

AET Connects is an annual publication presented to our friends, customers, partners, colleagues and stakeholders around the world. It explains our business strategies, captures our operational highlights and achievements in 2021 and early 2022, and offers an insight into our multi-faceted efforts to create value for individuals, communities and the environment.

As a progressive and responsible organisation, AET is committed to leading the industry — not only as a safe and reliable global energy logistics solutions provider — but also as an advocate for sustainable shipping operations. To demonstrate our purpose, we have volunteered to make our Task Force for Climate-Related Financial Disclosures (TCFD) a part of AET Connects for the first time.

Our theme for this year, "Moving Energy to Build A Better World", is a reflection of the commitment to conduct business in a manner consistent with the United Nations Sustainable Development Goals (UNSDG). It also underscores AET's aspiration towards a net-zero future for the people and planet.

#### **NAVIGATION ICONS**

The following navigation icons are used throughout this report:

Our Six Capitals	Financial Capital	Physical Capital	Human Capital
	Intellectual Capital	Social and Relationship Capital	Natural Capital
Our Material Matters	Project and Financial Performance	Values and Governance	Skilled Workforce
	Climate Change	Customer Satisfaction	Risk Management
	Digitalisation and Innovation	Ocean Health	Diversity and Inclusion
	Business Knowledge and Expertise	Natural Resource Use	Health and Safety
	Employee Engagement		
Our Stakeholders	Regulatory Authorities	Shareholder	Customers
	Employees	Suppliers	Communities
	Business Partners	Financial Providers	Trade Associations





#### **OUR BRAND**

Our name, AET, is presented in lower case and scripted in italics to demonstrate our forward drive, innovation and ambition to deliver consistently better energy related maritime solutions and services. The deep blue tint on the lettering gradually fades across the name to show where the depth of the oceans meets the expanse of clear blue sky.

To the right of the lettering is the AET eagle soaring across the oceans of the world. Our eagle represents the strength, capabilities and global reach of our organisation.

Taken together, the AET logo encapsulates a forward moving, strong and global company that is proud of its heritage and knows in which direction its future lies.

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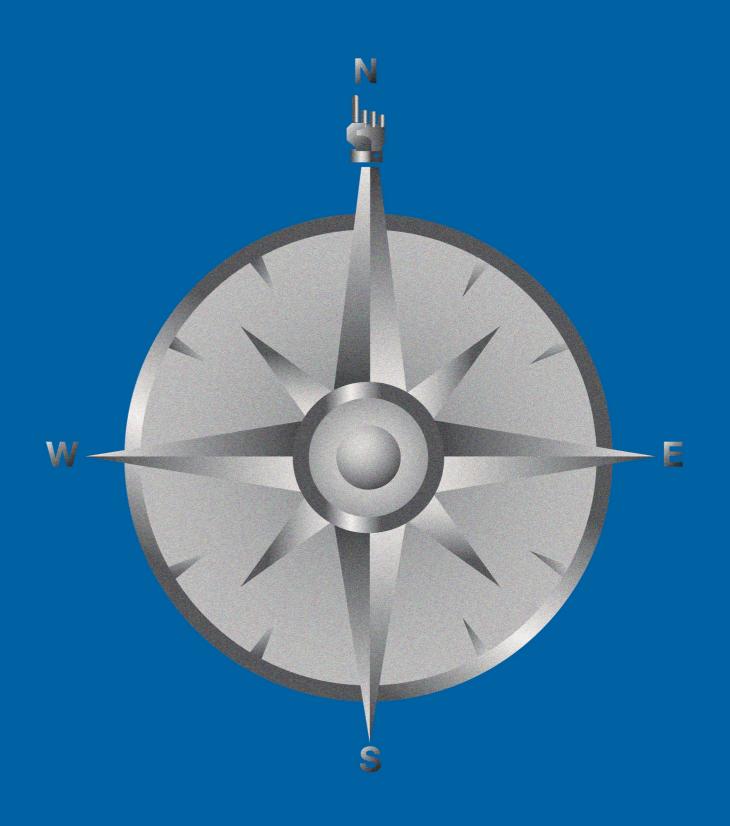


# INTRODUCTION

OUR JOURNEY
AET AT A GLANCE

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# **OUR JOURNEY**

#### **OUR MAIDEN VOYAGE (1994-2009)**

2007

Rebranded as AET

#### 1994

Founded as American Eagle Tankers with three vessels



American Eagle Tankers acquired by MISC with fleet size of 31



#### **CHARTING GLOBAL EXPANSION (2010-2017)**

#### 2010 & 2012

Began dynamic positioning operations in the Brazilian Basin, and the North and Barents Seas

#### 2014

Operationalised the world's first Modular Capture Vessels in the US Gulf



#### 2017

AET Shipmanagement rebranded as Eaglestar



Delivery of one DPST for operations in Brazil

2021

INNOVATING FOR THE FUTURE

- Secured contracts for three LNG dual-fuel VLCCs for delivery from 2023
- Eagle Bintulu was successfully surveyed and certified for Green Award through the Green Award Foundation
- Awarded "Singapore Registry of Ships" (SRS) Ship Owner of the Year by MPA



 Strategic investment in climate tech startup, Daphne

Technology

US

Completed our first

LNG bunkering in the

#### 48 vessels awarded the Chamber of Shipping of America (CSA) Jones F. Devlin Award for Safety and 50 vessels recognised with the CSA Environmental Achievement Award

#### **PIONEERING CLEANER SOLUTIONS (2018-2020)**

#### 2018

Awarded Tanker Operator of the Year by Lloyd's List Global Awards in London

#### 2019

- Delivery of first two LNG dual-fuel Aframaxes
- New office location in Brazil and new office in Norway

#### 2020

- Delivery of first two LNG dual-fuel DPSTs for North Sea operations, which are amongst the world's cleanest DPSTs ever built
- Delivery of four DPSTs for Brazil during COVID-19
- Three DPSTs awarded DNV GL's SmartShip notation and another DPST awarded Industry's first ABS smart notation
- Secured contracts for two of the world's first LNG dual-fuel VLCCs and three DPSTs
- Winner of Maritime & Port Authority of Singapore (MPA) International Safety@Sea Award

#### **ACTIONING DECARBONISATION**

#### 2022

 Delivery of two of the world's first LNG dual-fuel VLCCs which are amongst the most environmentally friendly VLCCs in the market



Delivery of three DPSTs for operations in Brazil



 Plan to develop and construct the world's first two ammonia dual-fuel zero-emission VLCCs, which will be owned and operated by AET in late 2025 and early 2026

# **AET AT A GLANCE**

#### **FINANCIAL**



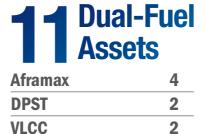




#### **ASSETS**

As of 30 April 2022





3

**VLCC** Newbuilds

# **World's Only**

Operator of Modular Capture Vessels







#### **OPERATIONAL EXCELLENCE**





**Vessel Utilisation:** 

99%

14,500+ Ship-to-ship (STS) Transfers

#### **HUMAN CAPITAL**

Gender Percentage (onshore)



**AET** 

Male **56%** Female

AET Connects 2021/2022



20+
Nationalities

Disclosure of gender related data through the "Bloomberg Gender Reporting Framework"



#### **AWARDS AND RECOGNITION**



Awarded "Singapore Registry of Ships" (SRS) Ship Owner of the Year at the Singapore International Maritime Awards (IMA) 2021

vessels received Chamber of Shipping of Americas (CSA)
Jones F. Devlin Award for Safety



vessels received CSA
Annual Environmental
Achievement Award

#### HEALTH, SAFETY AND ENVIRONMENT (HSE)

0.08

**Lost Time Injury Frequency (LTIF)** 

0.31

**Total Recordable Case Frequency (TRCF)** 



Total Scope 1^ Absolute GHG Emissions Reduction in 2021 (Y-o-Y)

10%



Total Scope 1^ Absolute GHG Emissions Reduction in 2021 compared to 2019

20%



Spills or environmental incidents

# OUR LEADERSHIP

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# **BOARD OF DIRECTORS**

DATUK YEE YANG CHIEN

Chairman Non-Independent Non-Executive Director CAPT. RAJALINGAM SUBRAMANIAM

President & CEO Non-Independent Executive Director DATUK NASARUDIN MD IDRIS

Independent Non-Executive Director RONALD BRUCE BLAKELY

Independent Non-Executive Director **PAULA PORTER** 

Independent Non-Executive Director VICE ADMIRAL (RTD) PETER NEFFENGER

Independent Non-Executive Director **ZAHID OSMAN** 

Non-Independent Non-Executive Director **COLIN LOW** 

Independent Non-Executive Director

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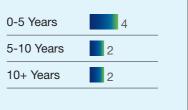
#### **DIVERSITY OF OUR BOARD**

#### **Board Composition**



Non-Independent

#### **Years of Service**

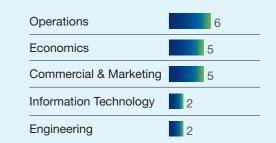


#### Nationality

Malaysia	4
Canada	1
USA	1
UK	1
Singapore	1

#### **Skills and Experience**





# **BOARD OF DIRECTORS**



**DATUK YEE YANG CHIEN**Chairman
Non-Independent Non-Executive Director

Datuk Yee Yang Chien was appointed Chairman of AET on 30 December 2016. He is concurrently President/Group CEO and Non-Independent Executive Director of MISC Berhad (2015-present); Chairman of Malaysian Maritime Academy Sdn. Bhd. (2020-present); Director of Malaysia Marine and Heavy Engineering Holdings Berhad (2008-present); and Chairman and Board member of various subsidiaries within the MISC Group. Datuk Yee is also an Advisory Council member of the Global Maritime Forum; Advisory Board member of Lloyd's Register; and Director of the Members' Committee of the UK P&I Club.

He was previously Chief Operating Officer (2013-2014) and Vice President of Corporate Planning and Development (2008-2013) at MISC, where he led the acquisition of American Eagle Tankers (now known as AET). He was also Group Vice President of Corporate Planning at AET (2005-2008) and Senior Manager of Research and Evaluation, Corporate Planning and Development Unit at MISC (2001-2005).

Datuk Yee holds a double degree in Financial Accounting/ Management and Economics from the University of Sheffield, UK.



CAPT. RAJALINGAM SUBRAMANIAM
President & CEO
Non-Independent Executive Director

Capt. Rajalingam Subramaniam was appointed President & CEO of AET on 1 January 2016 and also appointed Chief Operating Officer of MISC Group effective 1 February 2022.

He began his career at sea, came ashore in 1996 and has since held various positions in the MISC Group namely Vice President, Fleet Management Services, MISC and Group Vice President, AET Shipmanagement.

Capt. Raja is a Board Member of several subsidiaries and joint venture companies within the MISC Group and also serves the industry in various appointments including Executive Committee Member, International Association of Independent Tanker Owners (INTERTANKO); Board Member and Election and Governance Committee Member, GARD P&I; Chair of a number of class committees and Honorary Commander, Royal Malaysian Navy Reservist Programme.

He was awarded the National Seafarers Icon 2017 by Malaysia Marine Department and 2018 Tanker Shipping & Trade Industry Leader Recognition.

Capt. Raja holds a Post Graduate Masters in Business Administration and a Master Foreign Going Certificate of Competency from Ministry of Transport, Malaysia. He completed the Professional Maritime Training at Akademi Laut Malaysia, an Executive Education in a Finance Programme and in 2022, he has also completed the International Corporate Governance/Directors Programme at INSEAD Fontainebleau.



**DATUK NASARUDIN MD IDRIS**Independent Non-Executive Director

Datuk Nasarudin Md Idris has served on AET Board since 15 June 2010. He is currently an Independent Non-Executive Director of MISC Berhad (2017-present), Chairman of Malaysia Marine and Heavy Engineering Holdings Berhad (2010-present) and Non-Independent Non-Executive Director of Bintulu Port Holdings Berhad (2010-present).

He was previously a Non-Independent Non-Executive Director of MISC (2015-2017) and President/CEO of MISC (2010-2014). Prior to joining MISC, Datuk Nasarudin held various positions within the PETRONAS Group including Vice President of Corporate Planning and Development, PETRONAS; Group CEO of KLCC Holdings Berhad; Senior General Manager of Corporate Planning and Development Division, PETRONAS; Executive Assistant to the President of PETRONAS; General Manager of Marketing at PETRONAS Dagangan Berhad; General Manager of Corporate Development, PETRONAS; and General Manager of Group Strategic Planning, PETRONAS.

Datuk Nasarudin holds a Bachelor of Arts (Honours) Degree from the University of Malaya, Malaysia; a Masters Degree in Business Administration (awarded by the Brunel University) from Henley Management College, UK; and a postgraduate diploma in Petroleum Economics from the College of Petroleum Studies, UK. He also attended the Stanford Executive Programme at Stanford University, USA.



RONALD BRUCE BLAKELY
Independent Non-Executive Director

Mr Ronald Bruce Blakely was appointed as a Director of AET on 1 November 2016.

Prior to AET, Mr Blakely was with Shell, where he has contributed 38 years of service, including 15 years in senior finance roles. He also served as a Non-Executive Director on various Boards in the oil and gas industry and services sector; held Board appointments in several joint venture companies in different fiscal jurisdictions; and supported the Boards of not-for-profit organisations as a volunteer.

Mr Blakely is a professional accountant with a CPA designation from the Canadian Society of Management Accountants.

# **BOARD OF DIRECTORS**



VICE ADMIRAL (RTD) PETER NEFFENGER Independent Non-Executive Director

Vice Admiral (Rtd) Peter Neffenger was appointed as a Director of AET on 15 November 2019. He also sits on several Advisory Boards in both public and private sectors within the USA.

Prior to these roles, Vice Admiral (Rtd) Neffenger had a distinguished 34-year career in the US Coast Guard (1981-2015). He also served as Administrator of the US Transportation Security Administration (2015-2017).

Vice Admiral (Rtd) Neffenger holds a Master of Public Administration from Harvard University, USA; a Master of Arts in National Security and Strategic Studies from the US Naval War College; a Master of Arts in Business Management from Central Michigan University; and a Bachelor of Arts from Baldwin Wallace University, USA.



**COLIN LOW**Independent Non-Executive Director

Mr Colin Low has been appointed Director of AET since 15 November 2019. He is concurrently the Independent Director for Kacific Satellites Group Limited, a space and satellite telecommunications company; Board Director of private equity firm BLG Asia; member of the INSEAD Director Network (2013-present): and Risk Committee Chair and Independent Director to Jason Marine Group listed on the Singapore Stock Exchange. In January 2022, Mr Low was appointed as the Advisory Board Member to the Diligent Institute in New York, USA, a think tank in Corporate Governance ESG and Climate Change global practices.

Mr Low was previously the Investment Board Director of Fortune 500 firm GE (General Electric, USA) for the Asia Pacific Region (2005-2010): President of GE International and Regional Executive of Growth Initiatives in the ASEAN region; Chairman and Investment Committee Chair of mainboard listed Intraco Limited (2014-2021). He served as the Managing Director of GE Aircraft Engines ASEAN in his earlier career at GE; Chairman of private equity firm Singapore Investment Development Corporation (2011-2020). He was a member of the INSEAD University ASEAN Council (from 2008-2022). He proudly served as the US National Board Director of the Cancer Treatment Centers of America (2011-2018); Vice-Chairman of the American Chamber of Commerce in Singapore (2008-2014); Independent Director of OSIM International (2010-2016), and a member of the Advisory Board Asia Pacific to global executive search firm, Spencer Stuart International.

Mr Low is a Lifetime Fellow of the Singapore Institute of Directors and attained certification as an International Board Director in 2013 and Leading from the Chair in 2014 from the INSEAD University in Fontainebleau, France. He was conferred as a Fellow of the Hong Kong Institute of Directors in March 2021. In April 2022, he attained certification on the Diligent Climate Change Leadership programme. He holds a Master of Business Administration, a Bachelor of Science in Management (Honours) and a Bachelor of Science in Marketing (Honours) from the Southern Illinois University, USA.



PAULA PORTER
Independent Non-Executive Director

Ms Paula Porter was appointed as a Director of AET on 1 January 2020.

She was previously the Chief People Officer of Carnival UK (2012-2019) overseeing HR across Asia, Europe and USA; Divisional HR Manager of B&Q (2003-2007); HR Director of The Body Shop in UK and Ireland (2001-2005); General Manager of Canadian Pacific (1999-2001); and Divisional Personnel Manager of Marks & Spencer (1984-1999).

Ms Porter holds a Fellowship from the Chartered Institute of Personnel and Development (CIPD). She is a qualified senior coach in Business Development and Change Management and a certified Myers-Briggs assessor and coach with accreditations from CIPD. She has also attended the Institute of Directors' Finance for Non-Financial Directors programme.



**ZAHID OSMAN**Non-Independent Non-Executive Director

Mr Zahid Osman was appointed as a Director of AET on 1 January 2020. He is concurrently the Vice President of Corporate Planning effective 1 January 2022 and Board Member of several subsidiaries and joint venture companies within the MISC Group. He was previously the Vice President of MISC's Gas Assets & Solutions Business (2017-2021). He is also a Committee Member of the London P&I Club; Chairman of the Advisory Panel at Malaysia Women in Energy; and Council Member and Chairman of Government & Regulatory Affairs Working Committee at Malaysian Gas Association (2012-present).

Prior to MISC, Mr Zahid was with Shell for almost 20 years, where his last appointment was Vice President of Venture Development at Shell Integrated Gas & New Energies. He also held other management roles in finance, LNG marketing and trading, business development, commercial, upstream production sharing contract, stakeholder management, joint venture governance, gas advocacy, and project management in Upstream, Downstream, Integrated Gas and Trading businesses. He was also Vice President of the Malaysian Gas Association (2012-2017).

Mr Zahid holds a Master of Business Administration from the University of Chicago Booth School of Business, USA, and a Degree in Industrial Economics from the University of Nottingham, UK. He also attended a Management Programme on Strategy Creation at Columbia Business School, USA.

# **CHAIRMAN'S MESSAGE**



DATUK YEE YANG CHIEN Chairman

2021 was a particularly tough year for the tanker sector, and quite possibly, one of the worst we have seen in recent times with tanker rates diving to a 30-year low. Earnings fell below operating costs for most parts of the year until OPEC+ eased the supply cut in the third quarter. Oil demand returned very slowly and was offset by inventory drawdowns, with the resulting release of floating storage further dampening the already weak tanker market.

Despite these gashing headwinds, if we compare AET's numbers with that of 2012, which was another difficult year where the charter rates were equally dismal, the books will tell quite different stories. The cash flow generation in 2021 was easily double of 2012, and this was done with a smaller fleet. While the fleet size is still a strategic consideration but having the right type of vessels to meet emerging market demands in energy transition has now become the key to winning long-term secured income contracts.

#### Riding the financial cyclicity

We see AET as a key player in the long game of supporting the global energy supply chain. The goal is to achieve sustainable and secured income. In that long game, it is all about making the right moves at the right time, every time. We have built a strong team of professionals with diverse expertise to develop robust and comprehensive strategies and contingency plans through rigorous scenario planning. As MISC Group steers towards net-zero by 2050, we knew from the start that to support and deliver our various ESG (Environment, Social and Governance) initiatives would require strong and sustainable finance.

In many ways, our present financial robustness was borne out of the strategic decision made five years ago in 2017 to invest in LNG dual-fuel Aframaxes and DPSTs, ahead of the industry. It has given us an invaluable head-start in the net-zero emission race and landed us major contracts that would pivot our market positioning. That AET is today one of the largest shuttle tanker players in the world within a short span of just three years is certainly not by chance. With six eco-efficient shuttle tankers hitting the water in 2022, our asset portfolio and financial standing will only get stronger. These are just some of the far-reaching effects of our financial resilience.

Rather than planning around the conventional shipping cycle which follows crude oil prices, charter rates and newbuild costs that we cannot influence, we are paying closer attention to our internal cash flow cycle which is within our control. To counter this internal financial cyclicity, we turn to growing a secured income base. When the right opportunity presents itself, like the dual-fuel DPSTs in 2017, we will flex our cash flow cycle and pursue the project before pausing to consolidate and replenish resources for the next cycle. Last year was that respite. Other than the three dual-fuel VLCCs for Shell, we did not invest in any new assets and were focused on driving operational excellence and service delivery. It turned out to be a fortuitous timing for us when the global energy supply chain went into a tailspin in 2021.

#### Investing in sustainable shipping

Our current business model is entirely focused on the fossil fuel supply chain. Although demand for fossil fuel will fall when the world reduces its consumption from today's one hundred million barrels a day, there will still be a regular supply for petrochemical production and other needs. Being considered by energy majors as a safe and reliable tanker operator, AET is in a good position to defend its revenue streams even as the market tightens.

As we gear up for the next cycle, shuttle tankers and VLCCs will remain relevant among all the asset classes that we own and operate. The FPSOs in Brazil and the North Sea will need to do shuttle runs, and the oil refineries will require the VLCCs for the ocean haulage. The only difference is that these vessels will become

**C** Financial robustness is the bedrock of sustainable shipping. Through optimising the asset portfolio with an increasingly greener fleet of vessels and securing long-term chartering contracts, **AET** has successfully anchored its business against the current stormy economic conditions to ensure financial agility, enable energy transition and enhance shareholder value for the long haul. 77

greener, whether they are using LNG with greenhouse gas (GHG) abatement technology or zero-emission fuels, like ammonia.

Shipping used to be a highly competitive and fragmented industry, but the energy transition priority might just have united us. Collectively as an industry, we are now moving ahead of the public sector in paving the way for sustainable shipping. A case in point is the Memorandum of Understanding (MOU) AET has just signed with Lloyd's Register and Samsung Heavy Industries (SHI) in April 2022 for the development and construction of the first two zero-emission VLCCs. As founding members of The Castor Initiative, MISC, Lloyd's Register and Samsung Heavy Industries (SHI) are taking the active lead to demonstrate both the commercial feasibility of ammonia as a clean fuel for the shipping industry and the need for more such collaboration within and across industries. We are all eagerly awaiting the first dual-fuel zero-emission tanker to enter service in late 2025, and the second in early 2026.

As the transition fuel of choice, LNG has taken centre stage in the current energy transition. An LNG dual-fuel vessel built today will have 12 to 15 years of service in it. When coupled with abatement technology that can also

capture methane slips, the vessel can already reduce up to 30% GHG emission. This efficiency will improve with new advancements in abatement technology, making LNG itself a fuel in transition with an eventual place alongside other zero-emission fuels. In this regard, we have invested in Daphne Technology with its patented abatement technology to provide additional options for AET on the type of vessels it will build to meet its net-zero commitment.

#### Piloting towards a green horizon

In finding our footing with the right business cycle and asset mix, we have created a powerful AET playbook that will guide our future investments in sustainable shipping with greater clarity and assurance. At the same time, we must look beyond the conventional as we move towards carbon neutrality. We need to find ways to tap into new opportunities in areas such as the circular economy, energy transition and zero-carbon supply chain.

I have already kick-started this introspection throughout the MISC Group via a 30-year-long game called "MISC 2050". MISC 2050 is a long-haul strategy designed to reimagine the business portfolios of the Group and ensure we continue to thrive, grow, and push the boundaries in a green and circular global economy. Every business under the MISC Group, including AET, is required to identify new capabilities, asset classes, and investments that can meet future market needs. It will call for a change in mindset, like bringing in people with diverse, non-traditional skillsets into the tanker space, as we navigate towards a green horizon.

Moving into 2022, just as the world was thinking the global economy had turned a corner settling into a post-COVID norm, a war started raging between Russia and Ukraine and drove fuel prices sharply past the US\$100 per barrel mark in March. The external environment will continue to be challenging.

In IPCC's April 2022 report, Climate Change 2022: Mitigation of Climate Change, it was stated that to keep global warming within 1.5 degree Celsius, GHG emissions must peak by 2025 and then be reduced by 43% before 2030. AET is already heading towards these goals through our investments in dual-fuel LNG, and now, ammonia. I am pleased to inform our stakeholders that in Q1 2022, the AET Board has approved the mid-term target of 40% GHG intensity reduction and the longer-term net-zero GHG commitment by 2050. We are just doing our part and showing the way.

It takes tremendous time, effort, and resources to reconstitute our asset portfolio and pivot our business towards sustainable shipping. In making AET one of the world's largest shuttle tanker players and a leading dual-fuel tanker company, we have accomplished that, and more. I would like to commend and congratulate the Executive Leadership Team and all employees on a job well done! I am confident that together as a team, we will continue to make bold strides to unlock new possibilities that lie ahead.

# PRESIDENT & CEO'S MESSAGE

2021 was a year of contrasts. On one hand, it was a catalyst for an unprecedented energy transition that is driving massive technological and market shifts. On the other hand, it was also a year of disruption felt by the industry, the people and our communities. Keeping our focus on AET's purposeful strategy through a balanced asset portfolio that supports sustainable shipping, we navigated the challenges and seized market opportunities. Our people remained at the heart of our operations and decisions. The resilience of our workforce has shined through with the great show of teamwork among ourselves and with our partners and customers as we pulled through another stormy year under the strains of COVID-19.

#### **Delivering financial sustainability**

In a year where tanker rates were at a historic low, AET demonstrated its financial resilience by achieving an NPAT of US\$46 million in FY2021. EBITDA was US\$337 million on total revenue of US\$760 million, backed by longer-term contracts with quality customers. We pressed on with our proactive asset management strategy, and improved our cost structure to manage downside risks. As at 31 December 2021, our gearing ratio of 0.69 remained one of the lowest in the tanker market, backed by a balance sheet strength of approximately US\$4 billion.

In such a tough year, we remained one of few tanker owner-operators able to actively invest in the future through greener vessels and cutting-edge digital technologies. As early as July 2021, we managed to secure competitive financing amounting to US\$600 million for our ecoefficient newbuilds arriving in 2022 despite the tight liquidity market. Our strong credentials and long-standing relationships with bankers and financial institutions enabled us to establish good credit facilities, fully hedged at competitive rates, for fleet rejuvenation and CAPEX investments. Riding on digitalisation, we continued our journey to equip our vessels with the latest datadriven shipmanagement systems to improve inventory management, vessel safety, reliability and availability.

Over the past five years, we have invested close to US\$2 billion in new assets, half of which had gone into building up our pool of dual-fuel vessels. In 2021, 9% of AET's revenues came from dual-fuel assets. This will further increase with five more dual-fuel VLCCs joining our fleet in 2022 and 2023. Expanding our eco-efficient fleet has been the bedrock to AET's decarbonisation strategy, coupled with our active exploration and appraisal of new business areas, models and portfolios to build future capabilities.

#### Mapping our decarbonisation journey

In many ways our climate strategy is our business strategy guided by the globally agreed well below 2-degree Celsius limit to safeguard our long-term competitiveness. To that end, we are committing to aligning our GHG emissions across all scopes to net-zero by 2050, in line with the Paris Agreement goals. To help us get there, our target by 2030 is to reduce our shipping GHG emissions intensity by 40% compared to 2008 baseline. We believe in taking bold action and not sitting on the side-lines and hence, our net-zero commitment covers all scopes (including material Scope 3 emissions) and extends to all GHG emissions and not just carbon. This commitment was the culmination of

AET's commitment towards a net-zero world continues to provide the focal point for our pursuit of growth and opportunities while contributing with a purposeful agenda and a passionate team to a resilient and sustainable maritime industry.

our efforts over the last five years, starting with our first investment in dual-fuel assets in 2017. We have created a framework for actions, assessed the challenges ahead, reaffirmed our goals and targets, and developed a plan on how we would go about achieving them. What gives me confidence in our ability to meeting these goals is our passionate team and strong partnerships with like-minded partners, coupled with our purpose to moving energy to build a better world.

