our affiliate management company for vessels management and the period charters of the dry bulk assets for the majority of our ships. This partnership will see our ships service liner routes throughout Europe, the Middle East, and North Africa.

USH was founded in 2018 by Alex Romanos, Dimitris Katsiklis, Nicolas Giampouranis, and George Logothetis. Together, the founders offer unique and varied expertise in shipping, running dry docks, marine management and finance.

b. Commitment to Social and Environmental Value

We want to invest in a fleet that will set new benchmarks for environmentally friendly shipping. In so doing, we will deliver emissions reductions and more responsible marine management to our customers, and all stakeholders along the value chain.

We intend to implement robust data gathering systems to calculate and report on the environmental benefits of our approach to our stakeholders. It is our ambition to engage stakeholders to better understand how we might improve our operations and increase the social and environmental value we offer. That engagement will also focus on how we might improve the performance data we gather and publish.

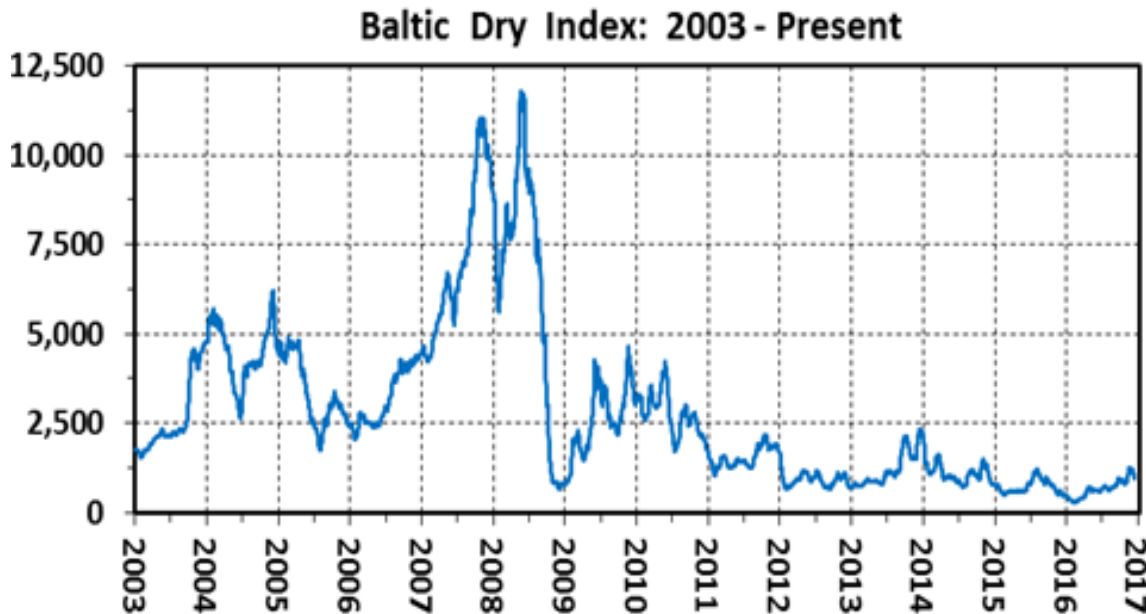
We encourage investors to review this Impact Report and treat it as an overview of the impact USH plans to deliver. Should investors require more details or should this report spark further interest, please do get in contact with us.

Alexander Romanos, CEO
Upwind Shipping Holdings Ltd

2. Social Purpose and Context

Post-2008 Shipping Crisis

The dry bulk market peaked in May 2008 when the Baltic Dry Index (BDI) reached 11,793 points, followed by a decline (overcorrection) within the same year to 668 points. The market since then has been following its historical average cycles but over-contracting has managed to limit the expansion of the market twice, first in 2012 and second in 2016, which saw the BDI at an all-time low of 290 points.



The main reasons for the inability of the market to stabilize during the peaks of 2010 and 2014 were:

- The state of the world economy post-2008 credit crunch which resulted in reduced global trade demand
- Easy access to capital due to extreme over-liquidity
- Over-contracting resulting in abnormally high orderbooks.

Sparked by the 2008 economic crisis, the post-2008 shipping crisis has prompted shipping companies to become extremely cost-efficient to maximize profits in a declining market. These cost-cutting measures have led to negative social and environmental externalities.