Translating our conviction into action with the belief that investing in innovation is key to reaching net-zero, we are piloting the next generation of zero-emission marine fuels on our assets. We expect these assets to be on water by end-2025 and early-2026. In Q4 2021, we also invested in a climate tech start-up focused on decarbonising hard-to-abate sectors such as shipping. We plan to deploy and test this bolt-on technology across our vessels which utilise LNG as a fuel source, while exploring the options for abating tank-to-wake emissions. At the same time, we continue to invest in lower-carbon assets, with 17% of our fleet already being dual-fuel. During the year, we worked with our industry partners on testing and piloting biofuels to further reduce our fleet's emissions.

To accelerate our sustainability journey, we launched the new Sustainability Strategy 2021-2025, a blueprint to guide the operations of AET as well as those in our value chain. Starting 2021, we volunteered to align our climate-related disclosures with the recommendations of the Task Force for Climate-Related Financial Disclosures (TCFD). By providing transparency on our mechanisms underlying sustainability governance, strategy, risks and opportunities, and metrics and targets, we are voluntarily committing ourselves to higher standards of accountability.

AET's commitment towards a net-zero world continues to provide the focal point for our pursuit of growth and opportunities while contributing with a purposeful agenda and a passionate team to a resilient and sustainable maritime industry. Our pathway to decarbonisation has led to technology investments in greener shipping and greater industry collaboration during the year. In turn, we are able to continue growing our stable and recurring revenue streams, enlarging our quality customer base,

expanding our asset portfolio, and upholding the highest service standards. As advocates of the triple-bottom line of people, planet and profit, we are prepared to learn, adapt and be agile amid the market shifts impacting us and our industry.

## **Expanding and strengthening our asset portfolio**

In March 2021, we entered into an agreement with Shell for the construction and long-term charter of three dual-fuel VLCCs with delivery scheduled for 2023. We also celebrated the delivery of Eagle Valence and Eagle Vallery, the first two dual-fuel VLCCs on long-term charter to TotalEnergies, in February and April 2022 respectively. As two of the world's first dual-fuel VLCCs, these vessels set the benchmark for being among the cleanest VLCCs in the market. They represent a significant step forward to a greener future, as we cement AET's position as a pioneer in LNG dual-fuel assets while supporting the world's energy transition needs.

Between 2021 and Q1 2022, we took delivery of four eco-efficient DPSTs on long-term charter contracts to Petrobras and Shell in Latin America. With another three DPSTs slated for delivery in 2022, we would have 17 DPSTs in our global shuttle tanker fleet.

Over in the US Gulf, we completed our first ever LNG bunkering in the US, bolstering our market standing as an energy logistics leader in the region. Over the past year, we renewed a total of 12 lightering contracts in North and South America, and secured an additional two lightering contracts in North America.

#### Investing in people and communities

As we embark on our ambitious green pursuits, effective talent development and capability building programmes will remain imperative. We see our investments in our social agenda as a good way to develop future leaders, promote maritime careers and give back to communities. During the year, we continued with the sponsorship of cadet training at the Malaysian Maritime Academy (ALAM), and mentored 20 interns by exposing them to international shipping and various job functions across AET. We expanded our scholarship programme in 2021 by sponsoring two Maritime Business diploma students from the Singapore Polytechnic. We are now partnering with the Texas A&M University at Galveston to extend similar opportunities to undergraduates in the US.

Striving to create social value in our localities, we continued with our social support programme and plan to distribute over one million meals to COVID-19 impacted communities in Singapore, Brazil, the UK, the US, India, the Philippines, and Norway. In some of the localities where we operate, we were offered various government support schemes to subsidise our running costs and had reinvested these funds to support the local communities instead.

#### **Collaborating for the future**

Looking ahead, 2022 is turning out to be an equally challenging year for the tanker sector. The impacts



CAPT. RAJALINGAM SUBRAMANIAM
President & CEO

of the Russia-Ukraine war, coupled with the prolonged pandemic, are double black-swan events for fleet owners, affecting both operations and the lives of personnel at sea and ashore. We will continue to monitor the situation and adjust our operations to safeguard our crew and mitigate operational risks and exposures.

We have firmly established that the environmental agenda and commercial viability can co-exist in sustainable shipping. Fortifying our business further by focusing on decarbonising our existing fleet operations, phasing-out inefficient vessels, investing in low-emission technology, and working with like-minded partners to take advantage of low-carbon business opportunities. To support this endeavour, we will continue to develop a diverse talent pool of committed and passionate people.

In closing, I would like to express my heartfelt thanks to the Chairman and AET Board members for their leadership and valued inputs, our customers and business partners for their continued support and confidence. My appreciation also goes to our team members across the globe, including our mariners and Lightering Support Vessels team members, for their wholehearted commitment to AET, as part of the MISC Group. We would, as a team, continue to purposefully act on our future-focused commitments as part of the progressive solution to build a better world.

# **EXECUTIVE LEADERSHIP TEAM**

#### **LINDA MURRAY**

Global Director, Human Resource and Facilities

#### **JOHN BAPTIST**

Global Director, Very Large Crude Carriers (VLCC)/ Product Chemical Shipping (PCS)

## CAPT. AMIT PAL

Global Director, Dynamic Positioning Shuttle Tankers (DPST)

#### CAPT. SACHI ATMALINGAM

Global Director, Corporate Health, Safety, Security, Environment (CHSSE) and Sustainability

# CAPT. RAJALINGAM SUBRAMANIAM

President & CEO, AET and Chief Operating Officer, MISC Group

#### CAPT. RON WOOD

Global Director, Mid-Size Tankers (MST) Crude Shipping

# WINNIE CRUZ-DING

Global Director,
Global Director,
Finance
Global Director,
Corporate Strategy
& Planning and
Joint Venture

**JOHAN MUNIR** 

Management

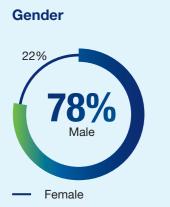
#### ROBERT SULLIVAN

Global Director, Legal (General Counsel)

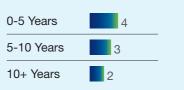




#### **DIVERSITY OF OUR ELT**



#### **Years of Service**



#### **Nationality**

Malaysia	4
Singapore	2
JK	2
JSA	1

#### **Skills and Experience**





# **EXECUTIVE LEADERSHIP TEAM**



#### JOHN BAPTIST

Global Director, Very Large Crude Carriers (VLCC)/ Product Chemical Shipping (PCS)

#### **BIOGRAPHY**

John assumed his position as Global Director of VLCC/Product Chemical Shipping (PCS) in AET in March 2021. He began his corporate career with AET in 2003 as Vice President of Insurance and Risk Management, having previously sailed with AET for more than 15 years. He has since served as Vice President of Commercial Operations of Europe, Global Director of Asset Management and Commercial Projects, Global Director of Shipmanagement, Chief Operating Officer of Eaglestar, and Global Director of VLCC and DPST before assuming his current position. John has contributed to AET by breaking into new territories, including DPST and marine well containment operations. John holds a Bachelor of Laws (LL.B) from the University of London and a Master of Law (LL.M) in Legal Aspects of Marine Affairs from the University of Wales, Cardiff. He is a member of the Institute of Chartered Shipbrokers UK and holds a Class 1 Master Mariner's license from Singapore.



2021 was another challenging year for the industry. Market sentiments continued to be weak — not only because of the prolonged COVID-19 threat, but also from the impact of low crude production, oversupply of tonnage due to lack of scrapping activities, and the prevalence of subterfuge shipping. Higher bunker prices further eroded vessels' earnings.

The VLCC/PCS team navigated these challenges by locking our assets under time-charter contracts. Effective

and cost-efficient contract management had been key, with the team paying closer attention to bunker planning, vessel speeds and consumption monitoring. During the year, another five vessels were booked on mediumand short-term charters. This would help to bolster our secured income portfolio as we mitigate the market impacts. Moving into 2022, cost management strategies and effective fleet management will be critical, as we continue to strengthen the business through long-term partnerships with customers.



#### **JOHAN MUNIR**

Global Director, Corporate Strategy & Planning and Joint Venture Management

#### BIOGRAPHY

Prior to assuming the role of Global Director, Corporate Strategy & Planning and Joint Venture
Management, Johan was AET's Chief Financial Officer, a position he had held from March 2013 to
October 2020. He joined the organisation with a wealth of experience gained in the shipping and oil and
gas industries, having held a variety of roles in finance, accounting, business planning and operations
within MISC, PETRONAS and their joint venture companies in Malaysia, Singapore, Egypt and the
Netherlands. Johan holds a Bachelor of Arts (Hons) in Accounting and Management Science from the
University of Kent at Canterbury, UK. He is a qualified CPA from the Malaysian Institute of Certified
Public Accountants and had completed his articleship at KPMG at the start of his career.



The energy transition presents new growth opportunities for AET and its customers. In 2021, guided by our new sustainability priority, we refreshed our business strategy and took on leading initiatives, including investments in low-carbon technologies and the adoption of TCFD reporting. The optimisation and future-proofing of our fleet will remain a pivotal part of our decarbonisation roadmap.

In the highly cyclical shipping industry, it has always been our priority to establish a secured income base to mitigate financial exposures. We have successfully married this objective with our sustainability goals by entering strategic contracts with major clients to invest in greener assets. Today, with a fleet of 11 dual-fuel assets with three more to be delivered in 2023, AET has firmly anchored itself as one of the pioneering leaders in greener shipping solutions. We will continue to build upon our strength as we navigate onward in our sustainability journey.



#### **LINDA MURRAY**

Global Director, Human Resource and Facilities

#### **BIOGRAPHY**

Linda has over 20 years of experience as a HR practitioner in several blue-chip multinationals, non-governmental organisation and offshore contractors with experience working in Middle East, Asia and Europe. She brings with her a wide spectrum of knowledge and expertise on corporate human capital development practices. These range from the formulation of diversity and inclusion strategies, and values and culture-change initiatives, to the development of change management programmes and HR strategies and policies. Linda has an MBA from the University of West London. She is a Certified Organisation Development Practitioner and is a Fellow of the Chartered Institute of Personnel & Development (FCIPD).



We recognise it is our people's resilience that delivered our customers' and stakeholders' expectations in a challenging 2021 with the on-going pandemic and tough industry market. I'd like to thank all my colleagues for their efforts, loyalty to AET and the care and support for each other.

Harnessing our ability to retain and develop our existing talent and attract new talent, we are refreshing our Employee Value Proposition for stronger focus on our employees as individuals, with purposeful work, flexible work arrangements to support greater work-life integration.

We are proud of AET's diverse and multigenerational talent. Aspiring to be an employer of choice, we continue to create a sense of belonging and foster an empowered and accountable workforce to pivot the organisation, drive and transform the business to be future-ready. This will ensure a sustainable AET for now and for future generations.



#### **CAPT. RON WOOD**

Global Director, Mid-Size Tankers (MST) Crude Shipping

#### BIOGRAPHY

Capt. Ron started his maritime career in 1988 as a seafarer onboard US-flagged vessels and moved up the ranks sailing with various US shipping companies. He joined AET in 2001 as a Mooring Master, overseeing ship-to-ship transfers in the US Gulf, before moving into the commercial team as Manager for USG Lightering Operations, Assistant Vice President of Aframax Atlantic Chartering, Vice President and Head of Aframax Atlantic Chartering and finally, his current role. Ron obtained his US Coast Guard Master Mariner license in 1998. He has served as co-chair for Industry Taskforce on Offshore Lightering (ITOL) and is an active member on industry committees.



With tanker markets depressed due to continuing demand disruption and the operational challenges associated with the pandemic, 2021 had been a challenging year for the MST team. The emergence of new COVID-19 variants of concern, drastic swings in bunker prices, and sanctions against key crude-producing countries had added to the uncertainties in the year. We have mitigated these challenges by reducing our spot exposures, proactively deploying our fleet in secured lightering programmes and fixed-rate charters.

Amid the constraints with quarantine orders and travel restrictions for both our ships and lightering personnel, we have worked closely with our customers to ensure uninterrupted service. As part of our ongoing fleet rejuvenation programme, we are optimising the existing fleet of mid-size tankers by seeking opportunities to monetise underperforming assets and using the recovered capital to acquire more efficient dual-fuel vessels to support the energy transition agenda of our customers.

# **EXECUTIVE LEADERSHIP TEAM**



## WINNIE CRUZ-DING Global Director, Finance

#### **BIOGRAPHY**

Winnie has over 20 years of experience in finance. Prior to joining AET in November 2020, Winnie held CFO and financial leadership positions with large multinationals in various industries, including technology, hospitality, publishing, legal research information solutions, and private investment. She has held interim CEO and HR Head roles that provided her a rich and broad experience in business strategy, controllership and compliance, corporate finance, driving transformation programmes, setting up and running shared services, and M&A. Winnie is a qualified CPA with an MBA from the University of Dubuque in the US, and a Bachelor of Science in Commerce from the University of Santo Tomas in the Philippines.

"

AET continues to focus on building financial sustainability. The year 2021 was yet another challenging year characterised by soft market conditions, described as one of the worst years for crude trades, coupled by tighter liquidity market. With the strengthening of our recurring income streams as our base strategy and foundation, we balanced the impact of the year's challenges by seizing strategic opportunities and through capital management. Our focus remains to continue creating value for our stakeholders, hence, in 2021, despite tough market conditions, we did partial redemption of Redeemable Cumulative Preference Shares from our shareholder.

Partnership and collaboration are important to AET's success. This was evident with the strategic banking relationships we have and continue to expand, resulting in securing competitive financing for our newbuildings, scheduled for delivery this year, of close to US\$600 million. It is important to develop partnerships with those who will journey with us. I believe that our business strategy, sustainability principles, coupled with our good governance, have provided us with good foundation and advantage in expanding these relationships as we journey and navigate the energy transition.



#### CAPT. AMIT PAL

Global Director, Dynamic Positioning Shuttle Tankers (DPST)

#### **BIOGRAPHY**

Capt. Amit joined AET in 2008. He had served as the Head of QAHSSE, Head of Commercial Projects, Director of Technical Operations, Vice President of Business Development, and Head of Product & Chemical Shipping, before assuming his current role in March 2021. Prior to AET, Amit had sailed and served in various capacities with A. P. Moller Maersk. He has also served with committees under the Singapore Shipping Association, Singapore Maritime Employers Federation, Maritime and Port Authority of Singapore, DNV and INTERTANKO. Amit holds a Class 1 Master Mariner license (Foreign Going), an MBA from Birmingham Business School - UK, a Master's in Applied Finance from Adelaide University - Australia, and a Bachelor of Science in Nautical Science from the University of Mumbai. He is also an Associate Certified Coach accredited by the International Coaching Federation.



The DPST fleet is among the key contributors to AET's long-term secured income business. Throughout 2021, we ensured the operational excellence of our expanded Brazilian fleet, while maintaining the highest performance standards for our customers in the North Sea. I must credit the success of these efforts to our service crews, whose commitment and sacrifices have been pivotal to overcoming the COVID-19 challenges.

There are six DPSTs expected to be delivered in 2022, of which three have already been delivered. Our focus is to complete the stringent customer acceptance tests and ensure the smooth delivery of these strategic assets. We are deeply committed to service excellence and quality assurance, as well as in elevating our value-add for customers, through ongoing efforts like decarbonisation and ship design. One of our top priorities is to adhere to stringent health and safety protocols. We are uncompromising when it comes to keeping our people safe and healthy.



#### CAPT. SACHI ATMALINGAM

Global Director, Corporate Health, Safety, Security, Environment (CHSSE) and Sustainability

#### RIOGRAPHY

Capt. Sachi assumed his current AET appointment in June 2021. He was previously Head of Group HSSE (GHSSE) at MISC, where he led the organisational transformation of GHSSE and was involved in the restructuring of the Malaysian Maritime Academy Sdn Bhd (MMASB) and Akademi Laut Malaysia (ALAM) which MMASB operates. He also served as Global Director of Technical Services and Development, Vice President of Operations (Asia) and Global Operations Prime in AET. He has represented AET and MISC in different Technical and Owners' Committees for various classification societies and the Global Maritime Forum. Capt. Sachi had sailed for more than 16 years before moving onshore. He holds a Class 1 Master Mariner license (Foreign Going), and an MBA from University of Tasmania.



2021 continued to be a tumultuous year shadowed by COVID-19. To overcome vessel diversions and supply chain disruptions, we worked closely with ship managers and customers to plan and accelerate safe crew changes, and rendered care and support, including financial aids, for our shipboard staff. We signalled our resolve and commitment to crew safety when AET signed the Neptune Declaration on Seafarer Wellbeing and Crew Change.

On the environmental front, we have placed an even greater emphasis on energy transition and decarbonisation by taking steps towards complying with IMO's Energy Efficiency Existing-Ship Index (EEXI) and Carbon Intensity Indicator (CII) resolutions, with efforts including detailed technical evaluations and operational measurements for each vessel. We are committed to employing a multi-pronged approach towards reducing carbon footprint across our value chain with a comprehensive sustainability strategy that starts from ship design and through the asset lifecycle to vessel retirement.



#### **ROBERT SULLIVAN**

Global Director, Legal (General Counsel)

#### **BIOGRAPHY**

Robert Sullivan assumed his position as Global Director, Legal (General Counsel) in April 2022.

Robert has been in the energy and maritime industry for over 20 years. He was a shipping and international trade lawyer, has extensive M&A and Alternative Energy experience and has led teams across Americas, Asia and Europe. Rob started his career with Britannia P&I Club, was in private practice and in corporate holding various leadership roles at BP for BP Shipping, BP Alternative Energy and BP M&A. More recently, he was involved in offshore wind through his role as General Counsel of Geoquip Marine, an offshore geotechnical solutions provider to the renewable and energy industries, infrastructure developers and government/research organisations worldwide.

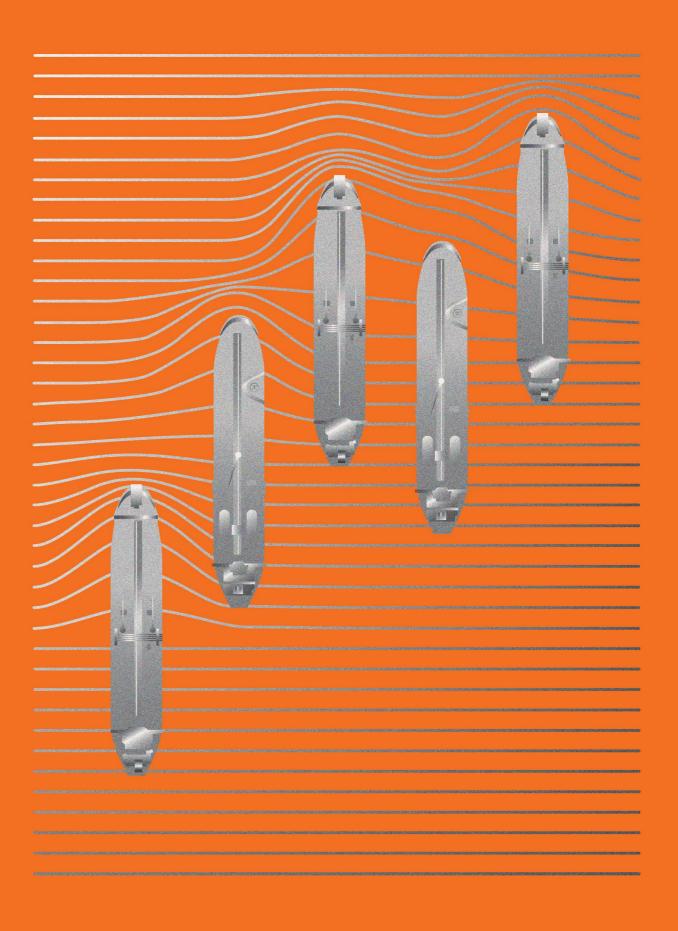
He completed his Master's Degree (LLM) in Shipping Law and International Trade at the Institute of Maritime Law, University of Southampton prior to qualifying as a Barrister (Middle Temple - Inns of Court School of Law, London) and then later further qualified as Solicitor of the Law Society of England and Wales.

Looking back at 2021, I am reminded of the huge role that shipping played in keeping the world markets running during one of the greatest challenges of our time. I have an enormous amount of respect for those who showed courage and determination in key industries, including seafarers such as those in AET who continued to safely move energy to where it was needed, keeping the lights on. We have witnessed familiar volatility, vulnerability, and further transition in the energy market, and have been encouraged by the commitments made by global leaders at COP26.

We understand the near-term challenges but the medium-to long-term solutions required to hit those targets are still largely uncharted and require strong leadership, informed by science. I am grateful for the opportunity to join AET and to lead the Legal & Corporate Secretariat team, a respected and talented team within the organisation. As an early adopter of the sustainability agenda, AET has already implemented new technologies to improve and modernise the fleet and I look forward to contributing to the further success of this endeavour.

# OUR BUSINESS

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VALUE CHAIN	



# **OUR FLEET AND SERVICES**

We own and operate a diversified fleet of dual-fuel and conventional tankers in all key geographies to deliver services to the global energy companies, refiners and traders.

Dual-Fuel Assets

Aframax 4

DPST 2

VLCC 2

VLCC Newbuilds 3

#### **VLCC**

13 vessels
(including 2 delivered and 3 dual-fuel vessels on order)

Capacity: **2 million barrels**Trading globally over
long distances

#### **Aframax**

Vessels
(including
1 Panamax and
4 dual-fuel vessels)

Capacity: **0.7 million barrels**Trading mainly in shorter
distance regional trades

#### Suezmax

6 vessels

Capacity: 1 million barrels Flexibility to do long distances as well as shorter distance trades

#### LR2

Capacity: 0.7 million barrels

Coated tankers operating in

regional trades

\_\_\_\_

3 vessels

**Chemical Tankers** 

Capacity: 21,800 cubic metres
Transports a variety of chemicals
and vegetable oils in both inter
and intra-regional trades

# We unveiled two of the world's first LNG dual-fuel VLCCs in February and April 2022.

#### **DYNAMIC POSITIONING SHUTTLE TANKERS (DPST)**

**DPST** 

Vessels
(including 2 dual-fuel vessels and 3 on order)

Capacity: **0.7–1 million barrels**Utilises Dynamic Positioning
technology to load crude from
remote offshore production facilities
and transport it to the shore for
storage or distribution

Through Dynamic Positioning technology, these vessels are able to maintain a fixed position without anchoring and load from offshore production facilities located in deepwater and/or harsh weather conditions.

In 2019, we unveiled two of the world's first LNG dual-fuel DPSTs for operation in the Norwegian, North and Barents



Seas. Our DPST fleet has grew to 14 vessels with the delivery of 10 vessels from 2020 to Q1 2022. We have additional three DPSTs that will be delivered in remaining part of 2022, bringing our total fleet size to 17 by the end of 2022.

Through our integrated marine services, we have expertise in DPST newbuilding project management and design innovation and have developed one of the world's first dual-fuel DPSTs with Volatile Liquid Organic Compounds (VLOC) recovery systems. Our expanding infrastructure and personnel in Norway and Brazil enable us to service our customers better and strengthen client relationships.

#### SPECIALISED TANKERS

#### Modular Capture Vessel (MCV)

vessels (included in the Aframax fleet)

Capacity: **0.7 million barrels**Modular Aframax-sized vessels
that combine FPSO and Dynamic
Positioning technology in a single
Aframax hull to enable safe capture
of hydrocarbons

We operate the world's only specialised vessels designed to assist in hydrocarbon capture in the event of a well incident in the US Gulf. The adaptable design enables these vessels to handle a wide



range of subsea well conditions and wellhead connection scenarios and weather conditions and can operate at depths of up to 10,000 feet.

Normally trading within the US Gulf, our vessels remain in constant

readiness to respond to an incident, and we regularly conduct simulated incidents to keep our response sharp. This requires highly skilled teams and efficient processes ashore and afloat.

#### SPECIALISED LIGHTERING VESSELS

#### Lightering Support Vessel (LSV)



Transport equipment and crew to conduct ship-to-ship cargo transfer operations

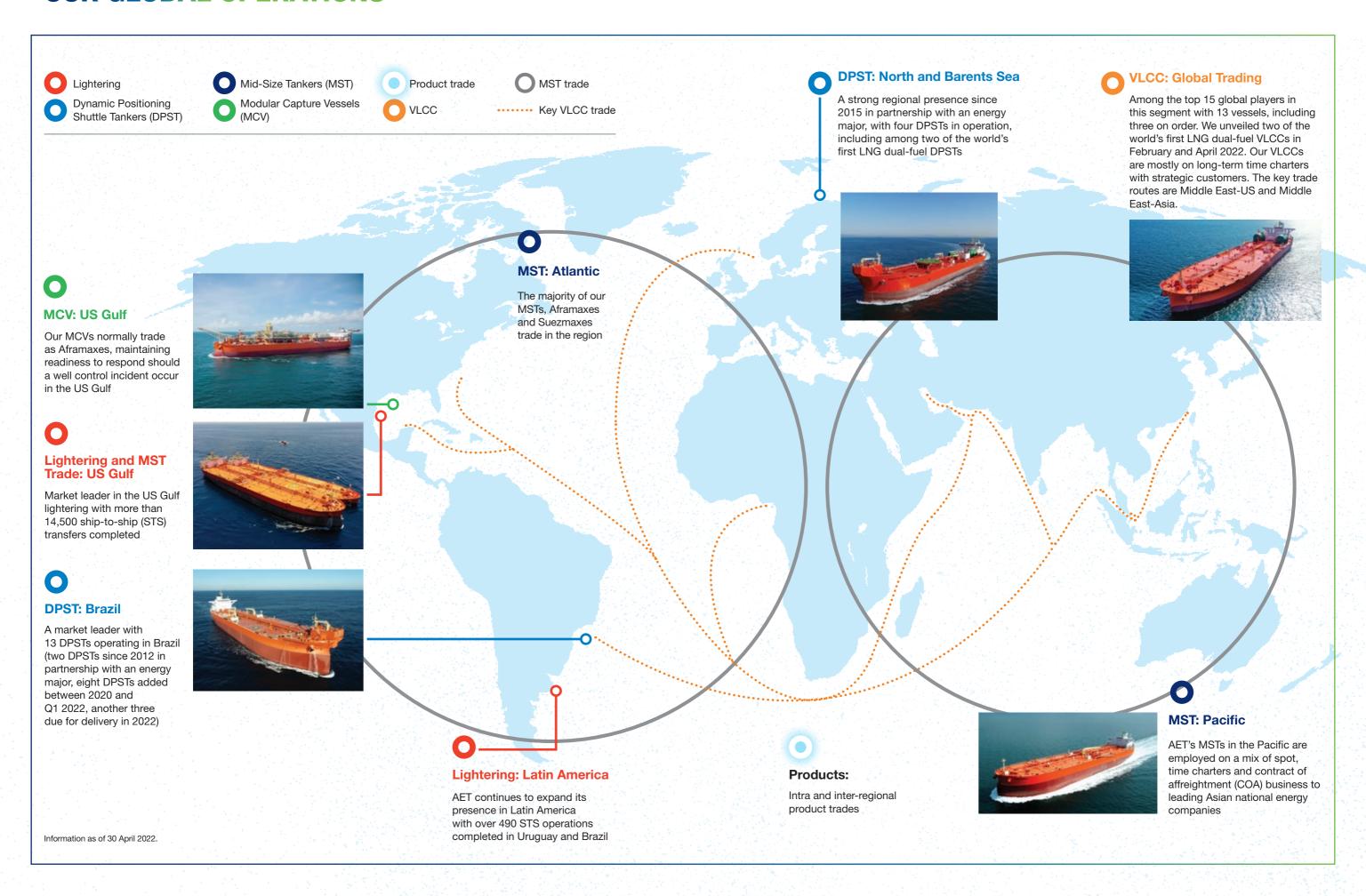
Our purpose-built LSVs and highly experienced crew provide best in class ship-to-ship (lightering) services. Our integrated lightering and conventional voyage operations deliver synergy and make us a one-stop shop that can service all our customers' needs. We have serviced more than 14,500



ship-to-ship transfers and are a market leader in the US Gulf region. Along with a base dedicated to lightering operations in Galveston, Texas, our fleet of purpose-built LSVs, and full employment of our own Mooring Masters and their Assistants ensure consistently safe and high-quality

operations. Lightering operations in offshore Uruguay and the Brazilian Basin provide our Latin American customers with additional flexibility. We continue to expand our presence in Latin America, having serviced 490+ lightering operations in offshore Uruguay and Brazil.

# **OUR GLOBAL OPERATIONS**



# **OUR GLOBAL PRESENCE**



**Onshore** 

**Onshore Staff** 



**Female** 









Offices to support operations and client relationships



#### Houston

Large commercial presence to service our customers across time zones; large shipmanagement presence to support our Atlantic operations



#### Galveston

Centre of Excellence (COE) of all lightering support activities for AET's global ship-to-ship (STS) operations and the home base to AET's fleet of Lightering Support Vessels



#### Rio de Janeiro

Dedicated presence to support our growing DPST fleet and lightering business in Latin America



#### Montevideo

Presence through our Joint Venture to support lightering operations in Uruguay



**Nationalities** 

**Countries** 

35



#### London

Large commercial presence in the heart of the business district, close to our customers and stakeholders

#### Stavanger

Office in Norway enables better service and client relationships for our expanding fleet of DPSTs operating in the North Sea

#### **Kuala Lumpur**

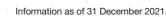
Liaises with our shipmanagement and crew operations in Malaysia, and supports commercial operations for our fleet operating in the Asia Pacific region

Labuan



#### Singapore

Global headquarters; large commercial, corporate and shipmanagement presence



# **OPERATIONAL EXCELLENCE AT AET**

At AET, operational excellence is about creating value for our customers in a safe, secure and sustainable manner. Our success is rooted in upholding the highest industry standards while remaining committed to service quality — both on shore and at sea.

The principles of Health, Safety, Security and Environment (HSSE) are the bedrock to our business operations. Beyond aligning our risk management and operating procedures to regulatory requirements, we strive to achieve HSSE excellence by engaging with customers, regulators, employees and other stakeholders to proactively identify and mitigate workplace risks and hazards. We also invest in regular trainings to strengthen AET's workplace safety and health culture, while implementing digital innovation to drive continuous improvements.

As a leading provider of maritime transport solutions for the world's energy needs, our vessel fleet has maintained a clean record in both oil spills and detentions by Port State Controls (PSC). We continue to be recognised by the industry for our commitment to safety and welfare, not only for staff and operational crews, but also for those in distress at sea.

AET also provides complete in-house commercial management services from chartering, vessel operations to post-fixture activities through our offices in Singapore, London, Houston and Rio de Janeiro. To support business expansion in growing markets like Brazil and Norway, we have restructured our business operations by asset classes, namely Mid-Size Tankers (MST), Very Large Crude Carriers (VLCC) and Dynamic Positioning Shuttle Tankers (DPST). Aimed at improving commercial excellence, the realignment has enabled us to better serve our customers.

Our ship managers, Eaglestar, OSM and V.Ships have been supporting our endeavours by providing the technical expertise to ensure the proper management and upkeep of our vessel fleet. This provides our customers with added assurance and our vessel crews with round-the-clock support across different geographies and time zones. In 2020 and 2021, during the pandemic, we maintained an availability rate of over 99% for our vessel fleet.

#### **PUTTING SAFETY FIRST**

A strong safety culture is indispensable to our business functions. In shaping the right safety habits and behaviours, AET has adopted the HSE Culture Ladder

 an approach to increasing safety awareness via five stages of development. As a progressive organisation, AET is steadfast in its drive towards a "Generative" HSSE culture where safety thinking is fully ingrained into everyday operations.



For details on the HSE Culture Ladder, refer to page 93.

#### **ENSURING CRISIS READINESS**

Our crisis response strategy and approaches are regularly reviewed to incorporate emerging business and operational risks globally. To enable our teams to handle crisis incidents more effectively, all AET offices are equipped with Crisis Management Centres. The Centres in Singapore and London were outfitted with advanced communications facilities in 2021. Similar upgrades in the Houston and Rio offices are in progress.

We conduct regular drills and simulate realistic crisis scenarios to stress-test our emergency responses and procedures and ensure the effectiveness and adequacy of our crisis plans and resources. These activities enable our teams to be better prepared for crisis-level incidents involving different situations, locations and stakeholders.

During the year, AET conducted and participated in two major crisis management drills. The first was a tabletop exercise conducted in Singapore in June 2021 which saw our Crisis Management Team partnering with MISC Group's Chief Information Security Officer and Control Risks, a risk and crisis management consultant specialising in cyberthreat scenarios. The exercise provided a valuable platform for understanding the impacts of cybersecurity risks, assessing AET's responsiveness to cyberattacks and identifying areas for improvement.

We also participated for the first time in the Seventh Maritime Information Sharing Exercise (MARISX) in July 2021. Conducted by the Information Fusion Centre (IFC) Singapore, this important tabletop exercise involved navies, maritime agencies, IFCs and shipping companies from 37 countries, as well as maritime security experts who provided insights on crisis situations.





Putting personnel and resources to the test through a cyberattack simulation exercise held in "Responsibility", AET's newly upgraded Crisis Management Centre in Singapore.

Over the three-day exercise, participants were put through 22 Maritime Security scenarios with 63 injects. The experience demonstrated the importance of multilateral cooperation and inter-agency partnership in order to effectively deal with maritime security threats and incidents. It also provided AET with the chance to network and exchange global best practices and insights with international shipping communities and enforcement agencies.



AET personnel manning the Crisis Management Centre in Singapore throughout MARISX.

#### **DELIVERING QUALITY ASSURANCE**

AET's Quality Management System (QMS) ensures that all business activities are conducted in accordance with key international benchmarks, outlined in the table below. Our QMS coverage extends from service delivery to energy, environment, as well as occupational health and safety practices. Our commitment to these standards set the pace for long-term performance improvements in AET's financial and operational sustainability. Our QMS is validated annually by independent certification bodies and our offices in Singapore, Kuala Lumpur, London, Houston and Rio continue to be certified to ISO 9001 QMS standards.

#### **Upholding International Quality Standards**

- ISO 9001 Quality Management
- ISO 14001 Environmental Management (at Eaglestar)
- ISO 50001 Energy Management (at Eaglestar)
- ISO 45001 Occupational Health and Safety (at Eaglestar)

Our Integrated Assurance Programme (IAP) comprises "Three Lines of Assurances" based on the "Three Lines of Defenses" established by the Committee of Sponsoring Organizations of the Treadway Commission. The first line of assurance is focused on managing risks through self-assessment. The second line of assurance is aimed at formulating the right policies and frameworks to support the assurance process, while the third line of assurance refers to compliance with the Group's internal audit charter.

#### STRENGTHENING SECURITY MEASURES

AET has adopted MISC Group's framework on Security Management System (SeMS), which defines the policies, standards, guidelines and tools for security risk management. The key objectives of SeMS are to protect people, property and information and ensure that our risk mitigation strategies commensurate with the risk exposures and security threats at different operating locations.

# **OPERATIONAL EXCELLENCE AT AET**

In line with SeMS, which requires our offices and vessels to comply to the Mandatory Minimum-Security Standards, we installed Video Surveillance Systems to enhance the security of vessels trading in high maritime security risk areas. We are also in the process of developing Security Contingency Plans (SCP) at our various offices. The SCP provides comprehensive guidelines for managing potential crisis situations stemming from man-made, natural or security threats.

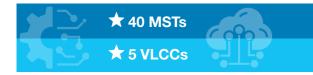
## TRANSFORMING THROUGH DIGITALISATION

Riding on opportunities afforded through digitalisation, AET is committed to increasing operational efficiency, safety and environmental compliance through higher automation. As part of our transformation journey, we have adopted e-navigation systems to enhance navigational accuracy and safety, Internet-of-Things (IoT) technologies for improved communications and real-time monitoring, and predictive analytics for optimised vessel management and operations, among others.

During the year, multiple digital solutions by Magellan X were piloted onboard 40 AET's MSTs and five VLCCs. These solutions enable us to monitor maritime safety, inventory levels and analyse decarbonisation metrics like fuel consumption, emissions and machine parameters, in real time. A key example is SAFEVUE. ai, a behavioural-based safety system that combines industry knowledge, industrial IoT capabilities and predictive analytics to improve workflows, crew wellbeing and safety. Technologies like radio frequency identification (RFID), artificial intelligence (AI) and machine learning are actively embedded into the system to improve the accuracy of captured data, lower resource consumption and drive procurement optimisation.

These cloud-based digital solutions have enabled stored data to be easily shared between crew and shore staff, allowing actionable insights and issues onboard to be rectified early. This has led to reduced operating expenditure, enhanced operational reliability and higher future-proofing of the current vessel fleet.

## Digital solutions were piloted onboard 45 vessels



# MEETING IMO ENVIRONMENTAL REGULATIONS

In June 2021, the IMO announced new  $\mathrm{CO}_2$  regulations requiring all vessels to adopt the Energy Efficiency Existing Ship Index (EEXI) as a measure to reduce greenhouse gas emissions, and the Carbon Intensity Indicator (CII) to track operational efficiency. Vessels are also required to adopt the enhanced Ship Energy Efficiency Management Plan (SEEMP) as a mechanism to heighten energy efficiency. These measures are part of the IMO's goal to lower carbon intensity in the shipping industry by 40% by 2030.

To comply with EEXI, CII and IMO 2030 targets, AET conducted a detailed technical evaluation, including measuring and verifying the operational data of each vessel. Factors affecting the EEXI included basic ship designs, type of power plants and propulsion systems, while the type of fuel and the nature of trade supported by each vessel could have an impact on the CII. A multi-prong approach had to be taken to ensure EEXI and CII compliance while meeting AET's own net-zero targets, balancing between costs, proven solutions and service providers with the technical experience.

#### **OPERATIONAL HIGHLIGHTS IN 2021**

# Completed our first ever LNG bunkering in the US



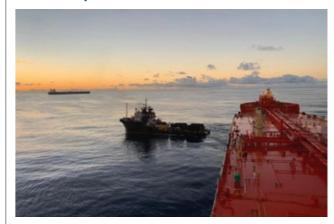
In October 2021, we completed our first ever LNG bunkering in the US, working in coordination with Shell to refuel the LNG dual-fuel Aframax tanker Pacific Ruby outside Port Canaveral in Florida. Six hundred metric tonnes of marine LNG was transferred onto the tanker from the Q-LNG 4000 bunker barge. The entire bunkering operations coordinated by AET and Shell and was safely and successfully completed in nine hours while Pacific Ruby was on its way from Houston bound for Botterdam.

# Eagle Balder completed her maiden LNG bunkering operations in Sweden



Eagle Balder completed her first two bunkering operations at the Port of Gothenburg, Sweden in early 2021. This LNG dual-fuel DPST is among the cleanest DPSTs ever built. The ship-to-ship bunkering operations were completed safely and simultaneously without interruption to the cargo operations. Prior to the operations, the crew and offshore personnel conducted careful and thorough risk assessment to ensure full compliance with the industry's best practices.

# Eagle Pilar completed her first STS transfer operation in Brazil



Eagle Pilar, our eco-efficient Suezmax second generation DPST purpose-built for long-term charter to Shell, safely completed her first STS operation in the Brazilian Basin in April 2021. The operation was supported by our global lightering team who provided the required STS support services including specialised personnel and equipment.

#### AWARDS & ACCOLADES

#### **International Recognition for Operational Excellence**

★ MPA SRS Shipowner of the Year Award
 ★ CSA Jones F. Devlin Award for Safety – 48 ships
 ★ CSA Annual Environmental Achievement Award – 50 ships
 ★ AOS-USA Maritime Samaritan Award
 ★ RICS Gold SKA Rating

Attesting to AET's operational excellence during the year were numerous accolades and awards. AET was recognised with the "Singapore Registry of Ships" (SRS) Ship Owner of the Year Award at the Singapore International Maritime Awards (IMA) ceremony held in April 2021 as part of the Singapore Maritime Week. The SRS Award recognises an outstanding owner of quality Singapore registered ships and takes account of fleet size, growth, operational excellence, sustainable contribution to human capital development both ashore and at sea.

The Jones F. Devlin Award for Safety presented by the Chamber of Shipping of America (CSA) to AET affirmed our excellent health and safety record for 48 of AET's vessels. In addition, the CSA's Environmental Achievement Award

was presented to 50 of our vessels to acknowledge our stringent HSSE standards and measures.

The Maritime Samaritan Award was presented by the Apostleship of the Sea of the United States (AOS-USA) to acknowledge our crew repatriation initiatives in the Western Gulf of Mexico during the pandemic.

AET's London office was awarded a Gold SKA Rating by the Royal Institute of Chartered Surveyors (RICS) for adopting good environmental practices (such as the use of sustainable and recycled building materials) during its fitting-out. The accreditation was determined through an environmental assessment, benchmark and standard.

**AET** 

# **MISC'S BRANDS AND BUSINESSES**

Our parent, MISC, is a leading maritime transportation solutions provider meeting the world's energy needs.





#### **GAS ASSETS & SOLUTIONS**

Delivers Liquified Natural Gas (LNG) across the globe with decades of proven experience as well as distinguished reputation for overall operational excellence, reliability. safety and on-time cargo deliveries. Recently added Very Large Ethane Carriers (VLEC) into their growing portfolio of gas assets.

Owns and/or operates 30 LNGCs\*. 6 VLECs. 2 FSUs. 1 LBV

\* Diamond Class vessels are jointly Owned with Mitsubishi-NYK

Vessel Utilisation

>99%



Single largest **owner** of VLECs in the world by capacity







#### **PETROLEUM** & PRODUCT **SHIPPING**

Provides safe, high quality and comprehensive ocean transportation and specialist petroleum services to the world's largest energy companies, trading houses and refiners.

Owns and/or operates 13 VLCCs\*, 6 Suezmaxes, 24 Aframaxes\*\*,

2 LR2 tankers. **3** Chemical tankers, 17 DPSTs\*, 9 LSVs

\* including 3 VLCCs and 3 DPSTs on order \*\* including 1 Panamax Information as of 30 April 2022

Vessel Utilisation

99%



World's only owner and operator of Modular Capture Vessels





**AET** 



#### **OFFSHORE BUSINESS**

Delivers complete, comprehensive and innovative solutions from design to operations. catering for marginal, conventional and deepwater field developments with an excellent production and operations performance track record for all its facilities.

One of the world's leading FPSO/FSO owner and operators with 13 assets^



^ including 1 FPSO on order

Floating asset uptime of >99%



#### **Gold Class 1** Award from

Malaysian Society for Occupational Safety and Health (MSOSH) for FSO Orkid for second year running





#### **MARINE & HEAVY ENGINEERING**

Specialises in offshore construction, conversion and marine repair. Owns and operates one of the largest marine and heavy engineering facilities in the region.

One of the largest dry docks in Southeast Asia capable of handling vessels up to 450,000 dwt

Excellent HSSE Culture **3,401,385** man days with zero LTI and fatality A B

## Only Malaysian company

to achieve the Canadian Standard Association's "Certification of Companies for Fusion Welding of Steel" from the Canadian Welding Bureau



AET Connects 2021/2022



#### **INTEGRATED** MARINE **SERVICES**

Provides a comprehensive, reliable and efficient shipmanagement service. Operates and maintains a modern and diversified fleet of vessels, supported by a team of highly skilled. competent and dedicated professionals.

Operates and manages

85 vessels across the globe

High overall vessel availability rate



Proiects in 2021 6 DPSTs 5 dual-fuel VLCCs 2 LNGCs

## mms



#### **PORT MANAGEMENT** & MARITIME SERVICES

Delivers world-class maritime services and expertise in marine assurance and compliance as well as port and terminal operations and management to the major oil and gas companies including the PETRONAS Group.

Facilities availability

100% availabilities of ietties. single point moorings, vessel traffic control



MSOSH Occupational Safety and Health

"Gold Merit" award



Excellent HSSE Culture with **Zero LTI** since 1999







#### **MARITIME EDUCATION & TRAINING**

Nurtures future maritime professionals and supports the industry's growing requirement for professionally trained seafarers by providing a broad spectrum of maritime training and education as well as offshore and other courses.

Offers over

**170** courses including customised courses



Cadetship Programme Enrolment

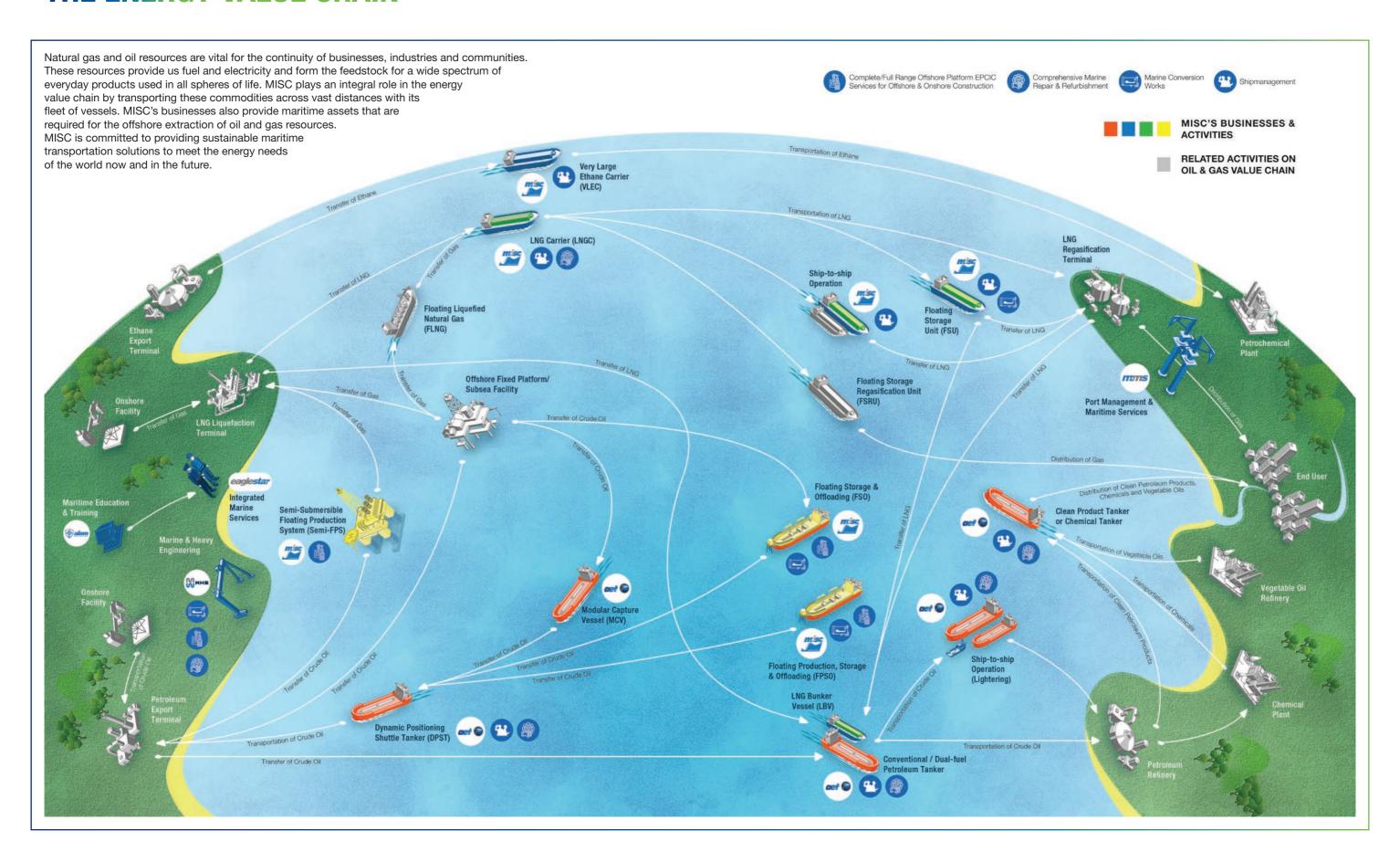


Trained over

13,900 seafarers since 1977



# MISC'S SERVICES ACROSS THE ENERGY VALUE CHAIN



# FINANCIAL PERFORMANCE AND KEY HIGHLIGHTS

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## **FINANCIAL REVIEW**

# SUSTAINING FINANCIAL STRENGTH THROUGH SECURED INCOME PORTFOLIO

FY2021 was a challenging year for the tanker sector, with historically weak earnings and rates. The COVID-19 crisis spurred an unprecedented collapse in oil demand in 2020 that kept the demand dampened in 2021 at 96.5 mbpd, below the 2019 pre-pandemic level of 99.5 mbpd. Spot earnings in the tanker sector came below operating costs, with earnings going into the negative range for the most part of the year. The situation only improved slightly when OPEC+ eased the supply cut in the third quarter. When oil demand started to recover, it was offset by inventory drawdowns instead of new orders. The release of vessels from floating storages throughout the year exacerbated the situation and further dampened the dwindling tanker demand. Consequently, tanker rates dived to a 30-year low in 2021.

AET demonstrated its resilience with its strategic focus on mid- to long-term secured income which provides AET with better financial stability for the long haul and the agility to take on new opportunities as they emerge. Managing the fleet portfolio against secured earnings mitigated the effects of economic uncertainties and financial volatility and improved our ability to achieve long-term sustainability

goals and meet customer requirements. During the year, we also strategically managed the disposal of assets in line with our fleet rejuvenation, negotiated lightering contracts, managed the in-charter portfolio, and reduced cost structure to better mitigate the downside risks. Lower operating costs were recorded with the optimised fleet size and tighter cost controls.

Despite difficult market conditions and the 30-year low tanker rates, we achieved an NPAT of US\$46 million in FY2021. AET secured a total revenue of US\$760 million and an EBITDA of US\$337 million. While our fleet was operating at high utilisation rates, the revenue and EBITDA were lower as compared with 2020, due to subdued market fundamentals.

Although the liquidity market had been tight in 2021, we were able to leverage our robust financial standing and a healthy balance sheet to secure competitive financing of about US\$600 million for the newbuilds scheduled for delivery in 2022. We have maintained our standby credit facilities that can be used to support new CAPEX investments for our fleet rejuvenation plan. This will ensure our ability to meet our obligations to our stakeholders. We also achieved significant savings by capitalising on low swap rates to hedge the loans and securing competitive rates.

#### FINANCIAL HIGHLIGHTS FOR FY2021

#### Revenue (US\$ million)



#### **Total Assets (US\$ million)**



EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortisation. NPAT: Net Profit After Tax; NLAT: Net Loss After Tax.

#### **EBITDA (US\$ million)**



#### Cash & Bank Balances (US\$ million)



AET Connects 2021/2022 Moving Energy To Build a Better World

We maintained a healthy balance sheet of approximately US\$4,198 million in assets with one of the lowest gearing ratios in the tanker market at 0.69. This was attributable to prudent capital management, and a secured incomegenerating portfolio. Despite poor market conditions, AET was able to maintain a strong level of cash balance to meet our financial obligations and our capital commitments. Additionally, we did a partial redemption of the Redeemable Cumulative Preference Shares from our shareholder.

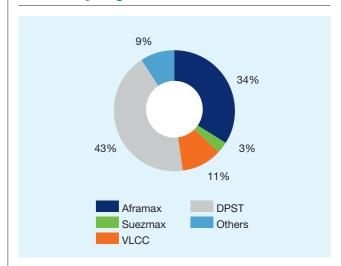
Over the last five years, AET has invested approximately US\$2 billion in new assets, of which about US\$1 billion was in dual-fuel vessels. As an early dual-fuel adopter, AET is a leading owner and operator of dual-fuel vessels. In 2021, we took delivery of Eagle Pilar, a newbuild DPST committed to a long-term contract with Shell in Brazil. We also signed an agreement with Shell for the construction and time charter of three LNG dual-fuel VLCCs for delivery in 2023.

In FY2021, 9% of AET's revenue came from our greener dual-fuel fleet. Our plan is to operate the majority of our fleet on eco-friendlier fuels by 2030. This is in line with our sustainability mission to contribute to a cleaner environment and accelerate the industry's decarbonisation priority. Together, these strategic assets will contribute

# In FY2021, 9% of AET's revenue came from our greener dual-fuel fleet.

Profitability (US\$ million)	2019	2020	2021
Revenue	1,039	920	760
EBITDA	408	403	337
(NLAT)/NPAT (operations)	41	85	41
Impairment/Gain or Loss on Sale of Assets	(31)	9	7
(NLAT)/NPAT After Minority Interest	9	94	46
Key Balance Sheet (US\$ million)			
Total Assets (including fixed assets and cash)	3,876	4,134	4,198
Total Liabilities (including borrowings)	1,756	1,987	2,034
Shareholder's Equity	2,120	2,147	2,164
Net Debt/Equity (times)	0.62	0.63	0.69

#### **EBITDA by Segments - FY2021**



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to the growth of our long-term secured income portfolio and greener shipping solutions. The secured revenues generated will provide financial stability and liquidity for AET over the next 10 years.

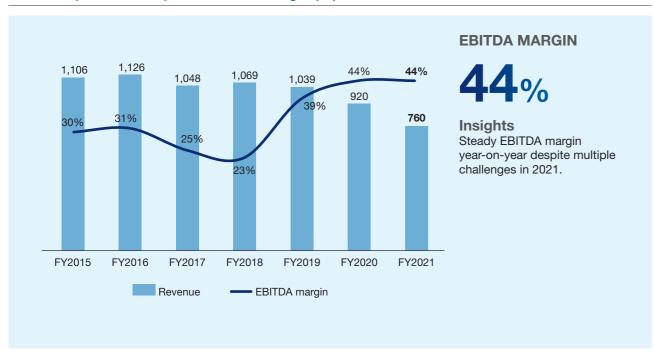
For our fleet of mid-sized tankers, we deployed them on more lightering contracts. Some were placed on time charters to reduce spot exposure while capitalising on the higher and more stable time-charter rates. Planned in-charters were scaled back to reduce exposures to the volatile spot market and drydocking was carried out routinely for vessel upkeep and safety. In line with our fleet rejuvenation strategy and in anticipation of slower demand for the near term, we sold seven vessels in FY2021, comprising of a VLCC, a Panamax and five older Aframaxes.

Joining our fleet portfolio in FY2022 and backed by long-term charters are six DPSTs and two VLCCs. These VLCCs are two of the world's first LNG dual-fuel VLCCs. Not only do they help our customers achieve a critical milestone in their fleet decarbonisation, the secured income from long-term charters will provide financial stability and liquidity to AET's operations.