Social and environmental externalities

The externalities caused by shipping cost cutting practices are many and varied. Two of the most prevalent practices and crucial concerns are the **increased emissions caused by the widespread use of low quality fuels** and the **introduction of non-native species into existing habitats due to the refusal to install Ballast Water Treatment Systems (BWTS) on ships.**

Shipping companies have turned to lower quality and cheaper fuels whenever they can to manage the risk of a reduced bottom line. Using these lower quality fuels instead of

modernizing engines to reduce consumption means that these ships contribute to climate change and air pollution. According to the IMO, shipping contributes 3.1% of all global CO₂ emissions. If shipping were a country, that would place it above Germany in sixth place on a list of greenhouse gas emitters.

Limiting climate change to less than 2 degrees Celsius of warming over pre-industrial levels (ideally 1.5 degrees Celsius) is seen as a global priority. Climate change is one of the 17 United Nations Sustainable Development Goals (SDGs) – a list of global priorities to be addressed by governments, civil society, industry and consumers across the world. With its share of overall CO₂ emissions, shipping has the potential to make a significant contribution to meeting these globally agreed targets.

Shipping diesel can have a sulfur content as much as 3,500 times diesel in cars. Shipping contribute 15% of global sulfur dioxide (SO_x) emissions and 13% of Nitrogen oxides (NO_x) emissions. These lead to smog and ozone, adversely affecting air quality, posing risks to people near shipping lanes and docks. High particulate matter in the fuel poses an additional health risk, particularly to people with asthma or other underlying respiratory challenges. This air pollution is linked with a number of health concerns including asthma, lung disease and premature death.

A 2009 study¹ found that ocean-going commercial vessels accounted for half as much air pollution as all the world's cars and led to 60,000 premature deaths a year.

At the same time, the majority of shipping companies have also opted to delay the installation of a BWTS for as long as possible, instead lobbying for an extension that would postpone the cost of retrofitting such a unit. A BWTS is crucial to treating ballast water to prevent the introduction of non-native, invasive species to existing marine habitats. Invasive species are a threat to environmental sustainability as they often force our native species, destabilizing habitats and threatening biodiversity. These issues have knock-on effects for the food chain, ecosystems, and other marine-dependent GDP-producing activities such as tourism.

IMO regulations

New IMO regulations will force existing vessels to upgrade or to be decommissioned.

MARPOL Annex VI requires that ships limit NO_x and SO_x emissions arising from the use of low quality fuels and inefficient engines.

Regulation 13 of MARPOL Annex VI states allowable NO_x emissions for Tier I, II and III engines.

¹ National Oceanic and Atmospheric Administration (NOAA), cited in the Guardian 31 March 2009: <https://www.theguardian.com/environment/2009/mar/31/noaa-pollution-florida-freighters-tankers-cruise-ships>

Tier	Date	NOx Limit, g/kWh		
		n < 130	130 ≤ n < 2000	n ≥ 2000
Tier I	2000	17.0	$45 \cdot n^{-0.2}$	9.8
Tier II	2011	14.4	$44 \cdot n^{-0.23}$	7.7
Tier III	2016†	3.4	$9 \cdot n^{-0.2}$	1.96

† In NOx Emission Control Areas (Tier II standards apply outside ECAs).

Annex VI also states the allowable sulphur content of fuel oil, which subsequently limits sulphur and particulate emissions.

Date	Sulfur Limit In Fuel (% m/m)	
	SOx ECA	Global
2000	1.5%	4.5%
2010.07	1.0%	
2012		3.5%
2015	0.1%	
2020		0.5%

These IMO emissions regulations for SOx and NOx will come into effect in January 2020.

To comply with the SOx limits, ships will need to use cleaner fuels with low sulfur content. To comply with the NOx limits, ships will need to undergo costly retrofits while older vessels will require a combination of solutions. The cost for each vessel will be around 2-3 million USD, thus driving vessels as young as 20 years old out of the shipping market.

The Ballast Water Management Convention (BWM Convention) requires that ships prevent the release of harmful aquatic organisms and pathogens into new environments. It is made up of two standards:

The D-1 standard requires ships to exchange ballast water deep into the ocean, where it is less likely that harmful species will survive and pose a threat to existing habitats. All ships must meet this standard.

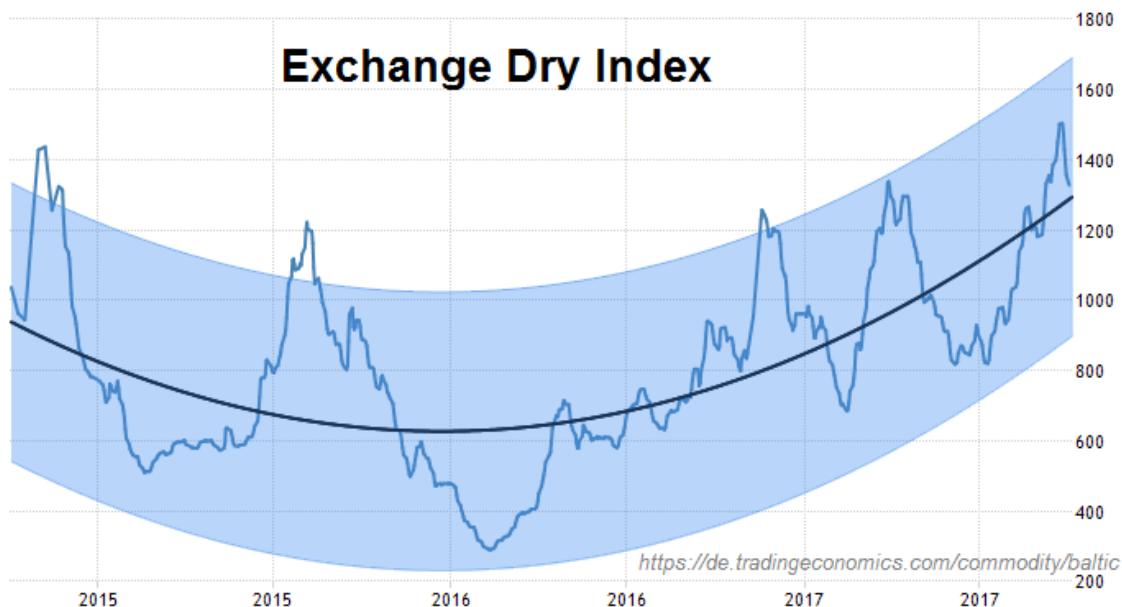
The D-2 standard limits the amount of organisms a ship can discharge through its ballast water. This often requires the installation of equipment to treat ballast water. New ships must meet this standard, and all ships will need to comply in future.

These regulations will come into effect in 2019. Again, rather than bearing the cost of installing a BWTS to comply with these incoming regulations, vessels older than 20 years will likely be decommissioned and recycled.

Between both regulations a conservative estimate is that at least 10% of the global fleet will go to recycling within the next 3-4 years.

The change we seek...

Since the market bottomed out in 2016, we have witnessed a cautious expansion, resulting in steadily higher freight rates. The gradual increase has been due to a combination of factors. The level of scrapping activity in 2016 and 2017 and a high percentage of laid-up ships has coincided with increased demand for dry bulk transportation, especially from emerging economies.



It is our vision to harness the ongoing market expansion of the dry bulk shipping market and coincident IMO regulations and subsequent high levels of scrapping to catalyse a shift towards a sustainable global dry bulk shipping industry. With the fuel savings and increased margins, our fleet will inevitably attract higher freight rates.

We hope our approach will serve as a blueprint for other shipping companies and catalyse a cleaner shipping industry.

a. Current Management

Leading the change

We wholeheartedly believe that by investing a small portion of the vessels' income to keep up with new technologies we can run a socially just and environmentally friendly shipping company.

Our Board and executive team are responsible and will be held accountable for delivering on our vision. The USH Board will meet weekly and monthly there is a review of each vessel's operational expenditure, including fuel consumption measures. We are therefore in a position to assess CO2 and Sox and Nox emissions and hence keep under review our social and environmental performance each month.

USH's executive team is equipped with the experience and expertise required to target and close the supply and demand gap of dry bulk ships while navigating the transition to cleaner shipping fleets.

Mr. George Logothetis (C.O.O) has a long family tradition in shipping. For the last sixty his family has run Empros Lines Shipping. A 10-year seafarer career ending with a 2nd officer certification onboard bulk carriers offers practical experience to the USH executive team.

Mr. Dimitrios Katsiklis has extensive experience in corporate finance and investor relations as well as insurance – a key element in daily vessel operating expenditure. He has successfully deployed projects in South East Asia and set up shipping businesses in Northern Greece.

Mr. Alexander Romanos has a family tradition in shipping and a background in commercial operations through his experience working for Consolidated Marine Management. He has extensive experience in ship repairs and ship outfitting and has been leading the management team of Greece's third largest shipyard.

Mr. Nicholas Yambouranis has worked extensively in industry in positions with various shipping companies, helping him accumulate an insider's knowledge of the market and acquire a wide range of connections with key figures in the global shipping industry. He is the co-author of the first, in-depth textbook on shipping strategy.

The Board and executive team will be supported by two separate committees: an Environmental Performance committee and a Corporate Social Responsibility Committee. Our Environmental Performance committee will review environmental and social impact policies, review data collected by the vessels and propose changes. The committee will convene on a monthly basis.