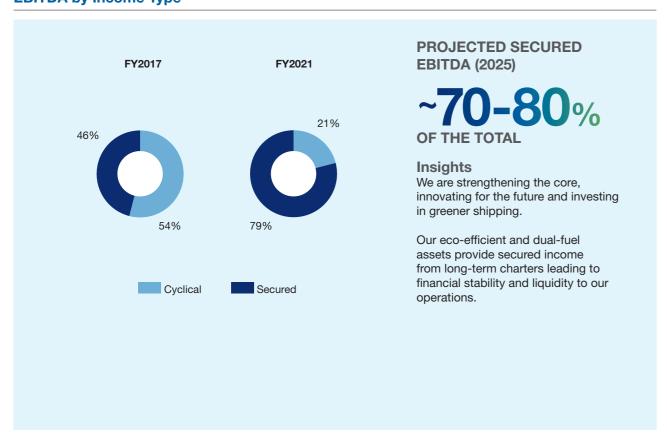
Moving into 2022, supported by robust long-term secured income and a rejuvenated asset portfolio, we will continue to maintain a healthy balance sheet to back AET's worldwide operations and decarbonisation priority. Despite the headwinds ahead—characterised by volatile oil markets, the health crisis presented by COVID-19, and the tense geopolitical situations—our strong financial position afforded by steady cash flows from operations and standby credit facilities will ensure our ability to meet our obligations to our stakeholders. We are confident that with our rejuvenated asset portfolio and a growing secured income base, AET will continue to grow from strength to strength building upon our financial resilience to generate growth in 2022 and beyond.

# **FINANCIAL REVIEW**

#### Revenue (US\$ millions) and EBITDA Margin (%)



#### **EBITDA** by Income Type

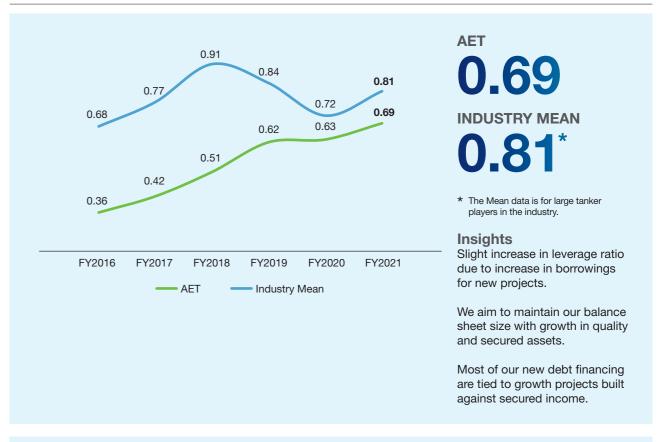


## EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortisation. TCE: Time Charter Equivalent.

#### Our TCE Performance vs Overall Market TCE (US\$/day)



#### Net Debt/Equity (Times)





For details on the Financial Pillar of our Sustainability Strategy, refer to page 100.

<sup>2018</sup> figures are pre-IFRS16.

# **KEY HIGHLIGHTS**

#### 2021

#### **January**



MISC Group, representing AET and Eaglestar, joined over 300 organisations in the maritime value chain to sign the Neptune Declaration on Seafarer Wellbeing and Crew Change in a worldwide call to action to end the unprecedented crew change crisis caused by COVID-19.

#### **February**

Featured in LNG Industry magazine on LNG bunkering, highlighting the continued growth of LNG as an important marine fuel for

the future.



#### March



Secured long-term time charter contracts for three LNG dual-fuel VLCCs from Shell, to be delivered in 2023.

#### April



Recognised with the "Singapore Registry of Ships" (SRS) Ship Owner of the Year Award presented at the Singapore International Maritime

Awards (IMA) ceremony as part of the Singapore Maritime Week 2021.



Our senior executives shared AET's views and position driven by our sustainability agenda and purpose-driven

ESG objectives in various high-profile global forums.

#### May

Launched a new microsite for AET Connects 2020, an annual publication on our business activities.



#### June

On the Day of the Seafarers, we paid homage to the hard work and dedication of all seafarers, mooring masters, workboat crew and site teams.



#### July



Co-hosted the first virtual MISC Group's Annual Bankers Engagement where senior relationship bankers and representatives from

global financial institutions joined our leaders as they shared the Group's business strength and stability as well as our aspirations.

#### August

Participated in the virtual career fairs organised by Singapore Management University and Nanyang Technological University.



#### September



Our Global Director for Human Resource and Facilities Linda Murray joined the panel session at Sea Asia on "Staying Ahead in the Race for New Talent" and discussed about embracing new norms in our talent strategies.

G IMO SEMANDE (SE

Honoured all our sea and shore staff on World Maritime Day for their contributions to our continued business resilience during the pandemic.

#### **October**



Completed our first LNG bunkering in the US, working in coordination with Shell to refuel the LNG dual-fuel Aframax tanker Pacific Ruby outside Port Canaveral in Florida.

Hosted our first Golf Event since 2019 to re-engage with our customers and partners.









Made a strategic investment into Daphne Technology alongside Shell Ventures, Trafigura and Saudi Aramco Energy Ventures, marking our entry into R&D for Greenhouse Gas abatement technologies aligned with our ongoing decarbonisation initiatives.

#### **November**



to the International Chamber of Shipping (ICS) conference "Shaping the Future of Shipping" at COP26 in Glasgow, Scotland. AET was represented at the conference by Jyoti Sharma and

Bronze Sponsor

Capt. Praba Balasundaram.

#### January 2022



Our Global Director for Corporate Strategy & Planning and Joint Venture Management Johan Munir participated

in the DNV-Maritime Live from Singapore Webinar Series on "Future-proofing shipping: The decarbonisation game-changer".

#### March 2022





Our Global Director for Dynamic Positioning Shuttle Tankers Capt. Amit Pal participated in the Tanker Shipping & Trade Webinar on "Shuttle tanker design, operations and decarbonisation offshore Brazil", urging industry partners to take actionable steps towards decarbonisation.

# **KEY HIGHLIGHTS**

#### **VESSELS DELIVERED THROUGHOUT 2021 AND EARLY 2022**

AET took delivery of six vessels throughout 2021 and early 2022. All vessels were safely delivered and cleared customers' stringent tests.





Eagle Valence and Eagle Vallery, two of the world's first dual-fuel and amongst the most environmentally friendly VLCCs in the market, was unveiled in February and April 2022. These two dual-fuel VLCCs are built for long-term charter to TotalEnergies.

Eagle Pilar, a Suezmax second generation Dynamic Positioning (DP2) Shuttle Tanker was delivered for long-term charter to Shell in the Brazilian Basin.







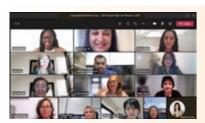
AET took delivery of Eagle Campos and Eagle Canoas, the first two of another three Suezmax DP2 Shuttle Tankers purpose-built for long-term charter to Shell. The final vessel in this series will be delivered to AET later this year. These fuel-efficient vessels further strengthen our commitment towards decarbonisation and sustainability.

Eagle Colatina, the first of another three purpose-built eco-efficient Suezmax DP2 Shuttle Tankers was named and delivered for long-term charter to Petrobras.



#### **CELEBRATING OUR DIVERSITY AND INCLUSION**

We value diversity in its fullest, and with our multi-generational workforce, promoting inclusion is pertinent to providing an engaging employee experience for all our staff, which drives our passion and innovation in support of our strategic goals. Some of our employee engagement initiatives included festive and cultural celebrations, family days, year-end parties, international food day and wellness month programmes.

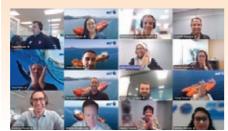


At the Gender Roundtable discussion with our President & CEO on International Women's Day, our female leaders aligned their focus to support our D&I agenda by coaching and mentoring the young female talents in the organisation.

Our Lunar New Year celebration in Singapore saw all staff decked in festively coloured outfits enjoying the delectable bento lunches.



Organised our first two virtual Cultural Day and International Food Day trivia quizzes where staff across the globe participated and gained more knowledge about one another's culture.

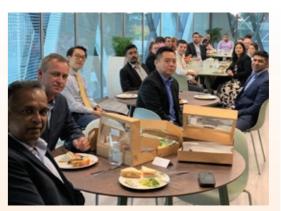


Our first staff engagement in London since the pandemic was the Family Fun Day where our staff enjoyed a get-together at the Hampton Court Flower Show.



Our Brazil staff gathered over traditional food to celebrate Festa Junina and the Carnival Day while staff in Singapore celebrated the nation's 56th year of independence with a food bash and print and digital advertisements in Singapore's news broadsheet, The Straits Times.



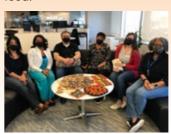


Our London staff enjoyed a get-together lunch to re-connect with one another.

Commenced our annual wellness month for global staff with activities and topics on physical, financial and social wellbeing.



Our Houston and Galveston staff celebrated Halloween with a fun-filled trivia quiz and food.



Celebrating Deepavali, our staff in Singapore were treated to a scrumptious lunch.



Year-end holiday parties were held for our Houston, Galveston, London and Rio colleagues to celebrate our achievements in 2021 while our Singapore colleagues ended the year with a meaningful fundraiser event to give back to the local community.



# OUR STRATEGY

MACRO TRENDS AND DRIVERS	5
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OUR BUSINESS MODEL	6
OUR INVESTMENTS IN SUSTAINABLE SHIPPING	6:



# **MACRO TRENDS AND DRIVERS**

#### **MEGATRENDS**



#### **Climate Change and Resource Scarcity**

Companies to rethink how they design and deliver products, services and projects to increase focus on abatement of carbon emissions and waste reduction.

Over 90% of world GDP is now covered by net-zero commitments.<sup>1</sup>



#### **Technological Advancement**

Automation and Al adoption will bring occupational and skill shifts.

~ 50% of current work activities are technically automatable by adapting currently demonstrated technologies.<sup>2</sup>



#### **Demographic Change**

The global population is growing, ageing and urbanising.

By 2030, over a billion people (or 12% of global population) will be aged 65 and above, up from 8.5% in 2015.<sup>3</sup>



#### **Urbanisation**

According to the UN, urban dwellers will constitute 68% of the world population by 2050, up from the current 56%.



#### **Changing Dynamics of Globalisation**

COVID-19 and the Russia-Ukraine war will prompt companies and governments worldwide to re-evaluate their dependencies and re-analyse their manufacturing and assembly footprints.

#### **CATALYST**

Shift in Customer Priorities Post COVID-19

**ESG Lens** 

#### **IMPLICATION TO SHIPPING INDUSTRY**



#### **Emission Reduction**

- IMO's ambition is to reduce shipping carbon intensity by 40% by 2030 and 70% by 2050.<sup>4</sup>
- LNG, ammonia, hydrogen and methanol are flagged as green shipping fuels of the future. In 2021, more than 740 out of approximately 86,000 ships run on LNG and this could increase to more than 1,000 vessels globally by 2030, driven by the shipping industry's desire to cut emissions.<sup>5</sup>



#### **Financing**

 Shipping is a capital-intensive industry, and access to financing will be increasingly linked to environmental sustainability.
 According to Bloomberg and Nordea, in 2021, Transport and Logistics were among the top five sectors raising debt through Sustainability-Linked Loans.<sup>6</sup>



#### **Consolidation and Alliances**

- As the global fleet ages, tighter access to replacement capital and environmental regulations will accelerate industry consolidation.
- Consolidation could also take the form of more owners putting their ships into commercial alliance such as pool operations, to strengthen their bargaining position with charterers.



#### **Smart Technologies**

- Rapid advances in technology and innovation are reshaping the shipping sector, with the development of new lower emission propulsion technologies and the ongoing digital transformation.
- 10% of the ships built in this decade will be smart ships with sophisticated sensor hubs and data generators. Connectivity via satellite communications will be massively improved, allowing ships to transfer higher volumes of data at lower cost.<sup>7</sup>
- Digitalisation and automation will create huge opportunities to make shipping and ports more resilient and efficient.



#### **Talent**

 Rapid technological advances will reduce the size of vessel crews and the type of skills sought for the maritime sector workforce will be significantly different from today.

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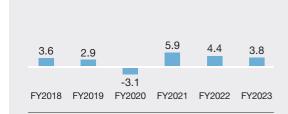
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# **INTEGRATED STRATEGY**

#### **TRENDS**

#### Global Economic Growth<sup>1</sup> (%)



#### Risks

• Elevated inflation due to rising energy prices and supply chain disruptions may hinder medium-term growth

#### **Opportunities**

• Collaboration with like-minded partners to de-risk, create competitive advantage and achieve economies of scale

#### IMO GHG Reduction Ambition<sup>3</sup> (GHG Intensity)



#### Risks

- Stricter environmental regulation increases complexity and cost of compliance, especially if regional markets adopt different approaches
- Emission reduction targets may not be sufficient to meet the Paris Agreement goals

#### **Opportunities**

- Demand for lower emissions logistic services could pave way to a two-tiered market, giving advantage to first movers
- · Consolidation in the tanker industry to unleash value and synergies

#### Global Oil Market Balance<sup>2</sup> (Mbpd)



#### **Risks**

· Geopolitical tensions could lead to oil demandsupply imbalance causing crude oil price volatility and business cycle disruption

#### **Opportunities**

· Shift in oil supply and refining landscape could boost tonne-mile demand for certain tanker sectors

#### Technology<sup>2</sup>









of Shipping

#### **Risks**

- Increased reliance on digital technology renders the shipping industry more vulnerable to cyber
- Although LNG is the most viable low-carbon fuel today, zero-emissions technology is still under development and uncertain

#### **Opportunities**

• Leverage on technological innovation for greater operational efficiencies and competitive

#### Tanker Market Balance<sup>5</sup> (%)



#### Risks

- Tonnage oversupply may linger, limiting freight rate upside
- · Geopolitical tension and regional security issues remain high and could alter trade patterns and supply of vessels

#### **Opportunities**

- Environmental regulations could spur demolition of older vessels and tighten the market balance
- Modest fleet growth on the back of low orderbook boosts the medium-term market outlook

#### Mbpd: Million barrels per day.

#### **GROWTH AREAS FOR AET**

- · Eco-friendly/dual-fuel vessels
- · Lightering: optimise fleet in the US Gulf and expand our lightering footprint in other locations
- · DPST time charter contracts with quality customers in Brazil and North Sea.
- Joint venture/strategic partnership with key oil majors/charterers
- Opportunities in VLCC and Suezmax segment due to change in trade routes, especially long-haul routes

#### **MITIGATION**

- Pre-empt and adapt with strategic fleet deployment
- Balanced asset portfolio and healthy mix of contracts
- · Investment in dual-fuel assets with a discipline in executing our fleet rejuvenation plan
- · Committed to developing 'partnership' relationships
- · Dedicated HSSE team with robust procedures and systems including a robust Cyber Security Management System

#### **OUR STRATEGY**

**Differentiated strategy** built on partnership and collaboration to capture value from existing asset lines

Systematically reducing the carbon intensity of our operations, supply chain and tanker segment mixasset by asset

Reinventing our portfolio mix to minimise risk and maximise growth

**Building new business** models and capabilities to capitalise on new opportunities in energy transition and efficiency

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# **OUR BUSINESS MODEL**

## **INPUTS**

#### **Financial Capital**

Financial capital is sourced from internally generated funds, as well as equity and debt financing



#### **Physical Capital**

Fleet of 60+ vessels including VLCCs, Suezmaxes and Aframaxes, Modular Capture Vessels (MCVs), DPSTs, Lightering Support Vessels and Chemical tankers



#### **Intellectual Capital**

- AET's intellectual capital includes expertise in both full-service lightering and STS transfer operation
- AET is a pioneer in LNG dual-fuel assets



#### **Human Capital**

AET has dedicated, highperforming and specialised personnel at sea (2,600+), including seafarers from Eaglestar and our sea and onshore staff (180+), to steer our business and operate our ships and facilities efficiently and safely



#### Social and Relationship Capital Strategic partnerships and

trusted relationships with stakeholders such as our key customers, suppliers, governments, port state controls, regulators, unions and industry bodies globally



#### **Natural Capital**

Use of natural resources such as water and bunker fuel to run our ships' operations

#### **KEY BUSINESS ACTIVITIES**

CH assisted by

I G finalises the

fixture and signs

the Charter Party



CH connects with potential customers directly or through third party



CH and OP, assisted by FS plan and coordinate the fleet's voyage



OP coordinates with ES and CHSSE to ensure safe and efficient operations of our fleet





BDJVM works with CSP

to identify, filter, assess

them into contracts

and evaluate new business

opportunities and convert







ES project manages; CHSSF ensures safety FI ensures financing: BDJVM and CC manage the vessel delivery and communication

BDJVM collaborates and innovates with ES. customers and shipvards on newbuilds/projects

Business Development, Joint Venture and

Shipyard Management

СН Chartering

Corporate Communications CC

CHSSE Corporate Health, Safety, Security & Environment and Sustainability

BDJVM, LG, FI,

CC. and CSP

work together

to crystalise the

CSP Corporate Strategy and Planning

ES Eaglestar Finance

HR Human Resource Information Technology

LG Legal

OP Operations

#### **OUTPUTS**

AET Connects 2021/2022

#### **Financial Capital**

**AET** 

# US\$337 million EBITDA

• Generated NPAT of US\$46 million

#### **Physical Capital**

# 115 million tonnes Total Cargo carried

• Took delivery of 1 vessel in 2021 and 5 vessels in 2022, as of 30 April 2022

#### **Intellectual Capital**

Specialised dual-fuel assets including assets under construction

- Expertise in full-service lightering 14,500+ STS transfers recorded in the US Gulf
- · Own and operate two MCV assets only tanker company globally to possess MCV capabilities

#### **Human Capital**

learning hours

3,286 learning places

- 20 leadership and 95 functional programmes through various modes of training delivery
- Five international assignments per year for the past five years for global leadership development
- Offered 20 tertiary students on-site internships, one apprenticeship, two graduate traineeship programmes and two scholarships
- · Partnered with Texas A&M University at Galveston for the scholarship programme to support 10 maritime students' training

#### Social and Relationship Capital

approximate number of **460** ALAM cadets sponsored in four years

- AET Caring for Communities 2021 COVID-19 donation campaign
- Initiated the 2021 #LetsHelpIndia fundraising campaign

#### **Environmental Positive Outputs**

Total Scope 1 Absolute GHG

Total Scope 1 Absolute **Emissions Reduction** Reduction in 2021 in 2021 (Y-o-Y) compared to 2019

GHG Emissions

#### **Negative Outputs**

- 1.61 million tonnes of GHG emissions (2020: 1.78 million tonnes)
- 32,898 tonnes NOx and 3,338 tonnes SOx emissions into the atmosphere (2020: 36,942 tonnes NOx and 3,050 tonnes SOx)
- 52 cubic metres and 20 cubic metres of garbage and plastic waste generated per vessel respectively

#### **OUTCOMES**

#### **Financial Capital**

- Through a secured income portfolio, obtained good visibility into future cashflows
- Strong capital structure with a leverage ratio (net debt/equity) of 0.69

#### **Operational**

- One of the largest mid-size tanker fleets in the world and top 15 VLCC owners/operators in the segment
- Third largest DPST player in the world
- Market leader in STS lightering operations in the US Gulf
- High vessel availability of >99% and utilisation rate of 99%

#### **Human Capital**

- Refreshed Employee Value Proposition
- Piloted and launched flexible work arrangements
- AET's gender distribution between male and female is 56% and 44% respectively
- Diverse talent pool represented by 20+ nationalities
- LTIF of 0.08 and TRCF of 0.31
- 48 vessels won the CSA Jones F. Devlin Award for Safety

#### Social and **Relationship Capital**

- Partnered with eight national and local charities' food programmes in seven countries to fund over one million meals to the underprivileged
- Staff raised S\$4,200 for the #LetsHelpIndia campaign to support COVID-19 impacted communities in India and Nepal with a matching donation from AET

#### **Environmental**

- · Our new AET London office received the SKA rating of Gold
- 50 vessels won the CSA Annual Environmental Achievement Award
- · Six AET vessels successfully surveyed and certified for Green Award through the Green Award Foundation

#### **5 YEAR TARGETS**

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Achieve **EBITDA** of approximately **US\$500** million by end of 2025

Maintain leverage ratio (net debt/equity) at 0.50 level by end of 2025

**Expand fleet of** dual-fuel vessels as part of AET's sustainability agenda

Agile and diverse talent pool enabling a wider selection of future leaders

**Explore** opportunities in the "new energy" space

Reduce fleet's carbon intensity equivalent or AERCO e by 40% by 2030 in line with IMO's 2030 GHG goal

**Decarbonisation** strategy to meet our net-zero commitment by 2050

# **OUR INVESTMENTS IN SUSTAINABLE SHIPPING**

With a greener asset portfolio, we are on track to meeting International Maritime Organization (IMO)'s 2030 targets of reducing greenhouse gases (GHG) intensity by 40% (against 2008 baseline), as well as our long-term commitment of net-zero emissions by 2050.

"

#### THE CASTOR INITIATIVE

In 2020, MISC allied with three maritime industry players: Samsung Heavy Industries, Lloyd's Register and MAN Energy Solution. The Joint Development Project to develop commercially viable deep-sea zero-emission vessels (ZEV) by 2030 is aligned with:

- The International Maritime Organization's 2050 greenhouse gas (GHG) aspirations; and
- Getting to Zero Coalition's commitment.

The three companies including Lloyd's Register, Samsung Heavy Industries and MISC, as founding members of The Castor Initiative, are taking the lead to encourage the use of green ammonia as propulsion fuel for the development and construction of the first two ammonia dual-fuel zero-emission VLCCs, which will be owned and operated by AET in late 2025 and early 2026.

The Castor Initiative members will focus on identifying green shipping corridors to facilitate the bunkering of these zero-emission VLCCs. This is certainly a landmark step forward which signifies MISC and AET's longer term net-zero GHG emissions commitment by 2050.

#### **DUAL-FUEL VLCCS**

In March 2021, Shell signed an agreement with AET for the chartering of three LNG dual-fuel VLCCs on a seven-year long-term energy-transportation contract. The ships are being built by DMSE in South Korea and will be delivered to AET in 2023.

The dual-fuel VLCCs are designed to be energy efficient and in compliance with IMO's 2025 Energy Efficiency Design Index (EEDI) III level. Each vessel will have an electronically controlled, gas-injection (MEGI) engine that can significantly reduce methane emissions. The ships will generate negligible methane slip during operation, making them among the most environmentally friendly vessels available with a 99% reduction in sulphur oxides (SOx), 85% reduction in nitrogen oxides (NOx), 95% less particulate matter (PM), and up to 30% less CO<sub>2</sub> in LNG mode as compared with the diesel engine.

The hybrid vertical bow design of the dual-fuel VLCCs will provide better hull-resistance performance at sea as compared to the conventional bulbous bow. The ships will be fitted with energy-saving devices, such as the DSME Duct and Long Cap and Rudder Bulb that can improve hydrodynamics and collectively deliver up to 2.5% energy-efficiency improvement. The technologically advanced dual-fuel VLCCs will significantly reduce emissions and deliver other environmental benefits in line with AET's environmental, social and governance (ESG) priorities and the energy transition goals of our customers.

AET is a pioneer in LNG dual-fuel vessels with a growing fleet of dual-fuel assets. The dual-fuel VLCCs are a continuation of our commitment to investing in sustainable shipping solutions that are both economically viable and environmentally compliant. While the strategic contract with Shell will provide AET with secure and stable income over a longer horizon, it is a key milestone for us in meeting IMO's 2030 GHG targets and steering our investments towards a zero-emission asset portfolio beyond 2030. We are fully committed to anchoring AET as a global leader in sustainable energy shipping.

#### **Emissions Reductions**

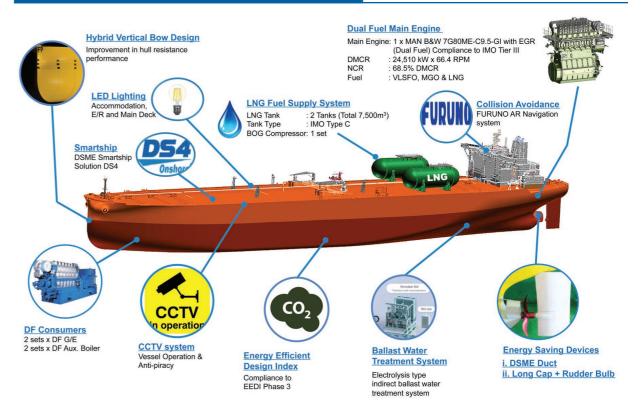
Up to 30% less CO<sub>2</sub> as per design

99% less S0x

**85**% less NOx

95% less PM

#### Primary Features of AET's new dual-fuel VLCCs



#### STRATEGIC INVESTMENT IN DAPHNE TECHNOLOGY

The transition to sustainable energy sources is already reshaping the global economy at a fundamental level. However, meeting the net-zero goal set by the Paris Agreement on Climate Change and IMO's GHG goals will require a dramatic reduction in GHG emissions. Solutions are urgently needed to help hard-to-decarbonise sectors move towards net-zero.

In 2021, AET, along with Shell Ventures, Trafigura and Saudi Aramco Energy Ventures, invested in Daphne Technology, a Swiss climate tech start-up that was a spin-off from the Swiss Federal Institute of Technology in Lausanne. The team at Daphne Technology has developed a patented exhaust gas purification technology that can remove multiple air pollutants from different fuel types (such as NOx, and SOx from Heavy Fuel Oil) and reduce emissions (such as NOx, SOx, methane and ammonia slip).

Daphne Technology's green converter can break down pollutants and convert them into non-hazardous by-products. These harmless by-products are then released into the environment or transformed into valuable products, such as fertilisers. In a single stroke, the technology will not only reduce GHG emissions but create a circular economy where by-products are upcycled.

Designed as a plug-and-play solution, the products by Daphne Technology have enormous potential to benefit any hard-to-decarbonise sectors that are struggling with GHG emissions. They will make energy transition economically sustainable for these sectors, and provide new opportunities for companies seeking promising technology in a sustainable future.

Our investment in Daphne Technology marks AET's entry into R&D for GHG abatement technologies, which is closely aligned with our ESG strategy and ongoing decarbonisation efforts. As an advocate of LNG as a greener solution in support of maritime decarbonisation, AET will invest further in technologies to reduce methane slip and improve well-to-wake emissions.

As a fleet operator, AET will be trialling Daphne Technology's products on our vessels which use different fuel types, including LNG in the newer ships with dual-fuel engines. We will be able to monitor first-hand the effectiveness of the green converter and collaborate with Daphne Technology for validation of empirical data and further enhancements. With the green converter and other innovations that will come out of Daphne Technology, AET will be charting a new course for sustainable shipping in 2050 and beyond.

# ANCHORING SUSTAINABILITY

CEO'S SUSTAINABILITY FOREWORD

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# **CEO'S SUSTAINABILITY FOREWORD**



At AET, we conduct business through the sustainability lens. We link our economic goals directly to our social and environmental responsibility, and we do so with the firm belief of "doing well by doing good". We place our best efforts to contribute to the 11 United Nations' Sustainable Development Goals (UNSDG), to which we subscribe. While the scale and scope of the UNSDGs is global and broad-ranging, the fundamental ways that we believe we can contribute remain unchanged, and it starts with acting responsibly, with integrity and with values. In 2021, we gave this conviction a systematic structure in the form of our sustainability strategy.

To that end, in 2021, we inventorised our GHG emissions, established our GHG organisational boundary and reaffirmed our commitment to aligning our GHG emissions across all scopes to net-zero by 2050, in line with the Paris Agreement goals. To help us get there, our target by 2030 is to reduce our shipping GHG emissions intensity by 40% compared to the 2008 baseline. In that regard, I am pleased to report that we have achieved 20% reduction in our Scope 1 GHG emissions compared to 2019. For our part, we have made significant technology investments and teamed up with like-minded partners who share our goal to create a sustainable global trade network. This is just the start.