The Corporate Social Responsibility committee's main goal is to propose actions to be financed by the company's net profits, in order to further improve the environmental and social impact of Upwind. The Corporate Social Responsibility committee will convene semi-annually.

b. Mission Statement and Activities

USH endeavours to set new standards in seaborne trade, exceeding the safety, social, environmental and quality benchmarks of the industry and its customers. We strive to become the both the benchmark and model of clean shipping and ship management.

We will achieve this by acquiring, designing and operating a boutique bulk-carrier shipping fleet that employs the latest technology to meet the latest IMO regulations and protect the environment, human health and the vessels in operation.

Our Values

Underscoring our strategy for sustainability, our core values act as a compass, guiding us in how we behave every day in order to deliver a sustainable shipping solution with reduced environmental and social impact.

Our Core values are:

Entrepreneurship

- We are dynamic, rigorous, agile and assertive in our everyday work and decision-making

Openness

- We promote honesty, transparency, integrity and ethos, as well as willingness to listen, learn and develop one's self.

Initiative

- We encourage new ideas, creativity and innovative approaches to continuously improve our services and our way of working
- We engage in continuous research with our employees on matters of environmental and social impact
- We encourage "out-of-the-box" ideas and opinions for to improve the company and its footprint.

Teamwork

- We appreciate every individual's contribution
- We work as one team to meet our goals and objectives
- We facilitate the flow of information vertically and horizontally within the company to better understand and tackle every-day hurdles
- We strive to develop trusting relationships.

Excellence

- We promote a continuous improvement culture
- We set our standards to be best-in-class in all our actions
- We approach every challenge positively and professionally.

Integrity

- Be honest in our actions.
- Honour our commitments and deliver on our promises.
- Be prudent and responsible custodians of the environment.
- CSR philosophy hard-coded to all of the founding members.

Endeavour

- We are original and show initiative
- We commit wholeheartedly to our goals and objectives to create a green sustainable shipping company

- We always go the extra mile, as individuals, for the Company, for our customers and the environment.

Continuity

- We are forward-looking and take a long-term view.
- We are proactive and transparent on sustainable development issues.
- We embrace change and recognize that there will be constant challenges ahead.

3. Who Benefits

USH will operate a clean dry bulk shipping fleet that deploys environmentally friendly equipment and practices. Together, these initiatives will help USH to produce fewer emissions than market alternatives while also preserving marine health and biodiversity.

There are three key prospective beneficiaries of USH's clean shipping fleet.

Beneficiary: Chartering companies

How we've engaged:

USH has long cooperated with some of the leading charterers and chartering brokers to gather their insights and better understand their needs.

The need:

- To charter Class A ships which meet the incoming BWM and MARPOL regulations outlined in the previous chapter, so as to legally sail those ships in international waters, pass through low emission zones such as the Panama Canal, and deliver goods around the globe.
- To charter ships which produce higher freight rates through reduced fuel consumption.

The outcomes:

USH has designed a focused strategy and "niche" boutique marketing based on these insights and needs, to encourage chartering companies to make USH their preferred global sea transportation provider.

Each USH ship will possess an eco-designed engine and BWTS in order to align with incoming IMO regulations.

USH ships will boast more efficient engines as well as other fuel-saving features such as lighting retrofits and new technology paints.

Beneficiary: Marine life

The need:

- To encourage health of underwater ecosystems
- To preserve biodiversity by stopping the release of non-native species into marine habitats.

How we've engaged:

Our team has conducted research on issues raised by the US Environmental Protection Agency (US EPA) and IMO such as the Ballast Water treatment and carbon emissions reduction.

The USH team has also reviewed reports produced by major environmental groups (WWF, ClearSeas, Greenpeace etc.) to pre-emptively develop and implement solutions to the problems stated, whether or not the issues have been raised by the US EPA or IMO.

In so doing, USH is circumventing the time lag between the voiced opinion of an environmental group becoming a ratified regulation by the IMO and other agencies.

The outcome:

All of our vessels are to be equipped already or fitted with a BWTS in order to meet the BWM regulation and prevent the release of non-native species into existing habitats.

USH ships will be re-coated with new technology paints that do not contain chemical herbicides to avoid marine growth.

Beneficiary: People in the cities where our ships dock

The need:

- To reduce the large amounts of SO_x, PM and NO_x that are typically emitted with traditional shipping, so as to protect against cardiovascular disease and improve human health.

How we've engaged:

Through engaging with academics and environmental NGOs, we understand that the shipping industry contributes to poor air quality in major port cities. The people who live near dock areas who are most adversely affected typically have no agency to influence the quality of the air they breathe.

The outcome:

- We will choose younger vessels with engines that comply with the incoming emissions standards
- Where appropriate, we will install an exhaust scrubber to reduce SO_x/NO_x emitted levels to well below acceptable levels.
- Through technical modifications and introducing environmentally friendly working practices, we will significantly reduce emissions and improve the overall environmental and social impact of our ships during stays in port.

4. Activities and Operations

The USH fleet will deliver outcomes to our beneficiaries through a variety of practices. Below we outline the outcome for each beneficiary, the practices USH will follow to produce that outcome, and how we will measure and value each outcome.

Outcomes for chartering companies 1

The benefit

The main benefit USH will deliver to our chartering companies is substantial fuel savings and subsequently higher freight rates they will enjoy when chartering our vessels.:

Activities

We will accomplish this through running ships with low-emissions engines and additional measures to reduce fuel use.

The two biggest contributors to fuel savings are the G-Type engines that USH vessels will be outfitted with, and the superior hydrodynamic hull designs of USH ships. Together, these features result in about 25% increased fuel efficiency, or about eight tons per day, when compared to a conventional vessel. This corresponds to savings of about \$4,000 per vessel, per day.

All USH vessels will also be painted with new technology, super-slippery paints, producing a further 2% in fuel savings.

Efficient LED lighting will be installed on all ships and will offer almost a 1% reduction in diesel consumption. Additional simple and complex modifications which we have learnt from our experience retrofitting and trouble-shooting ships in the past, will further reduce fuel consumption by up to 4%.

Measuring outcomes

We will evaluate this outcome by measuring 1) tons of fuel used / ton cargo carried, 2) litres of fuel saved by chartering company as compared to baseline estimate of market alternative, and 3) total fuel cost saving.

Valuing outcomes

USH will value this outcome based on the actual cost savings our vessels produce for chartering companies.

Outcomes for chartering companies 2

The benefit

A secondary benefit to our chartering companies is the lower embodied carbon footprint of the goods which they deliver. These benefits are passed on to the consumer.

Activities

The features listed in the above fuel-saving activity will produce emissions savings for our chartering companies by reducing fuel consumption.

Measuring outcomes

We will measure the emissions savings to chartering companies by evaluating Co2e (Co2 equivalent) per ton of cargo shipped.

Valuing outcomes

We will value this outcome by looking at a decrease in CO2e emissions per ton of cargo shipped compared with an average for the shipping industry. We will be exploring how we can extrapolate this outcome to evaluate the total embodied carbon in the final product that is delivered to the eventual customer. To do this we will be working with our chartering company clients to understand the contribution our ships have made to total carbon reductions.

Outcome for marine life

The benefit

The single greatest benefit USH will provide to marine life is a reduced risk of harm to marine health and biodiversity.

Activities

All USH vessels will be outfitted with a Ballast Water Treatment System. The BWTS eliminates all organisms that come in to the water tanks so when the ballast water is discharged, it does not introduce non-native species into the local marine environment.

Measuring outcomes

We will conduct regular testing to ensure each USH vessel's BWTS continues to deliver the desired result. We intend to test the quality of the water with a chemical agent and with reference to the BWTS manufacturer's guidelines, measure the chlorine level to ensure it is at the right level.

Valuing outcomes

USH is looking at how we might value the improved marine health and biodiversity in the future. We are sensitive to the myriad causes of harm to marine health and biodiversity, one of which is shipping. Proving causality is the challenge, but we intend to work with regulators and other parties to assess the contribution our ships make to addressing this challenge.

Outcome for human populations near ports

The benefit

USH vessels will reduce SOx, PM and NOx emissions released in and around the ports where the vessels pass through and dock. A reduction in these emissions will subsequently help to improve the human health of the people living near the ports.

Activities

Where appropriate, we will install an exhaust scrubber in order to reduce SOx, PM and NOx emissions well below acceptable levels. Currently the lowest allowable levels are in Emission Controlled Areas (ECAs) – populated areas such as the Mediterranean, Baltic Sea and Atlantic Coast of North America. The limit on sulfur in fuel in ECAs is 0.1% sulfur in fuel oil. All our ships will meet this limit.

USH vessels will also use either of the following options to reduce NOx emissions arising from the vessel's operations:

Selective Catalytic Reduction scrubber converts NOx into diatomic nitrogen and water with the aid of a catalyst. This is often used for the main engine. This technology is applied through the injection of ammonia in the exhaust gas at very high temperatures. The main engine does not need any further changes in order to apply the eco-friendly SCR technology. It reduces NOx emissions by between 78-90%.