I am pleased to announce our inaugural reporting of climate-related strategies and approaches in accordance with Task Force on Climate-Related Financial Disclosures (TCFD) recommendations in this issue of AET Connects. Having made these disclosures voluntarily, we strive to hold ourselves to higher transparency and accountability. With a list of climate-related metrics now reported alongside our financial results and business performance, we will have a clearer direction in channelling our efforts to meet various ESG targets across AET.

In addition to environment, sustainability has many other facets. The social pillar of our sustainability strategy is built to contribute to four key UNSDGs: #3 Good Health and Well-Being, #4 Quality Education, #5 Gender Equality and #10 Reduced Inequalities. With that in mind, our people agenda ensures that we continue to build an inclusive culture, excellence in our talent and encourage a diverse leadership that is representative of the regions we operate within. We expanded our youth education agenda in 2021 to include career fairs participation, scholarships, apprenticeships and traineeships. Despite the pandemic, we offered 20 tertiary students on-site internships within AET and continued our Singapore Maritime Foundation MaritimeONE Scholarships with a further two scholarships. We partnered with Texas A&M University at Galveston on their scholarship programme to support the training of 10 maritime students. We also continued our cadet sponsorship programme in Malaysian Maritime Academy (ALAM) through Eaglestar with over 460 cadets sponsored over the past four years. At AET, focusing on youth education and enhancing interest in the maritime sector is, for us, not only a passion to impart our knowledge and experiences but also an opportunity to tap into the next generation of talent.

Our governance pillar is anchored on our "doing the right thing" culture and we aim to reflect integrity, robust corporate governance and business ethics and accountability in our actions.

In this issue of AET Connects, we would like to present you the specific steps we are taking to mitigate the ESG concerns of our stakeholders. I am confident that our ESG initiatives will enable AET to deliver stronger value as we strive to forge deeper and more meaningful relationships with our stakeholders and continue to be a part of a sustainable solution for our planet.

# **OUR 2021-2025 SUSTAINABILITY STRATEGY AND GOVERNANCE STRUCTURE**

#### **OUR 2021-2025 SUSTAINABILITY STRATEGY**

Sustainability touches every aspect of our business. In developing our refreshed Sustainability Strategy 2021-2025, our key focus is on incorporating ESG principles into our business model to contribute towards solving bigger sustainability challenges for the maritime industry and the world. This Sustainability Strategy acts as a key framework to help us achieve our climate commitments and play a more active role as a responsible maritime player.



#### SUSTAINABILITY GOVERNANCE STRUCTURE

Sustainability Governance facilitates the smooth implementation of the Sustainability Strategy across AET, manages reporting processes and ensures overall accountability. The Sustainability Governance Structure supports the delivery of the Sustainability Strategy and integrates sustainability across all business operations.

**AET's Sustainability Governance Structure** 





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Chaired by the CEO, monitors AET-wide sustainability performance periodically



**CHSSE** and Sustainability Team

Implements and monitors AET's commitment to achieving its strategic sustainability priorities



**Business Units/Corporate Functions**Dedicated custodians for implementing sustainability-linked initiatives

# **OUR 2021-2025 SUSTAINABILITY STRATEGY**

#### **AET'S SUSTAINABILITY STRATEGY**

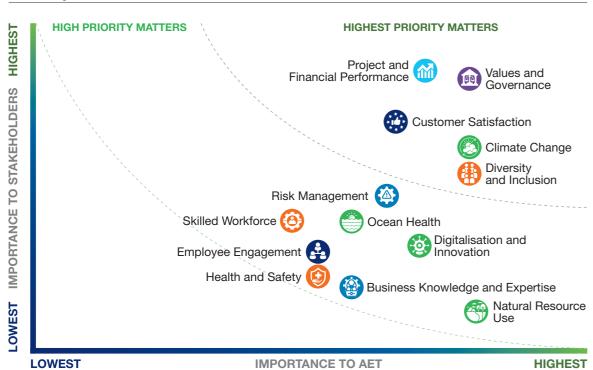
#### Pillar **Material Matters Our Commitment Strategic Priorities Our Progress UNSDGs Impacted** • Established our GHG intensity reduction target for shipping operations for 2030 and Climate Change **Environment** To care for the Towards Decarbonisation environment and net-zero commitment for 2050 • Promoting Circular Economy Natural Resource operate responsibly • Mapped net-zero total GHG emissions pathway Biodiversity Conservation Use Determined AET's GHG inventory based on the revised GHG organisational boundary Ocean Health Embarked on GHG Scope 3 emissions exercise Digitalisation and Invested in climate tech start-up, Daphne Technology Innovation • Plan to develop and construct the world's first two ammonia dual-fuel zero-emission VLCCs, which will be owned and operated by AET in late 2025 and early 2026 • Established AET's Ship Recycling Policy • Embarked on Task Force on Climate-related Financial Disclosures (TCFD) journey Social Health and Safety To promote health and Health and Safety • Lost Time Injury Frequency: 0.08 safety, individual and team Talent Excellence • Total Recordable Case Frequency: 0.31 excellence, as well as to Skilled Workers Community Investment Our shore staff achieved 4,840 learning hours create positive impacts in • Enhanced employee value proposition by introducing flexible work arrangements communities Diversity and Inclusion · Partnered with eight national and local charities' food programmes in seven countries to fund over one million meals through our global COVID-19 donation campaign, AET Caring for Communities • Sponsored two scholarships for students enrolled in the Diploma in Maritime Business at Singapore Maritime Academy and partnered with Texas A&M University at Galveston for a scholarship programme to support 10 maritime students' training · Values. Assurance and Values and Governance To foster a strong • Completed AET Compliance and Ethics Programme (2017-2021) with all objectives Governance **Business Ethics** achieved governance and business ethics culture • Responsible Supply Chain • Renewed ISO 9001 certification for 2021-2023 Management • Completed annual external audit for ISO 37001 to maintain certification • Conducted a pilot programme of supply chain ESG self-assessment framework on selected critical suppliers Risk Management **Financial** To achieve growth with Financial Growth Plans • Revenue: US\$760 million predictable and recurring • Financial Governance • Net Profit After Tax: US\$46 million Business Knowledge sources of cashflow Framework • Leverage ratio: 0.69 and Expertise Stakeholder **Employee Engagement** To create value through Stakeholder Engagement and • Rolled out the Sustainability Strategy e-learning training **Engagement** trusted stakeholder Disclosures · Conducted regular engagement with internal and external stakeholders through different **Customer Satisfaction** relationships engagement platforms • Strengthened our disclosures by publishing the TCFD section in AET Connects 2021/2022

## **KEY MATERIAL ISSUES AND OUR STAKEHOLDER UNIVERSE**

#### **KEY MATERIAL ISSUES**

Our materiality methodology uses a stakeholder-management and data-driven approach to evaluate both internal and external perspectives to produce a list of material topics that AET stakeholders were most concerned about. A materiality matrix ranked these issues and the relevant UNSDGs based on the level of importance to AET and our stakeholders. This enabled us to identify and prioritise specific risks and opportunities to improve our priorities, practices and shareholder value.

#### **Materiality Matrix**



**Selecting Material Topics** 

#### **BENCHMARKING**

This involved conducting desktop research on key material issues, peers and other players in the market to identify a broad list of material factors

#### STAKEHOLDER ENGAGEMENT

This involved engaging internal and external stakeholders to better prioritise the material factors

#### **MATERIALITY VALIDATION**

This involved mapping the key materiality matrix based on inputs from internal and external stakeholders, with final validation by the senior management

Our materiality assessment is aligned with MISC Group's methodology where stakeholders were asked to rank the identified material matters based on importance to the business and our stakeholders. The top-ranked material matters were then identified and presented in a graphical format to senior leadership.

#### **OUR STAKEHOLDER UNIVERSE**

AET is committed to elevating the maritime sector by having a positive impact on local and international communities. This commitment, supported by our stakeholder engagement strategy, creates value through awareness, dialogue and collaboration.

#### **Key Stakeholder Groups**

## **Who Are Our** Stakeholders?

We identify relevant stakeholders by considering their particular attributes and scope of involvement. The relevant stakeholders are groups or individuals who are directly or indirectly affected by our operations and activities or have the potential to impact AET.



We have established a structured stakeholder engagement process and a stakeholder-inclusive approach to creating value. Stakeholder engagement is integrated into every step of our value creation process.

#### **Our Principles of Engagement and Platforms**



**COLLABORATE** with strategic partners

- Strategy development activities
- Digital engagements
- Thought leadership and engagements
- Skill development programmes



**PROMOTE** sustainability

Key conferences and industry events



**COMMUNICATE** effectively through identified platforms

- Employee dialogues and industry events
- Townhalls and engagement with senior management



Stakeholder



FEEDBACK ought regularly from stakeholders

- Annual disclosures and publications
- · Timely updates on business activities, outcomes and achievements



- programmes, projects and relationships

   Surveys and feedback

AET Connects 2021/2022 **AET AET** AET Connects 2021/2022

## **TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)**

This is our first voluntary climate-related financial disclosure in line with the recommendations of TCFD. Our endeavours are integral to the commitment by the MISC Group to address climate change related issues and aspects within our value chain.

AET's stakeholders must be presented with information that helps them understand the climate change related issues and trends that are facing our business and what we are doing to manage and mitigate them. The TCFD standards seek to improve market understanding and analysis of climate-related risks and opportunities by developing disclosure recommendations that are useful to investors among other stakeholders in understanding material risks. While shifts toward a lower-carbon economy present significant risk, they also create significant opportunity for organisations that are focused on climate change mitigation and adaptation solutions. This is our first voluntary climate-related financial disclosure in line with the recommendations of TCFD. Our endeavours are integral to the commitment by the MISC Group to address climate change related issues and aspects within our value chain.

We have been progressively building an understanding of our climate-related risks and opportunities, updating our climate governance structure, and pushing ourselves to set and achieve increasingly ambitious goals over the last five years. Evidenced by the use of dual-fuel technologies, development and construction of two very large crude carriers which can be operated on zero-emission fuel, and

the growing investments in sustainable shipping, AET has taken the pledge to be part of the global solution in the transition to net-zero world.

In Q1 2022, the Board of Directors affirmed AET's commitment to achieve: (i) net-zero GHG emissions by 2050, and (ii) supported our goal of a 40% reduction in our fleet's operations GHG intensity by 2030 compared to 2008 baseline. Despite the current AET asset portfolio, the commitment formalises AET's ongoing work to address the challenges that climate change poses to our industry, market and society at large. The Board's affirmation also demonstrates how identifying, assessing and managing climate-related risks and opportunities remain a top business priority for AET. While this inaugural TCFD report has been a significant step in AET's decarbonisation journey, we will continue to improve on our accountability and mitigative actions in our drive towards a greener, low-carbon future.



This disclosure should be read alongside the "Towards Decarbonisation" section - GHG Intensity Reduction and Net-Zero GHG Commitment by 2050 on pages 86-89.

#### **Timeline of AET's Climate Actions**

#### 2017 2019 Placed order to build two of the world's Took delivery of the two LNG dual-fuel first LNG dual-fuel DPSTs Ordered two LNG dual-fuel Aframaxes MISC Group joins the Getting to Zero Coalition Invested approximately US\$350 to MISC Group initiated The Castor Initiative – ammonia-fuelled zero-emission vessels US\$400 million in low-carbon newbuilds 2020 2018 Secured time charter • Took delivery of two LNG dual-fuel DPSTs (with VOC recovery) for two LNG dual-fuel Placed order for amongst two of the world's first LNG dual-fuel Aframaxes • Invested approximately US\$200 to US\$250 million in low-carbon newbuilds • Developed AET's Sustainability Strategy 2021-2025 • Through MISC Group, participated in Carbon Disclosure Project

Moving Energy To Build a Better World

#### 2021

- Placed order for three LNG dual-fuel VLCCs
- Invested approximately US\$300 to US\$350 million in low-carbon newbuilds
- Invested in climate tech start-up Daphne Technology
- Through MISC Group,
- became a signatory of the Call to Action for Shipping Decarbonisation
- embarked and became a supporter of TCFD



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#### 2022

- Committed to net-zero GHG emissions by 2050
- Established GHG intensity targets for 2030 (shipping operations)
- To develop and construct a pair of zero-emission green ammonia VLCCs with Lloyd's Register and Samsung Heavy Industries
- Published inaugural TCFD report



#### **GOVERNANCE**

AET's oversight of climate risk has continued to expand and evolve with the increasingly demanding climate goals. Since the release of AET Connects 2020/2021, in which AET pledged to report and align the climaterelated initiatives to TCFD recommendations, we have:

- stated our commitment to achieving net-zero GHG emissions by 2050;
- stated our goal to reduce our fleet's operations GHG intensity by 40% by 2030;
- enhanced our oversight of Environmental, Social and Governance (ESG) activities and goals by providing regular updates to our Executive Leadership Team (ELT);
- increased the frequency and depth of climate-related discussions with the Audit Risk Management Committee (ARMC) and Board;
- expanded our understanding of our climate-related risks and included such risks in our Enterprise Risk Management (ERM) and Risk Register, scenario analysis and regulatory engagement and;
- rolled out our first ESG training module and Sustainability Strategy module to highlight our focus on environmental and climate-related risks.

#### **AET's Risk Oversight Structure**



## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

#### **GOVERNANCE**

#### **Board Oversight**



The Board of Directors has ultimate oversight of AET's work to identify, assess and integrate climate-related risks and opportunities throughout the organisation. The ARMC of the Board is the primary body responsible for managing risks, including the climate-related risks.

In 2021 and Q1 2022, the ARMC and the Board reviewed and discussed market developments related to the regulatory framework including IMO's GHG strategy and ambitions for 2030 and 2050. The Board also discussed issues pertaining to net-zero, and the implications of the company's net-zero commitment. To support these deliberations, the Board received reports from AET's Corporate Health, Safety, Security and Environment (CHSSE) and Sustainability team regarding the company's sustainability activities and performance, including those related to climate change and net-zero. The ARMC received reports from the ERM team regarding emerging trends on climate risk and AET's approach to managing them.

#### **Management Oversight**



The ELT, led by AET's President & CEO, provides guidance for identifying, measuring and assessing AET's climate-related risks and opportunities, in line with the Sustainability Strategy. The ELT is supported by the extended leadership and their respective teams with dedicated business, functional and operational expertise on risk, strategy and planning and on matters affected by climate-related risks and opportunities such as new markets as well as health, safety and environmental regulations.

The ERM team that is part of the Corporate Strategy and Planning team analyses AET's inherent and external climate risks, including the regular reviews performed by the business clusters in assessing the qualitative and quantitative impact of such risks, and updates the ELT on how the risks could be translated into opportunities. The issues and strategies are monitored at the ELT level and surfaced to the Board and ARMC on a quarterly basis. Risk assessment related to future emissions regulations is ongoing given the evolving regulatory environment in which we operate.

The ELT is supported by the CHSSE and Sustainability team, tasked with monitoring AET's fleet's carbon reduction performance, environmental compliance, and working with our stakeholders and partners on the development of emerging regulations.

#### Training



To keep abreast with the latest global trends and risk mitigation strategies for climate change, the Board and ELT members participated in workshops and seminars during the year. The training sessions were arranged by MISC's Corporate Sustainability team and AET's Corporate Secretariat on topics that included Climate Governance Principles, Implementing TCFD and Driving Towards Net-Zero, and GHG Awareness.

To onboard all employees to AET's environmental agenda, the first ESG training module as well the Sustainability Strategy module focused on climate-related risks were also rolled out during the year.

#### **STRATEGY**

Our decarbonisation strategy is carefully balanced with the need to meet the world's growing energy shipping demands, protect the environment and deliver stable shareholder returns — reflecting our triple bottom line priorities relating to people, planet and profit. We have adopted the following short, medium and long-term timelines to chart our strategy and progress towards decarbonised shipping operations.

In setting and monitoring the delivery of AET's strategy, the AET Board and ELT consider climate-related risks and opportunities across three time horizons:

SHORT-TERM (TO 2025) defined by our financial and business plan MEDIUM-TERM (TO 2030) defined by our strategic priorities, regulatory landscape and 2030 GHG goal

#### LONG-TERM (TO 2050)

defined by the scenarios that were built in 2021 to look at critical uncertainties around demand of energy and energy transition, in order to discuss the impacts and the responses to these scenarios

#### **Scenario Analysis**

In 2021, we worked with our parent, MISC to define climate-related risks and opportunities arising from various political, economic, environmental, social, and technical trends. To assess the resilience of our decarbonisation strategy and to better understand the physical and transition risks involved, we considered two global warming scenarios at +1.5 degree Celsius and +4 degree Celsius. The assumptions for the two scenarios came from the following sources: Intergovernmental Panel on Climate Change (IPCC), Representative Concentration Pathways (RCP), Shared Socioeconomic Pathways (SSP), International Energy Agency (IEA) and International Renewable Energy Agency (IRENA).

#### **Scenario Development Process**

#### **Determine Driving Forces and Critical Uncertainities**

Identify big shifts in society, energy, economics, technology and politics in the future that are relevant to AET

#### **Develop Plausible Scenarios**

Draw two possible scenarios to represent a range of potential outcomes

#### **Analyse and Understand Implications and Mitigations**

In developing the scenarios, we identified five key driving forces for AET's business performance. These driving forces set the boundaries for the scenarios and the stage for what may come. The two selected scenarios highlight the five TCFD principles of plausible, distinctive, consistent, relevant and challenging. Producing these scenarios required projections of future population levels and the impacts of economic activity, governance structures, social values and technological change. Economic and energy changes were also used to analyse and quantify the effects of these projections on climate change.

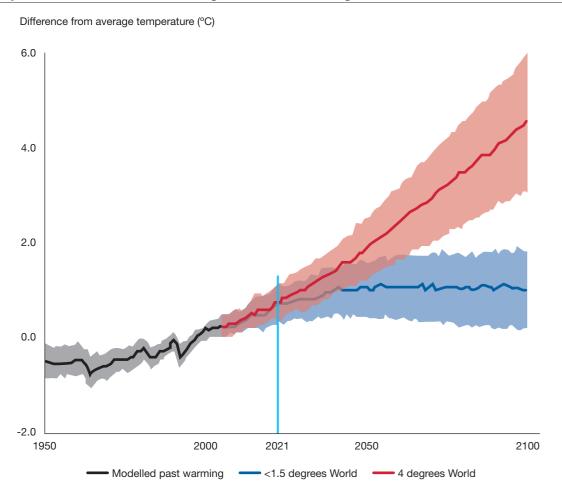
#### **Driving Forces Underlying AET's Risk Scenarios**

Political and Legal Aspects	Technology Development	Economic	Environmental Impact	Reputation and Social Aspects
International climate change policy	Renewable energy and energy-efficient technologies  Carbon capture storage and utilisation technologies  Economic growth  Energy market (including renewable energy)	growth and changes in to reduce va		Customer pressure to reduce value chain emissions
		market (including renewable		
Industry environment standards			Extreme weather events	Demographics/ global population change towards a more sustainable lifestyle
Carbon price				Talent retention and attraction

## **TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)**

#### **STRATEGY**

Projected Scenarios at +1.5 and +4 Degrees of Global Warming



Source: Based on IPCC Assessment Report 5

According to the Intergovernmental Panel on Climate Change (IPCC), limiting global warming to 1.5 degree Celsius is imperative if we wish to avoid catastrophic impacts from climate change. A 1.5 degree Celsius scenario would require aggressive action to limit climate change, hence transition risks are greatest while physical risks are lowest in a 1.5 degree Celsius scenario compared with scenarios where the global temperature rise exceeds this level. Therefore, AET has considered this scenario to understand how we would fare in a low-carbon transition pathway. In a more "business-as-usual" (BAU) scenario or in other words, a 4 degree Celsius scenario, AET might face fewer transition risks, but more physical risks, such as those that result from sea level rise and extreme weather events. Based on the indications of our climate-risk assessment and scenario analyses conducted in 2021, the physical and transition risks of climate change were material to AET's operations in the medium to long-term. However, we expect the impacts of climate change to be systemic, and the transition to a decarbonised global economy to provide growth opportunities across all industries. As such, AET remains committed to enterprise-wide actions in response to the identified climate risks and opportunities. Our focus is to capture the growth opportunities by investing in fleet rejuvenation, maximising energy efficiency, shifting to renewable energy sources and investing in nature-based removals to compensate for any residual GHG footprint. Aside from strengthening our risk resilience, such efforts will future proof our business and bolster our capacity for long-term financial sustainability.

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#### +1.5 Degree Scenario and Impact on AET

The +1.5 scenario is aligned with the Paris Agreement to keep average global warming to well below 2 degree Celsius and continue all efforts to limit the rise in temperatures to below 1.5 degree Celsius. In this scenario, countries and their governments would create the policy context to steer investments and attract climate finance. Strong collaboration would exist among countries on carbon regulations and policies to drive rapid energy system-level decarbonisation at national and sub-national levels through holistic netzero road maps, investment plans and implementation support. Nationwide schemes for carbon pricing would be introduced, even in all emerging market and developing economies. The tax would increase the price of carbon-intensive fuels and electricity, thereby providing incentives to reduce energy use and shift toward cleaner fuels across all sectors. Crude oil demand would peak by 2019, plateau, and then start declining before reaching sub 30 million barrels per day (mbpd) level by 20501. There is a widespread deployment of both demand-and supply-side energy efficiency measures, and increased electrification of end-use sectors. The speed at which existing equipment is replaced and new technologies are introduced would accelerate. For renewables and related technologies currently at an early stage of development, diffusion time would be reduced by several decades compared with historical averages. Large-scale deployment of Carbon Capture, Usage and Storage (CCUS) technology would happen to bridge the gap towards net-zero carbon economy. Ammonia and hydrogen would be the key marine fuels in the shipping industry by 2050, accounting for approximately 50% to 60% of the market together. The largest ports in the world would become industrial hubs to produce and store hydrogen and ammonia for refuelling ships. Extensive hydrogen and ammonia pipelines and facilities would be installed. Adoption and awareness of changing environmental regulations on carbon pricing and other legal frameworks would continue, supported by climate action across industries.

In this scenario, AET would be impacted predominantly by climate-related transition risks. These risks could range from reduction in crude oil production and demand, increased environmental and carbon policies and legislation, to a faster energy transition to renewables, cleaner and/or non-fossil fuelled energy sources. Our business would be affected by reduced market demand for our vessels.

Higher compliance costs would increase our capital expenditure (CAPEX) and operational costs (OPEX). Stringent environmental regulations may cause assets to be sold prematurely if they cannot be climateproofed without considerable investment. However, opportunities could arise from repurposing the decommissioned assets as floating storage for the alternative green fuel market and other circular economy opportunities in the future ocean economy.

AET could achieve increased revenue from market demand for low-carbon emission vessels that can meet growing stringent environmental and low-carbon related legislation. AET could also enter new markets as a transporter of alternative fuel or stored renewable energy.

AET would have opportunities to collaborate with supply chain partners and customers to improve the GHG performance of assets in the short to medium-term. This could include new industry collaborations to collectively make commitments, invest in new technologies, build capabilities and share best practices.

AET's recognition as a low-carbon solution provider that both acts and advocates would create more opportunities for us to lead the market and improve our competitiveness. These opportunities could contribute to strengthening revenue and help to attract and retain talent within the organisation.

#### +4 Degree Scenario and Impact on AET

In this scenario, global climate action institutions are weakened. Climate actions are fragmented with increasing regionalism, competition, and polarisation at the global scale. The lack of established global regulation around carbon emissions limits progress towards regulating carbon, and progress is slow due to misalignment between global and local regulations. Poor alignment of policies across countries impedes valuable exchanges of knowledge and best practices. There is continued reliance on fossil fuel-based transport systems, and crude oil demand remains at about 105mbpd<sup>1</sup>. The price of renewable energy is uncompetitive in most regions due to lack of funding or policy facilitating research and development in renewables. New technologies to reduce GHG and slow down the effects of climate change are adopted at a slower pace. Global emissions continue to be excluded from carbon pricing, and only a handful of countries have set out clear pricing pathways. Sea level rise continues to worsen with unpredictable sea wave patterns and greater frequency of extreme weather.

AET could be impacted by increased maintenance costs and CAPEX. Vessels would require more frequent maintenance to withstand increasingly intense weather conditions. Our operational efficiency may be impacted due to delays and disruptions caused by extreme weather events. Trading routes, ports and related infrastructure may experience disruptions or adverse impacts such as submergence, coastal flooding and coastal erosion due to sea level rise.

There could also be increased exposure to liabilities due to personnel injuries and asset damage caused by increasing storm surges, changes in precipitation. and greater intensity and frequency of typhoon/cyclone

However, AET may benefit from the rapid development of better ship designs that can withstand extreme climates. We could also see better growth opportunities due to demand growth or sustained demand in the oil and gas industry as the energy transition to alternative or renewable energy could be much slower.

IEA - World Energy Model Documentation. (2021, October). https://iea.blob.core.windows.net/assets/932ea201-0972-4231-8d81-356300e9fc43/ WEM Documentation WEO2021.pdf

## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

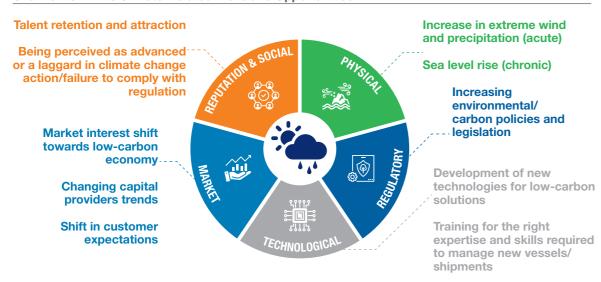
#### **STRATEGY**

#### **Climate-Related Risks and Opportunities**

During the TCFD workshops conducted in 2021, AET identified several climate-related risks and opportunities that were financially material. These climate-related risks and opportunities were mapped across AET's value chain, from upstream suppliers to downstream customers, to determine the impact from the physical and transitional climate-related risks. These risks and opportunities cut across our short, medium and long-term time horizons and are global in nature. We aim to conduct more thorough analyses in the near future to establish the projected monetary values and specific time horizons for managing such risks.

Our climate-related risks and opportunities are grouped under the five dimensions of physical, regulatory, technological, market, and reputation and social as shown in the chart: Overview of AET's Climate-Related Risks and Opportunities. These risks and their impact are further summarised in the table: Understanding the impact of climate-related risks and opportunities on AET's business strategy and financial planning. The existing mechanisms to mitigate these climate-related risks are summarised in table: Mechanisms to manage AET's climate-related risks (page 80).

#### Overview of AET's Climate-Related Risks and Opportunities



Understanding the impact of climate-related risks and opportunities on AET's business strategy and financial planning

PHYSICAL			
Risk Type	Potential Risks	Impact on Business, Strategy and Financial Planning	Opportunities
Acute	Increase in extreme wind and precipitation	<ul> <li>Increased asset maintenance cost and CAPEX to withstand extreme weather</li> <li>Disruption to operations</li> <li>Increased risk of damage to assets and injury to personnel</li> </ul>	<ul> <li>Increased collaboration across the supply chain</li> <li>Increased R&amp;D initiatives on ship design that can</li> </ul>
Chronic	Sea level rise	<ul> <li>Increased cost from operational delays and disruptions</li> <li>Disruption to trading routes, ports and related infrastructure due to submergence, coastal flooding and coastal erosion</li> </ul>	withstand extreme weather events and climate-related risks

#### **TRANSITIONAL** Impact on Business, Strategy **Risk Type Potential Risks** and Financial Planning **Opportunities** Regulatory Increasing • Higher CAPEX and OPEX associated Higher market environmental/ with implementing compliance differentiation resulting carbon policies measures from low-carbon and legislation • Increased cost of borrowing and reduced capital availability New and/or expanded · Decreased asset value and risk business segments of stranded assets related to new asset classes or vessel types Increased demand for low-carbon or compliant assets Technological Development • Higher R&D cost for products and Increased annual savings from energyof new technologies to generate renewable technologies energy or reduce carbon emissions efficient technologies • New or modified assets or services for low-carbon and reduced energy solutions proving more difficult or costly to consumption develop Increased funding/ incentives from financial providers for first movers who develop and adopt new technologies · Increased costs of reskilling the Improved standing Training for the right expertise existing workforce and acquiring new as a climate leader and skills talents to manage new technologies enhances the ability to required to attract talent manage new technology Market Shift in · Reduce demand for assets due to • Increased revenue customer energy transition from new business opportunities that expectations contribute to a circular Changing expectations and net-zero economy of capital Opportunities arising providers from sea transportation Market interest of alternative fuels shift towards or renewable and a low-carbon zero-carbon energy economy Reputation & Stakeholder Reputation impact associated with Stewardship position Social pressure to climate risks to drive advancements reduce in decarbonisation value-chain technology emissions • Unable to attract talent if it is Improved ability to Talent retention attract and retain talent and attraction "business-as-usual" as an advocate of low-carbon future

## **TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)**

#### **STRATEGY**

Mechanisms to manage AET's climate-related risks

#### **PHYSICAL**

#### Risk Type

#### **Potential Impact**

## Acute

Acute physical risks such as hurricanes and typhoons, could:

- disrupt AET's business and operations
- impact the safety of personnel, assets and cargo
- interrupt AET's value chain management • have a material adverse
- effect on AET's financial and operational results
- undermine AET's reputation in the marketplace



Chronic physical risks, such as rising mean temperatures and sea levels, could impact AET's shipping operations and ability to support its customers

#### Mechanism to mitigate climate-related risks

AET continues to improve the specifications of its newbuild vessels to address acute physical risks:

- Stringent safety controls have been applied to vessel navigation
- Comprehensive procedures have been introduced to improve passage planning, vessel management in bad weather, navigational equipment maintenance, resources management and contingency plans for various vessel emergencies

A Crisis Management Plan (CMP) was implemented to govern crises incidents:

- A Crisis Management Team (CMT) was appointed to identify, evaluate and recommend/proactively address strategic issues impacting people, environment, assets and reputation
- All emergency plans at the operational level have been integrated into AET's business continuity management and disaster recovery plans and procedures

As the conditions and severity of physical risks may change over time:

• Starting 2023, physical risk indicators and signposts will be developed as part of AET's business resilience strategy

#### **TRANSITIONAL**

#### Risk Type

Regulatory

#### **Potential Impact**

#### New and emerging carbon policies and regulations could:



• increase AET's regulatory

- and compliance risks
- affect the compliance requirements and costs associated with the compliance programmes/ processes in AET's different geographical locations

#### Mechanism to mitigate climate-related risks

AET continues to proactively keep abreast with maritime legislation and the unilateral decisions of maritime nations:

- Starting 2022, following our risk analyses, the "Failure to meet regulatory expectations on environmental impact, including climate change" will be managed as a standalone risk in the ERM risk register
- IMO regulations and guidelines will serve to guide our pathway towards zero emissions from international shipping. AET has developed an EEXI and CII execution plan to ensure zero failure.
- AET's vessel fleet will be continuously evaluated and right sized to ensure that underperforming ships are sold or monetised through investments into newer and greener assets.

AET Connects 2021/2022 Moving Energy To Build a Better World

#### Risk Type

#### **Potential Impact**



The development of new technologies for low-carbon solutions could:

- undermine the performance of AET's current vessel fleet
- reduce the relevance and usage of our assets

#### Mechanism to mitigate climate-related risks

AET continues to invest in new technologies to improve design and energy efficiency of our vessels. Key initiatives include:

- Incorporating LNG dual-fuel systems in our vessels
- Retrofitting existing vessels with green technologies to improve energy-efficiency and lower emissions
- Investing in strategic GHG abatement technologies
- Development and construction of the first two ammonia dual-fuel zero-emission VLCCs, which will be owned and operated by AET in late 2025 and early 2026

#### Market



Shifts in the expectations of customers and capital providers towards low-carbon economy could:

· reduced demand for conventional tankers AET is actively addressing new market opportunities arising from the transition towards renewable energy sources:

• Our business strategy will enable AET to explore and develop low-carbon services as new income streams that support both the circular and net-zero economy

#### Reputation & Social



Pressure to uphold our market reputation as a leader in climate-change action could:

- subject AET to higher scrutiny in the maritime and energy industries
- put higher demands on the costs and transparency of AET's environmental stewardship efforts

that support net-zero, and has established various measures to safeguard its reputational risks,

AET is leading in advocacy campaigns for policies

- · Setting goals to reduce our shipping GHG intensity by 2030
- Committing to net-zero GHG emissions by 2050
- Communicating our sustainability efforts and achievements to internal and external stakeholders
- Taking the lead to drive positive industry change
- Investing in dual-fuel systems that emit lower
- Sponsoring cadets at ALAM that are trained in crewing technologically advanced lower-carbon ships such as our dual-fuel Aframaxes and VLCCs



## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

#### **STRATEGY**

#### **Climate Strategy**

Climate change is a global challenge that poses risks to the environment, biodiversity, health, safety, and security of the communities we operate in. In many ways, our climate strategy is our new business strategy, and our climate strategy is guided by the global mandate to limit global warming to well below 2 degree Celsius in order to safeguard our long-term competitiveness. We believe that today's environmental risk is tomorrow's economic risk. We are actively tackling our environmental risks, so that we can ensure the economic viability of our business today and in the future.

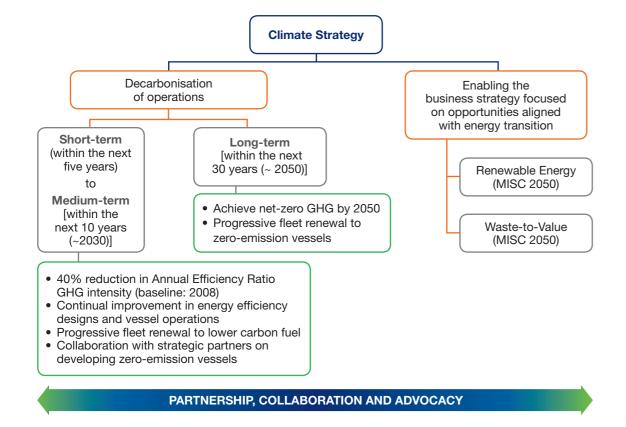
Our climate strategy is driven by factors such as changes in policy, legislation, customer preferences or markets as a result of growing concerns around climate change and energy transition. The requirement for an accelerated climate action through investments in renewables and green fuels poses a direct impact to our industry. At the same time, an intensification in the

scale and frequency of severe weather and natural disasters will be a systemic risk to our business in the long term. This makes climate change a toppriority issue that we must address head-on not only for our shipping business, but also in our role as a global company. To that end, AET is committed to implementing actions that will decarbonise our business while supporting the world in its transition to greener solutions.

While formulating our climate strategy and creating a framework for action, we have assessed the challenges ahead, considered our goals and targets and developed a plan on how we go about achieving them. We are committed to aligning our GHG emissions across all scopes to net-zero by 2050 in line with the Paris Agreement goals. Our target by 2030 is to reduce our shipping GHG emissions intensity by 40% compared to 2008 baseline. Climate-related metrics on GHG emissions and the evaluation of lower carbon emissions businesses are now part of the Company's Balanced Scorecard.

More on AET's climate strategy and transition plan in the following charts.

#### **Overview of AET's Climate Strategy**



#### ALT COMMOND EDET/EDEE

#### **AET's Transition Plan**

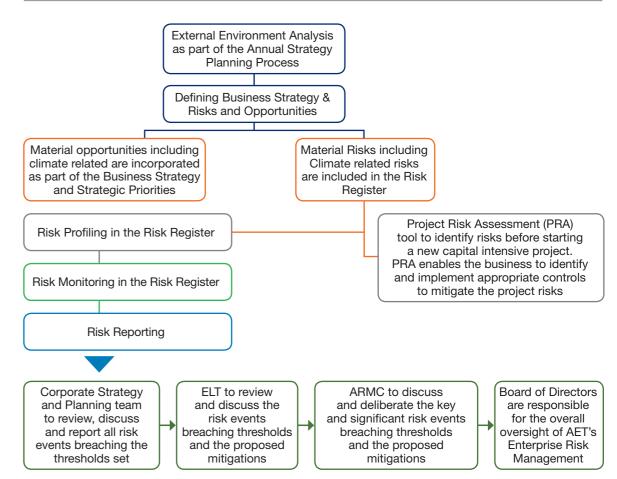


#### **RISK MANAGEMENT**

#### Risk Management Framework

The management of AET's climate-related risks is embedded into our processes for Strategic and Enterprise Risk Management and Project Risk Assessments.

**Overview of AET's Risk Management Framework** 



## **TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)**

#### **RISK MANAGEMENT**

#### **Strategic Business and Risk Planning**

Beginning 2022, the impact of climate-related scenarios on business outlook will constitute part of the external risk factors to be evaluated during AET's annual strategic and business planning exercise. Material risks and opportunities will be translated into strategic priorities as part of our five-year rolling business plan.

#### **Enterprise Risk Management**

Climate-related risks are identified, assessed, evaluated, treated, reported and monitored as part of AET's Enterprise Risk Management process. Risk management activities are undertaken by Corporate Strategy and Planning team before they are escalated to ELT, ARMC and Board for deliberation and resolution.

Beginning 2022, AET's climate-related risks will be included in the risk registers developed and maintained at the operational level.

This will improve the monitoring of our climate risks, assessment of climate-risk impacts and identification of risk-mitigation plans. The process for including AET's climate-related risks and opportunities in the existing risk register will be enhanced progressively.

AET's GHG emissions performance and carbon reduction against the strategic targets will be presented to the ELT and ARMC as part of the quarterly risk reporting from 2022. Our GHG emissions performance and intensity reductions against the strategic targets are already included and tracked as part of AET's Balanced Scorecard.

#### **Project Risk Assessments**

Beginning 2022, climate-related risks and opportunities will be considered in Project Risk Assessments. AET will assess the climate-related risks based on quantitative and qualitative criteria. Priorities will be set based on the severity of the potential risk impact and the scale of the opportunities.

#### **METRICS AND TARGETS**

The principal metrics used at AET to monitor our progress on GHG goals (including Scope 1, Scope 2 and Scope 3 emissions) are disclosed on pages 86-91, under the Sustainability Pillar - Environment "Towards Decarbonisation" section.

2 and, if appropriate, Scope 3 GHG emissions Risk factors, page 78 and the related risks.

Disclose Scope 1, Scope Scope 1 and Scope 2 on page 91 TCFD risks as described in Strategy section, page 76

Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

To better reflect our sphere of influence on GHG reduction, AET's GHG organisational boundary is based on the GHG Protocol Corporate Standard's financial control approach, in line with our parent's organisational boundary.

In line with MISC, AET's GHG organisational boundary was revised to follow the GHG Protocol Corporate Standard's financial control approach in 2021. All direct GHG emissions emitted from assets and operations falling under AET's GHG organisational boundary are accounted as our Scope 1, while electricity purchased for use on our assets and facilities are accounted as Scope 2. Emissions from the below mentioned assets and facilities, where material and applicable, form part of our Scope 3 emissions:

- 1. downstream leased assets which are owned by AET but leased out (bareboat-out) to other parties,
- 2. assets where AET has minority equity ownership and no control, and
- 3. upstream leased assets (in-chartered) with a lease term of six months

We expect to complete the estimation of our remaining material Scope 3 categories in 2022.

#### **Carbon Intensity Targets for Shipping Operations**

Scope (boundary)	Vessels owned or leased where AET has the full authority to introduce its operational and HSE policies and are subjected to the GHG requirements of MARPOL Annex VI
Base Year	2008
Target Type	CO <sub>2</sub> e intensity
Measurement Metric	AERCO <sub>2</sub> e (gCO <sub>2</sub> e/t-nm)
Commitment Period	2030
Target Level (reduction from base year)	AERCO <sub>2</sub> e: 40%
Scope (boundary)	All GHG:  • Carbon Dioxide (CO <sub>2</sub> )  • Methane (CH <sub>4</sub> )  • Nitrous Oxide (N <sub>2</sub> O)

#### Commitment to Net-Zero GHG Emissions by 2050

Scope (boundary)	All GHG:  • Carbon Dioxide (CO <sub>2</sub> )  • Methane (CH <sub>4</sub> )  • Nitrous Oxide (N <sub>2</sub> O)
Scope	AET's Value Chain:  • AET's operations (Scope 1 and Scope 2)  • Material upstream and downstream operations (Scope 3)
Measurement Metric	Total GHG in CO <sub>2</sub> e
Commitment Period	2050

#### **FUTURE ACTIVITIES**

AET plans to strengthen the management of climate-related risks in response to the TCFD recommendations. Moving forward, the integration of climate-related risks into AET's existing risk management process will be enhanced.

- In 2022, AET will explore the adoption of internal carbon pricing in our decision-making process as well as collate financial climate-related indicators that can better quantify our risks and opportunities.
- We will actively promote low-carbon asset solutions to our customers. AET will engage with customers, suppliers and other stakeholders throughout the value chain to strive for a mutual understanding of our approach to addressing climate change.
- We will continue to enhance the provision of consistent and transparent annual disclosures to our stakeholders in line with the TCFD recommendations.





### **SUSTAINABILITY PILLAR: ENVIRONMENT**

#### **IMPORTANCE TO AET**

The climate change agenda has taken a broad significance in the global trade ecosystem. Shipping accounts for up to 3% of global emissions but carries 90% of the world's cargo. As a result, the spotlight is now firmly on the shipping industry, with regulators and investors pressuring shipping groups to step up their efforts to cut their emissions.

The International Maritime Organization (IMO) has announced an ambition to halve international shipping greenhouse gas (GHG) emissions by 2050 while reducing  $\mathrm{CO}_2$  emissions intensity by at least 40% by 2030 and 70% by 2050 relative to the 2008 baseline. There is a need for the whole shipping industry to be fully committed to bringing about this change.

With a core objective to care for the environment and operate responsibly, AET is committed to environmental stewardship by managing our environmental impact and ensuring the sustainable use of natural resources. Our decarbonisation targets are fully aligned with IMO's GHG emission goals for 2030 and 2050. AET's Sustainability Strategy 2021-2025 was formulated to provide a clear roadmap towards these targets.

In our drive to accelerate decarbonisation, we have been partnering with our customers to support their strategic needs and environmental ambitions. We have also been exploring new R&D opportunities and pioneering the development of zero- and low-emission vessels. These efforts will enable us to forge long-term partnerships with our customers and meet their expectations.

#### **UNSDGs IMPACTED**



Design or retrofit sustainable assets which optimise resource-use effciency with greater adoption of clean and environmentally sound technologies



Design and operate assets that can reduce effects of climate change

#### **OUR INITIATIVES**

A key development for AET is the launch of our 2021-2025 Sustainability Strategy, which represents the next phase of AET's overall sustainability goals. The sustainability strategy provides a clear roadmap for our ESG commitments over the next five years, in addition to our GHG Target and Net-Zero Commitment that stretch further ahead into 2030 and 2050. The strategic priorities under the environment pillar are: Towards Decarbonisation, Promoting Circular Economy and Biodiversity Conservation.

#### **Towards Decarbonisation**

Under this priority, AET is focused on investing in greener technologies, rejuvenating our fleet with low-carbon emission vessels, adopting alternate fuels and reporting our climate-related risks in accordance with the TCFD framework. We are progressively incorporating greener technologies across our fleet of vessels, recognising their long-term benefits in terms of climate risk management and cost optimisation.

### Organisational and Operational Boundaries

In line with MISC, AET's GHG organisational boundary was revised to follow the GHG Protocol Corporate Standard's financial control approach in 2021. All direct GHG emissions emitted from assets and operations falling under AET's GHG organisational boundary are accounted as our Scope 1, while electricity purchased for use on our assets and facilities are accounted as Scope 2. Emissions from the below mentioned assets and facilities, where material and applicable, form part of our Scope 3 emissions:

- downstream leased assets which are owned by AET but leased out (bareboat-out) to other parties,
- assets where AET has minority equity ownership and no control, and
- upstream leased assets (in-chartered) with a lease term of six months or more.

We expect to complete the estimation of our remaining material Scope 3 categories in 2022. We revised our carbon measurement unit to Annual Efficiency Ratio (AER) to align with IMO's upcoming Carbon Intensity Indicator (CII) regulation. The GHG intensity

of our vessels is measured in AERCO $_2$ e, where the three relevant GHGs, i.e. carbon dioxide (CO $_2$ ), methane (CH $_4$ ) and nitrous oxide (N $_2$ O) emissions are measured using a common unit called CO $_2$  equivalent (CO $_2$ e). We also revised our base year to 2008 to align with IMO's 2030 and 2050 GHG aspirations.

To sharpen our medium- and long-term GHG reduction strategies and support the setting of GHG reduction targets, a GHG projection exercise was carried out for our fleet. AET's GHG emissions were forecasted up to 2050 and analysed for different scenarios, taking into consideration:

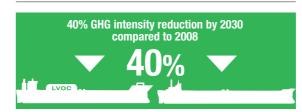
- (i) changes to our asset profile, and
- (ii) influence of GHG reduction technologies and regulations.

### Our Climate Action Goals, Priorities and Plans

#### **Short- to Medium-Term GHG Target**

Our short- to medium-term target is to reduce our shipping fleet's GHG intensity (AERCO $_2$ e) by 40% by 2030 compared to the 2008 baseline.

Short- to Medium-Term Carbon Intensity Target Breakdown



Our Initiatives and Plans to meet our Short- to Medium-Term GHG Target

As a part of our environmental responsibility, we will progressively undertake the following steps to decarbonise our operations in the short- to medium-term:

- Reduce the CO<sub>2</sub>e intensity of our existing ships by improving the vessel's technical and operational efficiency
- Power all newbuilds with high-efficiency LNG dual-fuel engines
- Progressively work towards developing zero-carbon emissions vessels by 2030

#### **Long-Term Commitment**

A key step to limiting the temperature rise well below 1.5 degree Celsius is to significantly reduce global GHG emissions and become netzero in the long term. As a part of our long-term commitment to supporting the global call to action, AET is undertaking a long-term approach to reaching net-zero GHG emissions by 2050. To fulfil our environmental responsibility, we will start to decouple our GHG emissions from business growth before 2030 and focus on achieving net-zero GHG emissions by 2050.



For details on AET's climate action strategies and scenarios, refer to the Strategy section of the TCFD report on pages 75-83.

Our Initiatives and Plans to meet our Long-Term Commitment

AET is committed to net-zero GHG emissions by 2050. This commitment covers our own operations and those impacted across our value chain. Our climate strategy to achieve net-zero GHG emissions includes:

- Progressively renewing the fleet with ZEVs
- Adopting new technological innovations on existing vessels and newbuilds to drive energy efficiency improvements and reduce carbon emissions
- Adopting carbon removal technology and carbon capture retrofits in newer vessels to remove excess carbon emissions, where viable
- Reducing value chain emissions (Scope 3 emissions)
- Initiating a nature-based carbon removal offset programme for unabated residual GHG emissions

#### THE CASTOR INITIATIVE

The three founding members, Lloyd's Register, Samsung Heavy Industries and MISC, of The Castor Initiative, are taking the lead in the development and construction of two ammonia dual-fuel zero-emission VLCCs, which will be owned and operated by AET with delivery planned in late 2025 and early 2026.

## INVESTING IN LOW-CARBON TECHNOLOGIES

In October 2021, AET alongside Shell Ventures, Trafigura and Saudi Aramco Energy Ventures invested in Daphne Technology, a Swiss climate tech start-up addressing the GHG challenge. Daphne Technology's solution leverages an innovative technology to remove toxic GHG emissions from the combustion gas of any fuel type, and converts the pollutants into non-hazardous by-products.

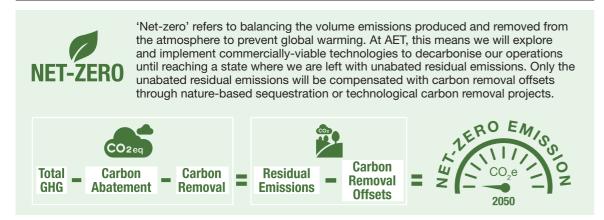


For details, refer to Our Investments in Sustainable Shipping on pages 62-63.

## **SUSTAINABILITY PILLAR: ENVIRONMENT**

#### **OUR INITIATIVES**

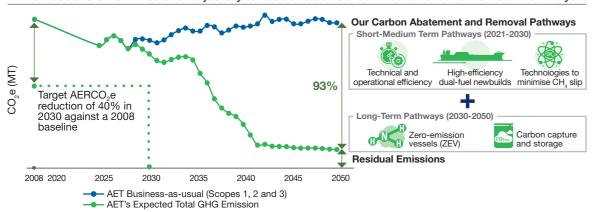
#### What We Mean by Net-Zero?



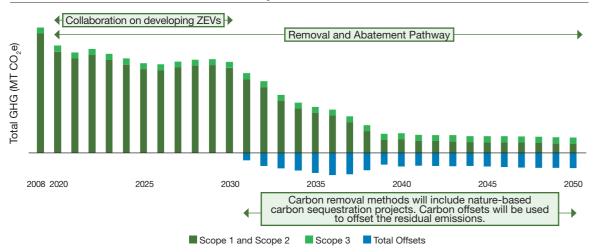
#### Absolute GHG Emissions Trajectory to 2050

The 2050 absolute GHG emissions trajectory is based on our forecasted GHG emissions until 2050 for different scenarios, considering changes to our asset profile until 2050, GHG reduction technology influences and regulatory policies.

AET's Absolute GHG Emissions Trajectory to 2050 and our Carbon Abatement and Removal Pathways



#### **AET's Net-Zero Total GHG Emissions Pathway**



#### **Summary of our Long-Term Net-Zero Commitment**



#### **Promoting Circular Economy**

AET is committed to reducing waste and encouraging the use of renewable resources. The waste products generated from our shipping operations are managed in accordance with the International Convention for the Prevention of Pollution from Ships (MARPOL Annex V).

Since 2016, all newbuilds are fitted with approved Ballast Water Treatment Systems.

In addition, all AET vessels maintain a garbage management plan specifying the proper separation and responsible disposal of waste products. In 2021, the garbage generation per vessel has increased by 18% while plastic waste generation per vessel has increased by 11%, compared to last year. Unlike in previous years (2019 and 2020), 2021 includes data of our third-party managed

ships. Additionally, some increase in the garbage and plastic waste generated can be attributed to the usage of face masks and single-use food packaging for onboard visitors due to strict hygiene measures adopted amidst the pandemic.

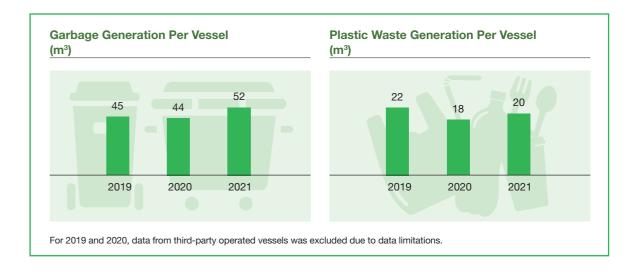
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On shore, beverages packed in single-use plastic bottles have been discouraged across AET offices since 2018, and posters are used to encourage employees to reduce plastic waste. These efforts have significantly reduced the usage of single-use plastics within our premises.

We will continue to make targeted efforts to reduce waste as part of our waste management strategy.



For more information, refer to the Performance Data under Sustainability Pillar - Environment on page 91.



## **SUSTAINABILITY PILLAR: ENVIRONMENT**

#### **OUR INITIATIVES**

#### **AET'S SHIP RECYCLING POLICY**

The lifecycle and disposal of vessels at the end of their service is governed by strict regulations, such that the recycling process does not pose a hazard to the environment. As a responsible shipowner and operator, it is our duty to recycle our disposed ships with utmost care. In 2021, AET Board approved our Ship Recycling Policy, which ensures proper and responsible recycling of disposed vessels. An inventory of hazardous materials must first be prepared, while the disposal process is done in accordance with The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (the Hong Kong Convention).

The scope of AET's Ship Recycling Policy covers the following four areas.







further trading



Sold to intermediary or directly to Hong Kong Convention approved yards for scrap

- Constructing each ship with zero or minimal hazardous
- materials
   Documenting
  each vessel with
  an approved
  Inventory of
  Hazardous
  Materials (IHM)
- Generating minimal hazardous substances and waste onboard our ships
- Removing hazardous substances in a controlled manner and replacing them with non-hazardous materials if practical whenever repair or maintenance is carried out on equipment
- Producing and maintaining a ship-specific IHM for each existing ship in our fleet
- Updating the ship's IHM and transferring it with other documentation before the sale of ships
- Complying with the Hong Kong Convention and/or all applicable national and international law when selling ships directly or indirectly to a yard for recycling
- Requiring buyers or yards for all AET sale contracts to undertake safe and environmentally sound recycling as per the Hong Kong Convention including using approved shipyards, and monitoring rights to the ship-breaking process whether directly or indirectly via appointed agents

#### **Biodiversity Conservation**

Considering the nature of our operations, biodiversity conservation is material to AET's business. We are committed to protecting life below water through our environmental initiatives and aligning with MISC Group's initiative, the Heart of The Ocean programme.

As a member of MISC's Heart of the Ocean programme, AET contributes to two conservation programmes in Malaysia. Through the Marine Biodiversity Conservation Flagship Programme, AET supports the activities to conserve coral reef in the Mersing Islands, Johor, as well as eradicate plastic litter in the ocean. Through the UMT-MMS Sea Turtle Conservation Programme, our resources are channelled into protecting sea turtles in Redang Island, Terengganu.







#### **Environmental and Sustainability Awards**

- ★ 50 ships received CSA Environmental Achievement Awards for excellence in HSSE and environmental protection
- ★ Six AET vessels successfully surveyed and certified for Green Award through the Green Award Foundation
- ★ AET's London office attained SKA rating of Gold by Royal Institute of Chartered Surveyors (RICS) for its sustainable fit-out

#### **PERFORMANCE DATA**

	Unit	2021	2020	2019
GHG EMISSIONS				
TOTAL GHG EMISSIONS (Including third-party vessels)	tonnes CO <sub>2</sub> e	1,610,211	1,779,877	2,006,556
Scope 1 (including third-party vessels)	tonnes CO <sub>2</sub> e	1,609,584	1,779,473	2,006,134
Scope 2 (shore electricity)	tonnes CO,e	627	404	422

TOTAL SCOPE 1				
Petroleum	tonnes CO <sub>2</sub> e	1,557,596	1,714,706	1,789,880
Product	tonnes CO e	51 988	64 768	216 254

AIR EMISSIONS (Excluding workboats)					
NOx Emissions	tonnes	32,898	36,942	42,253	
SOx Emissions	tonnes	3,338	3,050	25,588	

CARBON INTENSITY AND ANNUAL EFFICIENCY RATIO (AER)						
AER – TOTAL (Product/Petroleum)	gCO <sub>2</sub> /ton-nm	3.80	3.55	3.59		
AER – Petroleum	gCO <sub>2</sub> /ton-nm	3.72	3.46	3.32		
AER – Product	gCO <sub>2</sub> /ton-nm	10.28	10.65	10.75		
Total distance travelled by Petroleum & Product vessels	nm	2,707,296	3,024,761	3,041,860		
Garbage generation per vessel (Petroleum & Product)	m³	52	44	45		
Plastic waste generation per vessel (Petroleum & Product)	m³	20	18	22		

ISO CERTIFICATION		
ISO 50001 Energy Management System	Yes/No	Yes

## **SUSTAINABILITY PILLAR: SOCIAL**

#### **IMPORTANCE TO AET**

AET believes that sustainable businesses drive positive social change. AET's sustainability and business strategies provide the roadmap for how we leverage our global maritime expertise and partnerships, engage our employees and support meaningful charitable initiatives to enhance the lives of people in our communities.