Exhaust gas system recirculation is another technique which further reduces the emissions of NOx. This is usually used in the diesel generators which produce electricity for the vessel. The EGR works by recirculating a portion of an engine's exhaust gas back to the main engine to recycle energy. It reduces NOx emissions by between 80-85%.

Measuring outcomes

We will measure outcomes by evaluating indicators including: 1) SOx/ton of cargo shipped, 2) NOx/ton of cargo shipped. We will extrapolate these figures from the fuel use calculations.

Valuing outcomes

We will value the outcomes of our Sox and NOx reduction strategies by 1) valuing the cost of emission offsets or costs of penalties against chartering companies, 2) financial value of calculating fuel savings.

5. Stakeholders

Upwind Shipping Holdings involves a range of stakeholders – people or organisations that could be affected by, or affect, our activities. Close cooperation with these stakeholders is vital: excellent, synergistic and win-win stakeholder relationships provide the backbone for the successful deployment of our team's strategy.

With our business in its formative stages, we recognize we have further to go to develop the range of processes we use to engage our stakeholders and the depth of our engagements.

Chartering Companies

Chartering companies are the most important commercial stakeholders for USH as they will provide the earnings of the company through transporting their cargoes. They will also be responsible for conducting day-to-day operations in an environmentally sustainable way. They are absolutely essential in delivering the change USH seeks to make in the dry bulk shipping industry.

The company's founding members have worked with leading charterers and chartering brokers both domestically and internationally for many years. As a result, they have built strong relationships with some of the biggest names in the shipping industry.

Looking forward USH aims to establish relationships with "Triple A" charterers who:

- Are more environmentally consciousness
- Have strong CSR philosophies
- Require that transporters meet stricter environmental requirements.

Feedback from our regular one-to-one conversations with chartering companies has directly informed the development of our business plan. We expect that our ongoing engagement will help us learn and adapt our practices, policies and processes and enhance our positive impacts. We will keep under review whether we will add group discussions to our one-to-one meetings.

Investors

Potential USH investors will provide the funds required to launch a USH fleet and their needs and desires are a primary focal point for USH.

We have conducted a number of one-to-one meetings with potential investors. During these engagements we have found a strong appetite to participate in the project and the prospective returns of a shipping venture. We have learnt in these meetings that investor motivations, levels of understanding of the shipping industry, and environmental awareness vary. These factors are direct determinants of the success of the investment and project, and thus our ability to catalyse a shift to improved sustainability in dry-bulk shipping.

We have therefore identified a need to provide clarity around our motivations and secure investment from those who are aligned with our social and environmental ambitions. We must also educate investors on the shipping industry, as well as provide greater insight into how the industry can become more sustainable.

Through our listing with the Social Stock Exchange, we hope to meet impact investors.

Business Partners

Empros Lines Shipping Co. is an affiliate company of USH and the company's most important partner. They will undertake the technical management of the USH fleet, including optimizing the operational costs of our fleet. Empros Lines will also provide a source of secured, long-term revenue for USH as 20-30% of the USH fleet will transport cargoes owned by Empros Lines. The affiliation will provide USH the unique opportunity to collaborate with VShips which is staffed by Empros Lines in Greece. Empros Lines therefore plays a key role in producing the cost savings, stable income, and scale that USH requires to change the way shipping is conducted at a significant scale.

Reliable data on all sides of the business is one of the benefits of our affiliate relationship. This includes precise fuel use data which will be a key tool in accurately assessing our environmental performance.

USH's Chief Operating Officer's family business is Empros Lines. This relationship has been key to developing the strong collaborative partnership that will act as the foundation of all of USH's operations. Engagement with Empros Lines is ongoing and has been fundamental to the development of our business plan.

Looking forward, we will continue to engage Empros Lines in critical strategic conversations about advanced management policies, ship technology, market requirements and advanced shipping business practices. USH's partnership with Empros Lines will help us to learn and improve continuously into the future.

Regulators

Strict adherence to regulations and standards set out by the following regulators is essential to USH's success and eventual achievement of our vision for a sustainable shipping industry.

International Maritime Organization (IMO)

The IMO is the UN agency responsible for safety, the environment and security of maritime activities. It develops and updates maritime safety and pollution conventions and its regulations directly impact the ability of our fleet to sail.

Through both practical experience and research our management team has developed a detailed understanding of the rules and regulations stipulated by the IMO.