Our people are our greatest asset, and ensuring their well-being, safety and health remain paramount. Creating the right environment for our talents to grow and thrive, and investing in their skills and overall development would be vital to AET's

continued success. Contributing to the communities where we operate is equally material for our business. As a responsible ship owner, it is important for us to stand in solidarity with our communities by supporting the disadvantaged in society, so as to strengthen our social value in AET's localities.

Despite the many challenges faced by shipping industry in 2021 due to the pandemic, our efforts to safeguard and support AET's employees and seafarers have ensured the continued provision of maritime services to our customers and the global economy.

#### **UNSDGs IMPACTED**



Promote health and well-being of employees, contractors and our communities to progress towards a generative safety culture



Grow and promote female participation in the maritime industry. Drive meritocracy and equal opportunities to ensure women's full and effective participation and leadership at all levels of decision



Promote skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship



Promote equal opportunities in the workplace where all diverse talents are able to perform to their full potential

#### **OUR INITIATIVES**

#### **Health and Safety**

Health and safety are among AET's top priorities. We are committed to maintaining the highest Health, Safety, Security and Environment (HSSE) standards and adhering to all relevant industry requirements to ensure that our people, assets, operating environment and reputation are protected. Our business and HSSE outcomes are integrated, resulting in strong performance track record and quality services. In 2021, we achieved a high vessel availability rate of above 99%, meeting or exceeding our stakeholders' expectations.

## Our HSSE achievements including our fleet in numbers

Lost Time Injury Frequency (LTIF)	0.08
Total Reportable Case Frequency (TRCF)	0.31
INTERTANKO industry LTIF average	0.45
INTERTANKO industry TRCF average	1.00

With regards to upholding HSSE excellence, AET aspires to lead-by-example. Our HSSE initiatives

are led by the Executive Leadership Team (ELT), which closely reviews AET's HSSE performances, safety incidents and investigation outcomes. The ELT makes regular visits to our vessels, engages with frontline staff, conducts HSSE walkabouts at the office premises and updates the Board's Audit and Risk Management Committee (ARMC) quarterly on AET's safety performance and initiatives. All safety incidents and investigations are monitored and tracked at the highest level within AET. We have a Safety Roadmap that aligns with the principles in AET's Health Safety and Environment Management System.

To foster a strong HSSE work culture, AET initiates and supports various programmes to drive health and safety behaviours. We have adopted Hudson HSE Culture Ladder approach to shaping the right safety habits and behaviours via five stages of development within AET. During the year, workshops were conducted for shore and sea personnel across all AET offices by one of the original architects of the Hudson Ladder. The workshop objectives included benchmarking our safety culture against the Hudson HSE Culture Ladder, identifying opportunities to improve safety practices and embedding them into our organisational culture.

As a progressive organisation, AET is steadfast in its journey towards achieving a "Generative" HSE Culture as prescribed in the Hudson HSE Culture Ladder.

#### Hudson HSE Culture Ladder<sup>1</sup>



Other initiatives included "Stop Work Authority", which is focused on promoting a strong safety culture amongst all employees including our seafarers. Employees are also given the opportunity to participate in various behavioural HSSE (b-HSSE) initiatives such as Earth Hour, HSSE Recognition Day and submit their HSSE observations through our "Unsafe Condition Unsafe Act (UCUA)" programme. This is in addition to the disclosure of HSSE matters and performance at the company's level, where HSSE alerts including lessons learnt are disseminated regularly via internal circulars and other communication channels.

AET maintains a comprehensive HSSE training regime for all the frontliners throughout the year in addition to the trainings mandated under statutory requirements. In 2021, various trainings and events were conducted virtually including HSSE workshops and digital engagements with shore and sea staff.

AET's Wellness Month was conducted in October 2021 to support the physical and mental well-being of our global workforce. The activities featured themes ranging from social and financial well-being to talks on mental health, basic first aid and alternative medicine by medical practitioners and health experts. "MindFit at Work", a meditation app to support happiness, resilience, mental health and mindfulness, was extended to all staff for 12 months. To promote better work-life balance, flexible work arrangements were piloted in 2021, with an official launch across all our locations in early 2022.

To safeguard our seafarers, we engaged Occupational Health and Hygiene experts to conduct Health Risk Assessments (HRA) to identify possible physical.

chemical, biological, ergonomic and psychosocial hazards onboard our vessels. The mitigation measures from the HRAs are implemented to ensure our working environment becomes safer for all.

AET continued to work closely with the Industry Task Force on Offshore Lightering (ITOL), a cooperative organisation promoting industry self-policing and continuous improvement in lightering in the Gulf of Mexico. We also engaged regularly with our premier customers to update them on our safety initiatives and share best practices.

Our lightering operations managed out of AET Offshore at Galveston have remained zero Lost Time Injury (LTI) since 2015.

In recognition of our excellent health and safety record, 48 AET ships were presented the Jones F. Devlin Award for Safety by the Chamber of Shipping of America (CSA).

We believe that continued digital transformation will drive the shipping industry towards enhanced safety, operational performance and cost efficiency. The possibilities offered by digital transformation, artificial intelligence and automation will also be a gamechanger for the reduction of environmental emissions. Sol-X, Chord-X and SparesCNX are digital solutions being deployed on our vessels which enhance the safety and work efficiency of our people and assets.



Refer to Operational Excellence at AET section on pages 36-39 for detailed description.

#### Source:

1 Energy Institute. Understanding your HSE culture. Hearts and Minds. Retrieved from https://heartsandminds.energyinst.org/toolkit/UYC

## **SUSTAINABILITY PILLAR: SOCIAL**

#### **OUR INITIATIVES**

#### **Talent Excellence**

Our human capital enables AET to deliver on its business goals and value creation agenda, and supports our transformation aspiration. As we embarked on our 2021-2025 Sustainability Strategy, we have remained firmly committed to developing our internal talents whilst targeting the external sector for specific capabilities to build a strong talent pipeline to support AET's growth ambitions for today and the future. Our efforts are also aimed at creating a positive work environment with rewarding careers where our diverse and multi-generational workforce feel they belong and can perform to their full potential whilst delivering against AET's stakeholder expectations.

2021 was a challenging year for us due to the ongoing pandemic and turbulent market. As an organisation, we adjusted to the new normal by adapting our working styles which included piloting flexible work arrangements, providing support for our people's wellness, and leveraging technological advancements. We continued our employee engagement activities throughout the year through regular townhalls with our CEO and vessel visits by our ELT.

To nurture a skilled and talented workforce and ensure we remain competitive as an employer we refreshed our employee value proposition, enhanced employee engagement, volunteered to support local communities, offered differentiated rewards and targeted development programmes to support career advancement of our people. Most of our learning activities remained virtual during the pandemic. As a result, we placed greater emphasis on on-the-job learning opportunities which included participation in strategic projects and secondments, allowing our talent to broaden their skills, experience and cultural perspectives.

Our Talent Development Committee across various regions, together with respective team leaders, ensure high-potential talents focused on their development plans, and the wider talent pool continued to learn and develop within their respective roles. In 2021, our staff clocked a total of 4,840 learning hours via 3,286 learning places. In addition, there were 20 leadership and 95 functional programmes conducted through various modes of training delivery. For global leadership development, we offered five international assignments per year for the past five years to widen the horizon of our employees.

With newer ways of working, greater emphasis was placed on leadership development including the implementation of the wider MISC Group's leadership programmes which were catered for all levels within the organisation. These programmes were supported by the annual calibration exercise with our succession planning framework to identify and develop successors for AET and MISC Group's critical positions.

In line with efforts to grow the industry and nurture young talents, we welcomed 20 university interns in our offices globally, providing them with three to six months of hands-on training and experience in a variety of job functions. Across regions, we provided scholarships through the Singapore Maritime Foundation and Texas A&M University at Galveston.

#### **Diversity and Inclusion**

We value the rich diversity that exists in our organisation which we know drives greater understanding and alignment with our stakeholders, as it builds resilience to changing markets and enables us to stay flexible in serving our customers' needs. As of end-2021, our shore staff were represented by 20+ nationalities worldwide who continue to bring their unique backgrounds and multi-generational perspectives to our global operations.

We see Diversity and Inclusion (D&I) as an essential component of AET's sustainability goals, and our focus has been on continuing to build trust and empowerment through an inclusive work culture.



middle management management are women

are women

senior

managers and senior leaders undergo inclusive leadership trainings

**Onshore Staff** 



Benchmark our progress against the Bloombera Gender-Equality Index (GEI)

As a global organisation, AET's workforce spreads across seven countries and our D&I strategy focuses on two to three key initiatives annually.

**AET** 

In 2021, as an outcome of building gender diversity through inclusion, our performance-related HR processes have enabled a gender representation of 56% male and 44% female for our shore staff. In addition, 22% of our senior management are women and 32% of our middle management are

To mark International Women's Day 2021, our CEO hosted a roundtable discussion with our women leaders focused on continual coaching and mentoring of young female talents within the organisation. We continued to benchmark our progress against the Bloomberg Gender-Equality Index (GEI), which tracks diversity data using a standardised Gender Reporting Framework.

Our D&I Policy, which was incepted in 2020, focuses on three priorities including:

- growing our diversity initiatives,
- creating the right environment for all to succeed,
- equipping our leaders with the skills and ability to lead inclusively and with accountability.

The importance in building an inclusive work culture means continuous and ongoing training and education of our people. We introduced bite-sized awareness sessions and hosted cross-functional dialogue sessions on D&I to elevate self-awareness and understanding of unconscious bias. AET prides itself in celebrating diverse festivities and cultural events including International Women's Day and Day of the Seafarer. Whilst the pandemic persisted and limited our ability to organise in-person events, we held virtual sessions in replacement which were well participated by staff across the organisation.

Based on the findings from our employee survey, we have set up a D&I baseline to measure our progress. Simultaneously, we ensured that 100% of our managers and senior leaders undergone inclusive leadership trainings to build their self-awareness and personal accountability to lead and develop their teams inclusively. We launched a global virtual workshop series on "Inclusion and Unconscious Bias Awareness", which was conducted quarterly for staff across all levels to raise awareness about embracing an inclusive mindset.

As we continue to evolve on our D&I journey, our focus will be to ensure equitable HR processes and inclusion practices that further champion our D&I commitments and ESG Agenda.

#### **HEAR FROM OUR PEOPLE**



AET has given me equal opportunities to speak, be heard, and be included in all discussions. My career in AET has progressed positively alongside the growth of my family in the past eight years, thanks to the company's family care and maternity benefits, and now we have the FlexWork benefits that further support our differentiated needs.

**Trixie Tolentino** Manager, Fleet IT Applications



As an organisation, AET is committed to D&I. I believe AET has a strong moral compass. The company wants to do the right thing and treat people equitably, with fairness and respect.

William Blagbrough Head of Legal, APAC



What I value most about AET is that they encourage you to voice your opinions. Working with a diverse group of people, I value the sharing from the colleagues with different cultural backgrounds and ethnics.

**Antoinette Love-McCloney** Accounts Payable Officer, Finance

## **SUSTAINABILITY PILLAR: SOCIAL**

#### **OUR INITIATIVES**

#### **Community Investment**

AET's community efforts provide a way for creating social value in the localities where we operate. We prioritise our investments in areas where we can demonstrate leadership and where our expertise and resources can make a positive difference. Our continued efforts to give back to communities have strengthened the mutual trust and strategic relationships that we have formed with our respective stakeholders. As a global organisation, we continue to contribute towards purposeful social causes by empowering the disadvantaged in communities and supporting wider community needs such as reducing inequality, and eliminating hunger and poverty to make a positive impact through our actions and business performance.

#### **Nurturing Talents**

AET's support for the MaritimeONE scholarships with Singapore Maritime Foundation is a good example of our commitment to develop young talents. AET continued its scholarship programmes in 2021 sponsoring two students enrolled in the Diploma in Maritime Business at Singapore Maritime Academy of Singapore Polytechnic.

We also partnered with Texas A&M University at Galveston (TAMUG) for a scholarship programme to support 10 maritime students' training. These scholarships are in addition to our sponsorship of cadet training at the Malaysian Maritime Academy (ALAM). In the last four years, ALAM has provided



professional maritime training for over 460 AET sponsored cadets. In turn, the cadetship programme provides us access to a talent pool of seafarers that is vital to AET's uninterrupted business operations.

#### **AET Caring for Communities**

We remain committed to supporting communities around our offices to make a positive difference and giving back to the society to "build a better world". In 2021 and early 2022, we contributed US\$250,000 to fund over one million meals for the underprivileged through our global COVID-19 donation campaign. This is an ongoing partnership with eight national and local charities' food programmes in seven countries.



Norway: With our donation expanded to Norway, around 34,000 underprivileged received a meal either cooked or through delivered food packs from Matsentralen Rogaland. The foodbank also redistributed and delivered 619 tonnes of surplus food for meals for impacted community members across 23 municipalities in Rogaland while at the same time helping to reduce food waste.



Brazil: Our Rio colleagues attended the donation handover ceremony with RioContraCorona where they distributed food packs to about 200 beneficiaries at the Center of Public Education at Rocinha. Next to Rocinha, 4,100 underprivileged families (about 16,500 individuals) in Vidigal, Cantagalo and other communities have been provided with food packs to have two daily cooked meals for up to two weeks translating into nearly 600,000 meals.



Singapore: In 2021, our donation extended support to a new charity, Singapore Children's Society which supports the day-to-day operational needs of the Sunbeam Place @ Children's Society, a residential home and gazetted place of safety for children who are in need of protection. Our donation funded groceries, fresh food and necessities for 24,000 meals to provide a home-like, loving and conducive environment for the beneficiaries. In addition, our colleagues in Singapore participated in an in-house fundraiser and auction and raised over \$\$4,000 to provide fresh food, fruits and hygiene necessities for 40 children and families in need.

We also successfully raised S\$4,200 from our #LetsHelpIndia fundraising campaign in partnership with Singapore Red Cross for the purchase of medical supplies and hospital beds for COVID-19 impacted individuals in India and Nepal through the Indian Red Cross Society. The funds raised were also matched by AET.



Philippines: Partnering Philippine Business for Social Progress, over 1,700 severely impacted families received food packs with fresh and dried goods translating into over 180,000 meals. 300 local farmers and fishermen families also received much needed income from the produce they provided for these food packs.



**UK:** Our contribution to The Felix Project funded the redistribution of fresh surplus food to prepare around 96,000 meals for vulnerable community members in London. In addition, our colleagues also volunteered at the Felix's Kitchen for a day and helped to prepare 2,776 nutritious readymade meals for distribution to families in need.





**USA:** Supported Houston Foodbank with over 60,000 meals for the underprivileged while 80,000 meals were served through the Galveston County Foodbank

#### **Our Other Social Support Programmes**

AET was a Bronze Sponsor to The Mission to Seafarers' Sustaining Crew Welfare campaign which contributed to the Innovation Fund to provide vital welfare assistance to seafarers and their families through online stores and delivery services for seafarers who could not go ashore. As part of MISC, we joined over 300 maritime organisations in signing the Neptune Declaration on Seafarer Wellbeing and Crew Change.

Since 2007, we have been a dinner table sponsor at the Houston International Seafarer Center (HISC)'s Maritime Gala where the proceeds supported HISC's facilities for visiting seafarers and seafarers' no-cost transportation from ships to the Centre and local areas.



In addition, our US colleagues volunteered in a beach clean-up organised by the Texas General Land Office, clearing nearly half-a-mile of beaches in Galveston.

## **SUSTAINABILITY PILLAR: GOVERNANCE**

#### **IMPORTANCE TO AET**

Upholding a high standard of Corporate Governance and principles gives confidence and assurance to our stakeholders that AET is prudently run. Our commitment to a strong governance culture is driven by AET's Code of Conduct and Business Ethics (CoBE) which clearly sets out the business ethics, professional integrity and personal conduct expected of our employees. The CoBE, which conforms to international standards and business regulations, serves to deepen our stakeholders' trust in the quality and outcomes of AET's strategy and business decisions.

The Sustainability Strategy (2021-2025) monitors and enforces robust sustainability practices centred around ESG pillars. The Risk Management framework ensures that we balance our business risks and opportunities arising out of the identified risks.

The forward-looking Sustainability Strategy demonstrates our commitment to driving ESG targets across all our operations and reinforces our ethos of strong governance as one of the leading ship owners worldwide. It addresses the growing importance of ESG commitments in the maritime-shipping sector with increasing stakeholder interest for greater transparency and accountability in the non-financial performance of businesses.

#### **UNSDGs IMPACTED**



Promote sustainable economic growth and decent work for all by ensuring labour rights, and promoting safe and secure working environment



Promote fair business practices and foster strong governance and business ethics

#### **OUR INITIATIVES**

We continue to foster a culture of strong corporate governance, business ethics and conduct throughout AET. In 2021, our efforts were focused on fortifying our governance culture, and strengthening the sustainability governance structure within AET.

#### **Effective Management Systems**

A sound management system is key to good corporate governance. Our management systems and internal controls apply the core principles of good governance: fairness, accountability, responsibility and transparency.



- Demonstrate tone from the top on ethical culture
- Ensure compliance to rules, regulations and governance



- Communication and
- awareness Mandatory training on critical legal areas, CoBE and relevant policies and auidelines
- Compliance and ethics feedback

## RISK MANAGEMENT

- Regulatory and legislation register
- Group policies on critical
- legal areas ABMS certification CoBE
- Bribery and corruption, and third-party risk management
- Conflict of interest
- Whistleblowing

#### **Compliance Management Framework**

#### Embeds a compliance culture in AET

Guides management, business and operations in achieving compliance strategies and goals

Identifies and proactively manages compliance risk and compliance obligations

Prevent incidents of non-compliance

Ensures corrective actions are put in place in a timely manner

### MONITORING AND REPORTING

- Annual compliance
- attestation by all staff AET annual myAssurance attestation programme on critical and operational legal areas
- Management reporting Quarterly reporting to

#### AET Connects 2021/2022 Moving Energy To Build a Better World

#### **Values, Assurance and Business Ethics**

The Governance and Business Ethics Framework aims to foster a strong culture of integrity within AET to ensure ethical and professional conduct of our employees. The framework draws upon diverse business experiences and cultural backgrounds to establish comprehensive business ethics and corporate governance practices and includes even the Board composition to ensure a diverse mix of leaders with wide-ranging experiences, skillsets, nationalities and genders. As of 31 March 2022. 62.5% of the Board are Independent Directors who provide objective insights and advice on our business strategies and decisions.

Underwriting the framework are several policies and programmes. AET's Compliance and Ethics Programme is a five-year strategic plan consisting of a set of action plans and deliverables to strengthen the culture of governance and ethics. The first five-year plan (2017-2021) was completed with all objectives met.

In 2021, our ISO 9001 certification was successfully renewed for the next three years and our ISO 37001 certification was maintained as we completed our annual external audits for ISO 9001 and ISO 37001 with regards to our Quality Management System (QMS) and Anti-Bribery Management System (ABMS) respectively. ISO 37001 is the first international ABMS standard designed to help companies combat bribery risk in their operations and value chains. These certifications ensure our QMS and ABMS remain adequately and effectively implemented. Our offices in Singapore, Houston, Rio de Janeiro, London and Kuala Lumpur are

ISO 9001 certified while our offices in Singapore, Houston, Rio de Janeiro, London and Stavanger are ISO 37001 certified.

Strengthening our cybersecurity measures is essential to protect us from potential cyber threats. Protecting our technology, assets, critical information are our utmost priority as part of our ongoing cyber risk management.

Our Data Protection Policy aims to safeguard all stakeholder data residing in our systems. With our trained Data Protection Officers, we ensure full compliance with applicable data protection laws, including EU's General Data Protection Regulation (GDPR).

#### Responsible Supply Chain Management

AET has established Responsible Supply Chain Management to drive sustainability practices across the supply chain. As part of this strategic initiative, the Board has approved AET's Ship Recycling Policy in 2021. This policy ensures proper and responsible recycling of disposed vessels set out in the Hong Kong Convention and any other applicable conventions and regulations. AET also developed the ESG self-assessment framework with critical suppliers to ensure compliance with sustainable sourcing, circular economy, business ethics, and health and safety.



For more details on AET's Ship Recycling Policy. refer to the section "Promoting Circular Economy" under Sustainability Pillar - Environment on page 90.

#### **International Standards and Certifications**







- ★ Compliant with the UK Bribery Act and EU GDPR
- ★ Member of the Maritime **Anti-Corruption Network (MACN)**
- ★ Maintained ISO 37001 certification for Anti-Bribery Management System
- ★ Renewed ISO 9001 certification for Quality Management System

#### **Our Governance Policies and Guidelines**











- ★ Anti-Bribery and Corruption Policy
- ★ Code of Conduct and Business **Ethics**
- Competition and Anti-trust Policy
- ★ Conflict of Interest Policy
- ★ Data Protection Policy
- ★ Modern Slavery Policy
- ★ Ship Recycling Policy
- ★ Whistleblowing Policy

## **SUSTAINABILITY PILLAR: FINANCIAL**

#### **IMPORTANCE TO AET**

Our financial performance is one of our sustainability pillars. Our key objective is to achieve financial resilience from long-term secured income contracts and predictable growth through recurring sources of cash flow. Managing the fleet portfolio against secured earnings mitigates the effects of economic uncertainties and volatility, and improves our ability to achieve our long-term goals sustainably.

A strong financial position enables us to future-proof our business, as visibility into future cashflows enables strategic planning of our greener investments and future programmes. A robust balance sheet is essential for us to satisfy the requirements of our shareholder, investors and key stakeholders. We have identified the following two key strategic priorities that drive AET's financial sustainability:

- Financial growth plans
- Financial governance framework in line with the Financial Reporting Accounting Standards and Corporate Financial Policy (FRAS/CFP)

The financial growth plan guides us in developing our business strategies and financial plans. The financial plan is the operating budget that forecasts the revenues, expenses and cash flow while the financial sustainability strategy identifies various methods to use available resources to the best advantage to deliver long-term profitability and positively impact the environment and society.

#### **UNSDG IMPACTED**



Promote sustained economic growth, full and productive employment and decent work for all

#### **OUR INITIATIVES**

Under the Financial Pillar, we are focused on maintaining a robust balance sheet and a stable cash flow despite the challenges posed by the external environment. Through securing long-term charters with key customers, the majority of earnings are now generated from our secured-income asset portfolio. These contracts provide AET with financial stability and operational agility to take on new opportunities as they emerge.

2021 was a challenging year for the tanker sector, with weakened charter rates and earnings. The negative effects of COVID-19 on economies continued to be felt in 2021. Amidst the challenges, we strategically managed the disposal of older assets, negotiated lightering contracts, managed the in-charter portfolio, and reduced the cost structure to mitigate downside financial exposures and risks. As a result, lower operating costs were recorded with the optimised fleet size and tighter cost controls.

Our Financial Pillar contributes to UNSDG 8 by providing Decent Work and Economic Growth. AET is committed to promoting sustained economic growth, full and productive employment, and decent work for all.

US\$ 760M





**LEVERAGE RATIO** 





For more details, refer to the Financial Review section on pages 46-49.

EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortisation. NPAT: Net Profit After Tax.

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## SUSTAINABILITY PILLAR: STAKEHOLDER ENGAGEMENT

#### **IMPORTANCE TO AET**

AET is committed to making a positive impact on our stakeholders and contributing to the growth of the maritime sector. This commitment is supported by the Stakeholder Engagement Strategy, which focuses on creating shared value. We conduct regular engagements with our stakeholders because it enables us to understand and meet their expectations. It also enables us to seek their suggestions, consider their feedback on economic and ESG matters, and establish clear priorities in our sustainability agenda. The Stakeholder Engagement pillar is a critical element in our Sustainability Strategy, as it reflects the emphasis we have placed on generating long-term

stakeholder value through our sustainability agenda and business operations.

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Our key stakeholders span from our shareholder and employees, to customers, financial partners, regulators and local communities. They each have high expectations of AET's transparency, accountability and business conduct. Every stakeholder is seen as an essential partner in our sustainability journey. By being open and transparent in voluntarily disclosing our sustainability issues in this publication and the MISC Integrated Annual Report, we are able to deepen the "trust bank" and close relationships we share with our stakeholders.

#### **UNSDG IMPACTED**



**AET** 

Promote global partnership for a sustainable maritime industry by encouraging multi-stakeholder collaborations

#### **OUR INITIATIVES**

In 2021, we contributed to the strengthening of the maritime industry through active participation in industry associations, public policy consultations and regulatory discussions. Our active involvement in industry associations has enabled us to engage with the maritime industry players and contribute to the development of the shipping industry. AET holds the Chairmanship of the Gas Committee at INTERTANKO, and our CEO is a Board member of the GARD P&I Club.

Our CEO and ELT also participated in international conferences and industry events, such as the

37th Asia Pacific Petroleum Conference 2021 and Marine Money London, to extend our reach to a wider group of stakeholders. As a strong advocate for sustainable shipping, we became a Bronze Sponsor at the International Chamber of Shipping Conference, "Shaping the Future of Shipping" at COP26 in Glasgow, Scotland. In 2021, MISC and AET co-hosted the MISC Group's virtual Annual Bankers Engagement. We were joined by senior relationship bankers and representatives from various local and global financial institutions as we shared the Group's business strategies and outlook.