These learnings have guided the development of our business strategy and the prospective designs of our vessels.

Under USH's Code of Ethics, the company intends to work with the IMO to enhance, improve and contribute to the social and environmental standards set out in their regulations.

International Labour Organization (ILO):

The ILO is the principal authority responsible for governing people and living standards on board ships. The ILO develops and updates maritime HR conventions.

We have engaged with the ILO and their regulations to build a shipping company that provides constructive and creative experiences for crews under the best living standards.

We are committed to communicating USH's values and ensuring that each crew member understands and aligns with them. This will further encourage our crews to operate above ILO standards. Included in this is a commitment to provide ongoing education to raise the environmental awareness of our crews so that USH vessels operate sustainably.

Maritime States

A Flag State registers ships and enforces state laws which apply to ships. They are the primary legal authority governing activities onboard vessels. The flag state is responsible for regulating all aspects of the commercial and operational performance of vessels.

We have considered ratings of flag states to inform our fleet purchasing decisions. USH vessels will fly flags that are on the white list of the port state controls. As a result, our ships will have strict rules concerning certifications and safety aboard the vessel.

A Coastal State (Port State Control [PSC]) enforces laws on ships in coastal waters. Vessels are subject to laws of the coastal state in whose waters it is trading.

PSCs rate flag states based on a variety of Key Performance Indicators. Vessels that fly white listed flags are less likely to be targeted by port state controls. This eases the flow of commercial operations. For USH, passing each and every PSC inspection is a priority and will be treated as an indicator of the robustness of our policies and company rules.

We aim to engage each Coastal State we operate in to create and implement policies and frameworks which align with the majority of Port State regulations.

Classification Societies:

Classification Societies are the shipping industry's own system for regulating the technical and operational standards of ships. They make rules for ship construction and maintenance and issue classification certificates to reflect compliance. The

International Association of Classification Societies (IACS) act as intermediaries between the commercial shipping industry and governments, by submitting advisory documents to the IMO regarding the development and implementation of rules.

As part of our fleet purchasing criteria, we will be looking for vessels that are members of the strictest classification societies so that we know we are buying well maintained ships.

NGOs and Environmental groups

NGOs and environmental groups represent the interests of stakeholders who might otherwise be unable to represent themselves. As it pertains to USH these groups may advocate for improved air quality in port cities, improved marine health and biodiversity, and lower global shipping emissions. We take their concerns seriously because they are representative of the interests of wider civil society and if ignored we risk losing USH's license to operate.

We have consistently reviewed publications and opinions of NGOs and environmental groups and considered the views shared when adopting a business strategy that aims to deliver a more responsible shipping option.

Upwind increasingly seeks to identify and consult with non-financial stakeholders such as non-governmental organisations, trade unions and local community organisations, among others. Dialogue and direct involvement with this category of stakeholders will help us understand expectations and gather diverse views on social, economic and environmental dimensions of our business processes. This will enhance our appreciation of our social and environmental responsibilities and improve our risk management capacity and ability to innovate.

6. Evidencing Social Value

USH's management team seeks to set a benchmark for a cleaner shipping industry. To do this and to support the achievement of our mission, we must employ robust data gathering systems to gather meaningful data which illustrates the positive environmental impact of USH's innovative approaches.

a. Evidence

Beneficiary	Outcome	Indicator	Performance	Duration
Chartering Companies	Reduced fuel use leading to lower GHG emissions	Tons of fuel per ton carried		Totalled annually
		CO2e per ton carried		Totalled annually
	Adherence to IMO regulations	Average # of offences recorded/charged per vessel in fleet		Totalled annually
The Environment	Lower GHG emissions arising from cleaner vessels and responsible day-to-day operations	CO2e per mile travelled		Totalled annually
	Lower GHG emissions during port calling	CO2e per day docked		Totalled annually

	Fewer non-native organisms released into leading to improved marine health and preservation of biodiversity	Organisms per ton ballast water exchanged		Totalled annually
Populations In Cities Where We Dock	Reduced SOx and NOx leading to improved human health	Fuel use per ton of cargo carried (from which we extrapolate NOx and SOx levels)		Totalled annually

b. Current Management

As stipulated in our Code of Ethics, our daily noon reports will allow for strict record keeping on the daily consumptions of Fuel Oil, Lube Oil and Diesel Oil, among other. All measurements will be taken by hand with dipping and visual checks of the gauges.

The data collected in the noon reports will be extrapolated to gather relevant and insightful information about our environmental performance. For example, collecting Fuel Oil data will help us to calculate the SOx emitted from our vessels. The data received through noon reports will form the building blocks of our annual energy consumption reports. The data we gather through extrapolation will cover all indicators outlined in the table above and will form the basis of our annual impact reports.

USH will continuously and consistently update its practices and procedures through the environmental and social committee. The committee will:

- Convene on a monthly basis to review our recorded data
- Review data provided by stakeholders of the industry
- Propose changes to our existing management practices and procedures
- Introduce new policies that seek to improve our performance.
- Hold shipping operations staff accountable for the implementation of these changes

c. Future Plans

Over time, we will have a database large enough to crosscheck and verify the validity of each noon report. This will help us ensure the vessels operate in as environmentally friendly way as possible. The bigger data set allows us to gather more accurate fuel consumption figures.

Due to the nature of vessels, data gathering is pre-determined by the design of each vessel. Interventions introduced later in a vessel's life will yield distorted data. For example, sampling exhaust gases can only be done at the chimney. The gases exiting the chimney are not uniform in composition, thus incorrect readings are expected. However, the manufacturer of the chimney measures emissions when building the main engines and thus, shipping companies should gather their data from a specific equation provided by the manufacturer. The most reliable data is that from the manufacturer of the equipment and ship infrastructure, rather than the interventions introduced later in the vessel's life. It is USH's goal to change the equations given by the manufacturers, providing a benchmark whereby lower fuel input in an equation thus further lowers emissions.

The USH management team has decided that USH will enter the new-build market once we are efficiently operating as an environmentally-friendly and profitable fleet. The vessels ordered will have significant energy-saving capabilities and emissions reduction through LNG main engines. Completely redesigned sensor systems for data collection and state of the art automation and control systems are the only effective way to push the boundaries of data-gathering within the shipping industry.

In the meantime, we are also committed to exploring other methods and data-gathering tools, including a vessel's Voyage Data Recording (VDR) system. Currently our experience has shown that that VDRs are often unreliable showing higher or lower consumptions than actual.

7. Risks/Opportunities Analysis, Externalities & Other Issues

a. Risks/opportunities analysis

Regulatory risk

The incoming IMO regulations have guided the design and proposal of USH vessels. Since their proposal, the regulations have been subject to delays. There is a risk that the regulations will experience further delays.

While these regulations are a driver for the fleet USH proposes to assemble, the need for more environmentally responsible shipping exists nonetheless. USH's proposed fleet will deliver the same environmental and financial outcomes with or without the pressure of environmental regulations. Meanwhile it is extremely unlikely the regulations would be scrapped entirely, thus, acting on delayed regulations will serve to place USH further ahead of the curve.

In-company risk between vessels

USH will follow a single vessel company model to avoid any cross-risk between vessels. Each vessel is to be owned by a Special Project Vehicle (SPV) to ensure risks from one vessel's operations do not affect other aspects of the business. All SPVs are to be owned by Upwind Shipping Holdings LTD.

Insurance risk

All vessels and cargo in the shipping business are 100% insured against any risks. The company will have various operating insurance policies, including Hull and Machinery, War Risk insurance, Loss of Hire and Protection & Indemnity insurance. All insurance policies in shipping are mandatory for any sail, therefore, the totality of the investment is insured at any moment, for any cause.

Market risk

Market risk is another danger that shipping firms face. By running an environmentally friendly fleet we can maintain a lower-than-average operational expense profile. These reduced running costs mitigate the risks of a market downturn.

Economic/oil price risk

Marine fuel oil (MFO) constitutes around 40% of operational expenditure. During periods where crude oil prices rise, like in the summer of 2008 when Brent oscillated above 140USD/bbl, this percentage was much higher. We will therefore hedge bunker prices to protect our company from unexpected rising OPEX rates. We will make use of freight derivatives that are based on various freight indices to hedge against any freight rate fluctuations.

b. Negative externalities

Fewer emissions, not zero

USH endeavours to mitigate environmental impacts of its fleet and the global shipping industry. In part, this will be accomplished by burning cleaner fuels with cleaner engines, along with a variety of other fuel conservation practices.

USH ships will continue to burn fuel as the traditional shipping industry does. In turn, USH will continue to emit greenhouse gases as other market alternatives do. However, USH will produce fewer emissions and so deliver positive environmental benefits.

Fewer non-native organisms, not zero

Similarly, the Ballast Water Treatment Systems on each USH vessel will continue to release *some* non-native organisms into existing habitats. This is in line with IMO regulations which stipulate an allowable quantity of non-native organisms that may be released into existing habitats during ballast water exchange. Again, we will be releasing far less than market alternatives and so providing a positive benefit.