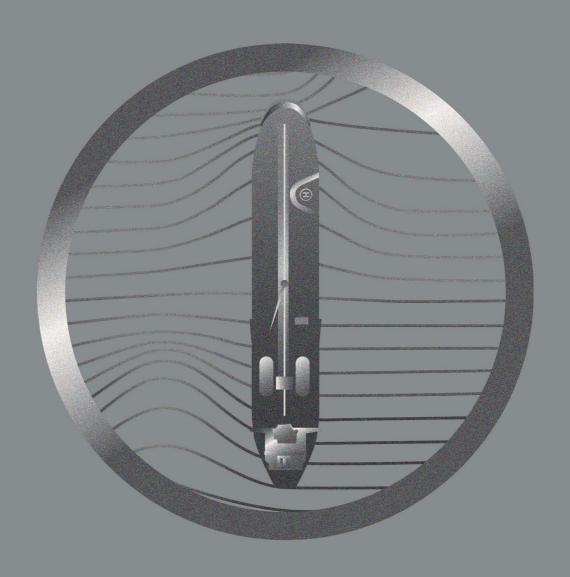
#### **KEY INDUSTRY BODIES**

AET is associated with the following organisations:

- Chamber of Shipping America
- Getting to Zero Coalition (through MISC)
- Global Maritime Forum (through MISC)
- International Tanker Owners Pollution Federation Limited
- Malaysia Shipowners' Association (through MISC)
- Maritime Anti-Corruption Network
- Singapore Shipping Association
- The International Association of Independent Tanker Owners (INTERTANKO)
- The International Group of Protection and Indemnity Clubs Gard & Britannia

# SUPPORTING INFORMATION

FLEET LIST	104
GLOBAL OFFICE DIRECTORY	107
ABBREVIATIONS	108



## FLEET LIST As of 30 April 2022

No.	Vessel	Туре	Yard	Year Built	Age	DWT	Flag
1	Bunga Kelana 10	Aframax	Samsung Heavy Industries Co. Ltd., Korea	2004	17.6	105,274	Malaysia
2	Eagle Torrance	_	Imabari Shipbuilding Co., Ltd., Japan	2007	14.8	107,123	Singapore
3	Eagle Turin	_	Imabari Shipbuilding Co., Ltd., Japan	2008	14.2	107,123	Singapore
4	Eagle Kuching		Tsuneishi Shipbuilding Co. Ltd., Japan	2009	12.5	107,481	Singapore
5	Eagle Kuantan		Tsuneishi Shipbuilding Co. Ltd., Japan	2010	12.1	107,481	Singapore
6	Eagle Kangar		Tsuneishi Shipbuilding Co. Ltd., Japan	2010	11.9	107,481	Singapore
7	Eagle Klang		Tsuneishi Shipbuilding Co. Ltd., Japan	2010	11.5	107,481	Singapore
8	Eagle Hanover		Sungdong Shipbuilding & Marine Engineering Co., Ltd., Korea	2010	12.0	114,014	Isle of Man
9	Eagle Hamilton		Sungdong Shipbuilding & Marine Engineering Co., Ltd., Korea	2010	11.8	114,022	Isle of Man
10	Eagle Helsinki		Sungdong Shipbuilding & Marine Engineering Co., Ltd., Korea	2010	11.8	114,164	Isle of Man
11	Eagle Hatteras		Sungdong Shipbuilding & Marine Engineering Co., Ltd., Korea	2010	11.6	114,164	Isle of Man
12	Eagle Halifax		Sungdong Shipbuilding & Marine Engineering Co., Ltd., Korea	2010	11.5	114,164	Isle of Man
13	Eagle Hydra	_	Sungdong Shipbuilding & Marine Engineering Co., Ltd., Korea	2011	11.3	114,164	Isle of Man
14	Eagle Kinabalu	_	Tsuneishi Shipbuilding Co. Ltd., Japan	2011	11.3	107,481	Singapore
15	Eagle Kinarut	_	Tsuneishi Shipbuilding Co. Ltd., Japan	2011	11.1	107,481	Singapore
16	Eagle Louisiana		Tsuneishi Shipbuilding Co. Ltd., Japan	2011	10.9	107,481	Marshall Islands
17	Eagle Texas		Tsuneishi Shipbuilding Co. Ltd., Japan	2011	10.7	107,481	Marshall Islands
18	Eagle Barcelona	_	Samsung Heavy Industries Co. Ltd., Korea	2018	4.3	113,327	Singapore
19	Eagle Brisbane	_	Samsung Heavy Industries Co. Ltd., Korea	2018	4.1	113,327	Singapore
20	Eagle Brasilia (LNG Dual-Fuel)		Samsung Heavy Industries Co. Ltd., Korea	2019	3.3	113,416	Singapore
21	Eagle Bintulu (LNG Dual-Fuel)		Samsung Heavy Industries Co. Ltd., Korea	2019	3.2	113,049	Malaysia
22	Pacific Ruby (LNG Dual-Fuel)		Samsung Heavy Industries Co. Ltd., Korea	2021	1.0	113,306	Marshall Islands
23	Pacific Pearl (LNG Dual-Fuel)		Samsung Heavy Industries Co. Ltd., Korea	2021	0.6	113,306	Marshall Islands
1	Nave Atropos	Panamax	Sungdong Shipbuilding & Marine Engineering Co., Ltd., Korea	2013	9.0	74,695	Marshall Islands

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No.	Vessel	Туре	Yard	Year Built	Age	DWT	Flag
1	Eagle San Antonio	Suezmax	Samsung Heavy Industries Co. Ltd., Korea	2012	10.0	157,850	Singapore
2	Eagle San Diego		Samsung Heavy Industries Co. Ltd., Korea	2012	9.8	157,850	Singapore
3	Eagle San Juan		Samsung Heavy Industries Co. Ltd., Korea	2012	9.7	157,850	Singapore
4	Eagle San Pedro		Samsung Heavy Industries Co. Ltd., Korea	2012	9.5	157,850	Singapore
5	Eagle San Francisco		Hyundai Heavy Industries Co. Ltd., Korea	2018	4.3	157,512	Malta
6	Eagle San Jose		Hyundai Heavy Industries Co. Ltd., Korea	2018	4.3	157,512	Malta
1	Bunga Kasturi Lima	VLCC	Universal Shipbuilding Corp, Japan	2007	14.6	300,246	Malaysia
2	Bunga Kasturi Enam	_	Universal Shipbuilding Corp, Japan	2008	14.1	299,319	Malaysia
3	Eagle Vancouver	_	Daewoo Shipbuilding and Marine Engineering, Korea	2013	9.3	311,922	Singapore
4	Eagle Varna	_	Daewoo Shipbuilding and Marine Engineering, Korea	2013	9.1	311,922	Singapore
5	Eagle Verona		Daewoo Shipbuilding and Marine Engineering, Korea	2013	8.6	320,122	Isle of Man
6	Eagle Versailles		Daewoo Shipbuilding and Marine Engineering, Korea	2013	8.4	320,122	Isle of Man
7	Eagle Venice	_	Hyundai Heavy Industries Co. Ltd., Korea	2016	5.5	300,342	Singapore
8	Eagle Victoria		Hyundai Heavy Industries Co. Ltd., Korea	2016	5.4	299,392	Singapore
9	Eagle Valence (LNG Dual-Fuel)		Samsung Heavy Industries Co. Ltd., Korea	2022	0.2	299,244	France
10	Eagle Vallery (LNG Dual-Fuel)		Samsung Heavy Industries Co. Ltd., Korea	2022	0.1	299,473	Malaysia
1	Eagle Le Havre	LR2	Hyundai Heavy Industries Co. Ltd., Korea	2017	4.9	113,905	France
2	Eagle Lyon		Hyundai Heavy Industries Co. Ltd., Korea	2017	4.8	113,808	Singapore
1	Bunga Lavender	CPP	Fukuoka Shipyard, Japan	2010	11.4	19,997	Panama
2	Bunga Lilac		Fukuoka Shipyard, Japan	2011	11.1	19,992	Panama
3	Bunga Lily		Fukuoka Shipyard, Japan	2011	10.8	19,991	Panama

## FLEET LIST As of 30 April 2022

No.	Vessel	Туре	Yard	Year Built	Age	DWT	Flag
1	Eagle Paraiba	DPST	Samsung Heavy Industries Co. Ltd., Korea	2012	9.9	105,153	Malaysia
2	Eagle Parana	-	Samsung Heavy Industries Co. Ltd., Korea	2012	9.8	105,153	Malaysia
3	Eagle Barents		Samsung Heavy Industries Co. Ltd., Korea	2015	7.2	119,690	Bahamas
4	Eagle Bergen	-	Samsung Heavy Industries Co. Ltd., Korea	2015	7.0	120,657	Bahamas
5	Eagle Blane (LNG Dual-Fuel)		Samsung Heavy Industries Co. Ltd., Korea	2020	2.2	128,427	NIS
6	Eagle Balder (LNG Dual-Fuel)		Samsung Heavy Industries Co. Ltd., Korea	2020	2.1	128,442	NIS
7	Eagle Petrolina		Samsung Heavy Industries Co. Ltd., Korea	2020	2.0	153,227	Singapore
8	Eagle Paulinia	_	Samsung Heavy Industries Co. Ltd., Korea	2020	1.8	153,352	Singapore
9	Eagle Paraiso		Samsung Heavy Industries Co. Ltd., Korea	2020	1.7	153,265	Singapore
10	Eagle Passos		Samsung Heavy Industries Co. Ltd., Korea	2020	1.5	153,291	Singapore
11	Eagle Pilar		Samsung Heavy Industries Co. Ltd., Korea	2021	1.3	153,184	Singapore
12	Eagle Campos		Hyundai Heavy Industries Co. Ltd., Korea	2022	0.3	154,325	Malaysia
13	Eagle Canoas		Hyundai Heavy Industries Co. Ltd., Korea	2022	0.2	153,000	Singapore
14	Eagle Colatina		Samsung Heavy Industries Co. Ltd., Korea	2022	0.1	155,000	Singapore
1	ELS Maite	Workboat	Zigler Shipyard, Louisiana	1975	47.4	1,023	Uruguay
2	NS Loreto		Maclaren IC Estaleiros e Servicos S.A.	2007	15.3	1,557	USA
3	Didi K		Guangzhou Hangtong Shipbuilding & Shipping Co., Ltd	2008	14.0	1,371	Uruguay
4	Olivia	-	Candies Shipbuilders, LLC	2008	14.3	1,227	Uruguay
5	Annabelle Miller		Master Boat Builders, Inc., Coden, AL	2009	12.5	1,261	USA
6	AET Innovator		Leevac Industries, LLC.	2011	10.5	1,475	USA
7	AET Excellence		Leevac Industries, LLC.	2012	10.3	1,475	USA
8	AET Partnership		Leevac Industries, LLC.	2012	10.0	1,475	USA
9	AET Responsibility		Leevac Industries, LLC.	2012	9.8	1,475	USA

#### **Newbuildings**

No.	Vessel	Туре	Yard	Built	DWT	Flag
1	HN 5499	VLCC	Daewoo Shipbuilding and Marine Engineering, Korea	2023	300,000	TBC
2	HN 5500		Daewoo Shipbuilding and Marine Engineering, Korea	2023	300,000	TBC
3	HN 5506		Daewoo Shipbuilding and Marine Engineering, Korea	2023	300,000	TBC
4	HN 3197	DPST	Hyundai Heavy Industries Co. Ltd., Korea	2022	153,000	TBC
5	HN 2376		Samsung Heavy Industries Co. Ltd., Korea	2022	155,000	TBC
6	HN 2377		Samsung Heavy Industries Co. Ltd., Korea	2022	155,000	TBC

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#### General Disclaime

The material in this annual publication contains certain forward-looking statements concerning the financial condition, strategy, results of operations and business of AET and its objectives with respect to those items. These forward-looking statements involve risks and uncertainties. Actual results may materially differ from those discussed in the forward-looking statements due to a variety of factors, including trends in economic conditions and markets in which the company operates, as well as fluctuations in foreign currency exchange rates. Unless otherwise specified in this annual publication the material herein relates to the year 2021 and up to 30 April 2022. This publication contains photos taken during COVID-19 in line with safe management measures in all localities. The material contained in this annual publication is copyright® of AET and MISC unless stated otherwise and all rights are reserved.

## **ABBREVIATIONS**

ABMS	Anti-Bribery Management System	DWT	Deadweight Tonne	
ABS	American Bureau of Shipping	D&I	Diversity and Inclusion	
AER AERCO <sub>s</sub> e	Annual Efficiency Ratio Annual Efficiency Ratio Carbon	EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation	
ALNOO <sub>2</sub> e	Dioxide Equivalent	EEDI	Energy Efficiency Design Index	
Al	Artificial Intelligence	EEXI	Energy Efficiency Existing Ship Index	
ALAM	Akademi Laut Malaysia	ELT	Executive Leadership Team	
AOS-USA	Apostleship of the Sea of the United States	FPSO	Floating Production Storage and Offloading	
ARMC	Audit and Risk Management	ERM	Enterprise Risk Management	
	Committee	ESG	Environment, Social and Governance	
BAU	Business-as-Usual	FRAS	Financial Reporting Accounting	
b-HSSE	Behavioural-Health, Safety, Security		Standards	
	and Environment	FSO	Floating Storage and Offloading	
CAPEX	Capital Expenditure	FSU	Floating Storage Unit	
CCUS	Carbon Capture, Usage and Storage	gCO <sub>2</sub>	Gram CO <sub>2</sub>	
CFP	Corporate Financial Policy	gCO <sub>2</sub> e/t-nm	Gram CO <sub>2</sub> equivalent per tonnage nautical miles	
CHSSE	Corporate Health, Safety, Security and Environment	GDP	Gross Domestic Product	
CH <sub>4</sub>	Methane	GDPR	General Data Protection Regulation	
CII	Carbon Intensity Indicator	GEI	Gender-Equality Index	
CMP	Crisis Management Plan	GHG	Greenhouse Gases	
CMT	Crisis Management Team	HISC	Houston International Seafarer	
CO <sub>2</sub>	Carbon Dioxide	LIDA	Center	
CO <sub>2</sub> e	Carbon Dioxide Equivalent	HRA	Health Risk Assessment	
COA	Contract of Affreightment	HSE	Health, Safety and Environment	
CoBE	Code of Conduct and Business Ethics	HSSE	Health, Safety, Security and Environment	
COE	Centre of Excellence	IAP	Integrated Assurance Programme	
COP26	2021 United Nations Climate Change	ICS	International Chamber of Shipping	
	Conference	IEA	International Energy Agency	
CPP	Clean Petroleum Product	IFC	Information Fusion Centre	
CSA	Chamber of Shipping of America	IMA	International Maritime Awards	
DP2	Second Generation Dynamic	IHM	Inventory of Hazardous Materials	
	Positioning Shuttle Tanker	IMO	International Maritime Organization	
DPST	Dynamic Positioning Shuttle Tanker	INTERTANKO	International Association of	
DSME	Daewoo Shipbuilding & Marine Engineering	loT	Independent Tanker Owners Internet-of-Things	
			-	

IRENA International Renewable Energy Agency ISO International Organization for Standardization ILEV LING Bunker Vessel LING Liquified Natural Gas LINGC LING Carrier LISO Lightering Support Vessel REP RAD Representative Concentration Pathway LING Lightering Support Vessel REP RAD Research and Development LISV Lightering Support Vessel REP Security Contingency Plans SCP Security Contingency Plans Waritime Information Sharing Exercise MARPOL International Convention for the Prevention of Pollution from Ships MIDD Million Barrels Per Day MMASB Malaysian Maritime Academy Sch Bhd MT Metric Tonnes MMASH Maritime and Port Authority of Singapore MSOSH Malaysian Society for Occupational Safety and Health MST Met Coss After Tax NPAT Net Profit After Tax NOX Nitrogen Oxides NICO LING Company Support Vessel REPA Project Risk Assessment PSC Port State Control OMS Quality Management System RFID Radio Frequency Identification RRCP Representative Concentration Pathway Representative Concentration RRCP Representative Concentration Pathway Representative Concentration RRCP Representative Concentration RRCP Representative Concentration Pathway Representative Concentration RRCP Representative Concentration RRCP Representative Concentration Pathway Representative Concentration RRCP Representation Consentration RRCP Representative Concentration RRCP Representation Concentratio	IPCC	Intergovernmental Panel on Climate	PCS	Product Chemical Shipping			
Agency	IDENIA	Change	PM	Particulate Matter			
SO   International Organization for Standardization   QMS   Quality Management System	INEINA		PRA	Project Risk Assessment			
Standardization  LBV LNG Bunker Vessel  LNG Liquified Natural Gas  LNGC LNG Carrier  LR2 Long-range 2 tanker  LR2 Long-range 2 tanker  LSV Lightering Support Vessel  LTIF Lost Time Injury Frequency  MACN Maritime Anti-Corruption Network  MARISX Maritime Information Sharing Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd  MT Metric Tonnes  MOU Memorandum of Understanding  MPA Maritime and Port Authority of Singapore  MSCH Malaysian Society for Occupational Safety and Health  MST Met Loss After Tax  NPAT Net Profit After Tax  NPAT Net Profit After Tax  NPAT Net Profit after Tax  N, Q  OPEC+ Organization of Londers India (Surveyors)  REICS Royal Institute Concentration Pethers Surveyors  REOP Security Contingency Plans  Rab Research and Development  SCP Security Contingency Plans  R&D Research and Development  SCP Security Contingency Plans  R&D Research and Development  SCP Security Contingency Plans  SEEMP Ship Energy Efficiency Management Plan  Security Management System  SEEMP Ship Energy Efficiency Management Plan  Research and Development  SCP Security Management System  SEEMP Ship Energy Efficiency Management  Psecurity Management System  Security Management And Individed Individe	ISO		PSC	Port State Control			
LING Liquified Natural Gas LNG LING Carrier  LNG LING Carrier  LNG Long-range 2 tanker  LSV Lightering Support Vessel  LTIF Lost Time Injury Frequency  MACN Maritime Anti-Corruption Network  MARISX Martine Information Sharing Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sofn Bhd  MT Metric Tonnes  MOU Memorandum of Understanding  MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MICS And Internation General Carbon Dioxide Equivalent  NLAT Net Loss After Tax  NAN Not Nitrogen Oxides  Nitrous Oxide  Not Countries Plus  Not Nitrous Oxide  Not Countries Plus  Not Oparization of the Petroleum Exporting Countries Plus  Not Countries Plus  Not Nitrous Oxide  Not Countries Plus  Not Nitrous Oxide  Not Countries Plus  Not Countries Plus  Not Nitrous Oxide  Not Countries Plus  Not Coun			QMS	Quality Management System			
LNGC LNG Carrier  LR2 Long-range 2 tanker  LSV Lightering Support Vessel  LTIF Lost Time Injury Frequency  m³ Cubic Metres  MACN Maritime Anti-Corruption Network  MARISX Maritime Information Sharing Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd  MT Metric Tonnes  MOU Memorandum of Understanding MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MCO Nitrogen Oxides  MTAT Net Loss After Tax NOX Nitrogen Oxides  N <sub>2</sub> O Nitrogen Oxides  N <sub>2</sub> O Nitrogen Oxides  Noyal Institute of Chartered Surveyors  RAID Radio Frequency Identification  R&D Radio Frequency Identification  R&D Research and Development  SEPM Security Contingency Plans  SEEMP Ship Energy Efficiency Management Plan  Security Management System  SEEMP Ship Energy Efficiency Management Plan  Security Management System  SEEMP Ship Energy Efficiency Management Plan  Security Management System  SEEMP Ship Energy Efficiency Management Plan  Sex Security Management and Singapore  TCF Task Force for Climate-Related Financial Disclosures  Task Force for Climate-Related Financial Disclosures  Task Force for Climate-Related Financial Disclosures  UMT-MMS University Malaysia Terengganu  - Port Management and Maritime Services  UN United Nations  UNSDG United Nations Sustainable Development Goals  VLCC Very Large Crude Carrier  VLCC Very Large Crude Compound  VCC Volatile Organic Compound			RCP	•			
LR2 Long-range 2 tanker  LSV Lightering Support Vessel  LSV Lightering Support Vessel  LTIF Lost Time Injury Frequency  m³ Cubic Metres  MACN Maritime Anti-Corruption Network  MARISX Maritime Information Sharing Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  Mbpd Million Barrels Per Day  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd  MI Metric Tonnes  MOU Memorandum of Understanding  MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MCA Vitrogen Oxides  Ny O  Nitrogen Oxides  Ny O  Nitrogen Oxide  Nobel Milton Surger (Compound  Nobel Milton Barrels Pase)  Nobel Malaysian of Carbon Dioxide Equivalent  Nobel Milton Barrels Pase  Noc Sulphur Oxides  SHI Samsung Heavy Industries  SeMS Security Management System  SeMS Sulphur Oxides  SHI Samsung Heavy Industries  SeMS Sulphur Oxides  SHI Samsung Heavy Industries  Sex Sulphur Oxides  SHI Samsung Heavy Industries  SEMS  SeMS Security Management System  SEMS Sulphur Oxides  SHI Samsung Heavy Industries  SHI Samsung Heavy Industri		·	RICS	Royal Institute of Chartered			
LSV Lightering Support Vessel LTIF Lost Time Injury Frequency  MacN Maritime Anti-Corruption Network  MARISX Maritime Information Sharing Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd  MCV Metric Tonnes  MCU Memorandum of Understanding MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO_e Metric Tonnes of Carbon Dioxide Equivalent NPAT Net Profit After Tax NOX Nitrogen Oxides N_0 O Nitrous Oxide  N_0 O Nitrous Oxide  Development SCP Security Contingency Identification R8AD Research and Development R8AD Research and Development R8AD Research and Development SCP Security Contingency Plans SCP Ship Energy Efficiency Management Plan SEMP Ship Energy Efficiency Management Plan SEMP Ship Energy Efficiency Management Plan Security Contingency Plans SEMP Ship Energy Efficiency Management Plan Security Contingency Plans SEMP Ship Energy Efficiency Management Plan Semys Esemp Security Contingency Plans SEMP Ship Energy Efficiency Management Plan Semys Esemp Security Contingency Assuming Sems Security Management System Semys Sems Security Management System SEMP Ship Energy Efficiency Management System SEMS Security Management System SEMS Security Management System Semys Sems Security Management System Sell Semps Sems Security Management System Sex Semys Sems Sems Sems Sems Sems Sems Sems Sem				Surveyors			
LTIF Lost Time Injury Frequency m³ Cubic Metres  MACN Maritime Anti-Corruption Network  MARISX Maritime Information Sharing Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  MDD Million Barrels Per Day  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd  MOU Memorandum of Understanding  MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO_ge Metric Tonnes of Carbon Dioxide Equivalent  NCA Nitrogen Oxides  N_Q Nitrogen Oxides  N_Q Nitrogen Oxides  N_Q Nitrous Oxide  OPEC+  Organization of the Petroleum Exporting Countries Plus  SEMP Schum Ship Energy Efficiency Management Phian  SEMP Schip Floersy Efficiency Management Phian  SEMP Ship Energy Efficiency Management Phian  Sew Sulphur Oxides  SCM Sulphur Oxides  STS Ship to Ships  SRS Singapore Registry of Ships  SRS Singapore Pegistry of Ships  SRS Singapore Registry of Ships  SRS Singapore Pegistry of Ships  SRS Singapore Pegistry of Ships  SRS Sing			RFID	Radio Frequency Identification			
m³ Cubic Metres  MACN Maritime Anti-Corruption Network  MARISX Maritime Information Sharing Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  MMOV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd  MT Metric Tonnes  MOU Memorandum of Understanding  MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO2e Metric Tonnes of Carbon Dioxide Equivalent  NUAT Net Loss After Tax  NOX Nitrogen Oxides  N2C Sulphur Oxides  SRS Singapore Registry of Ships  SRS Ship-to-ship  TAMUG Texas A&M University at Galveston  TCE Time Charter Equivalent  TCFD Task Force for Climate-Related Financial Disclosures  TRCF Total Recordable Case Frequency  MSOSH Malaysian Society for Occupational Safety and Health  Services  UMT-MMS University Malaysia Terengganu  - Port Management and Maritime Services  UN United Nations  UNSDG United Nations Sustainable Development Goals  VLCC Very Large Crude Carrier  VLCC Very Large Ethane Carrier  VLCC Very Large Ethane Carrier  VLCC Volatile Liquid Organic Compound  OPEC+ Organization of the Petroleum Exporting Countries Plus  V-o-Y Year-On-Year			R&D	Research and Development			
MACN Maritime Anti-Corruption Network  MARISX Maritime Information Sharing Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  Mbpd Million Barrels Per Day  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy  Sdn Bhd  MOU Memorandum of Understanding  MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO_2e Metric Tonnes of Carbon Dioxide Equivalent  NLAT Net Loss After Tax  NPAT Net Profit After Tax  NQC Nitrous Oxide  OPEC+  Organization of the Petroleum Exporting Countries Plus  MARROL International Convention of the Petroleum Exporting Countries Plus  SeMS Security Management System  SeMS Sulphur Oxides  SCN Sulphur Oxides  SUM Samsung Heavy Industries  Security Management System  Sems Sulphur Oxides  SIR Sulphur Oxides  SSP Shared Socioeconomic Pathway  STS Ship-to-ship  Texas A&M University at Galveston  TCE Time Charter Equivalent  TCFD Task Force for Climate-Related Financial Disclosures  TRCF Total Recordable Case Frequency  UMT-MMS University Malaysia Terengganu  - Port Management and Maritime Services  UN United Nations  UNSDG United Nations Sustainable  Development Goals  VLCC Very Large Crude Carrier  VLCC Very Large Ethane Carrier  VLCC Very Large Ethane Carrier  VLCC Volatile Uqid Organic Compound  VOC Volatile Organic Compound	LTIF		SCP	Security Contingency Plans			
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Exercise  MARPOL International Convention for the Prevention of Pollution from Ships  Mbpd Million Barrels Per Day  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd  MT Metric Tonnes  MOU Memorandum of Understanding  MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO <sub>2</sub> e Metric Tonnes of Carbon Dioxide Equivalent  NLAT Net Loss After Tax  NPAT Net Profit After Tax  NOX Nitrogen Oxides  N <sub>2</sub> O Nitrous Oxide  OPEC+  Organization of the Petroleum Exporting Countries Plus  MSD Million Barrels Per Day  SAR Sulphur Oxides  SAR Sulphur Oxides  SARS Singapore Registry of Ships  SARS  Sulphur Oxides  SULPHON AGARET SARE SUlphur Oxides  SARS  Singapore Registry of Ships  SAR  Sulphur Oxides  NUCF  UNIT-MIS  University Malaysia Terenganu  - Port Management and Maritime  Factor of Climate-Related  Financial Disclosures  TCF  Task Force for Climate-Related  Financial Disclosures  UNIT-MIS  University Malaysia  University Malaysia  University at Galveston  TCF  Task Force for Climate-Related  Financial Disclosures  UNIT-MIS  University Malaysia  University Malaysia  University Malaysia  University Malaysia  University Atamona  University Atamona  University Atamona  University Atamona  Universi	MACN	Maritime Anti-Corruption Network					
MARPOL International Convention for the Prevention of Pollution from Ships  Mbpd Million Barrels Per Day  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd TAMUG Texas A&M University at Galveston  MT Metric Tonnes  MOU Memorandum of Understanding MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO <sub>2</sub> e Metric Tonnes of Carbon Dioxide Equivalent  NEAT Net Profit After Tax NOX Nitrogen Oxides  N <sub>2</sub> O Nitrous Oxide  OPEC+  Organization of the Petroleum Exporting Countries Plus  Sansung Heavy Industries  SAM Sulphur Oxides  SAS Singapore Registry of Ships  SAP Shared Socioeconomic Pathway  SAPS  Singapore Registry of Ships  SAP  Shared Socioeconomic Pathway  STS  Ship-to-ship  TAMUG  Texas A&M University at Galveston  TCE  Time Charter Equivalent  TCFD  Task Force for Climate-Related Financial Disclosures  TRCF  Total Recordable Case Frequency  UMT-MMS  University Malaysia Terengganu  - Port Management and Maritime Services  UN United Nations  UNSDG  United Nations Sustainable  Development Goals  VLCC  Very Large Crude Carrier  VLCC  Very Large Ethane Carrier  VLCC  Volatile Liquid Organic Compound  VOC  Volatile Organic Compound	MARISX	9	SeMS	Security Management System			
Prevention of Pollution from Ships  Mbpd Million Barrels Per Day  MCV Modular Capture Vessel  MMASB Malaysian Maritime Academy Sdn Bhd  MT Metric Tonnes  MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO <sub>2</sub> e  Metric Tonnes of Carbon Dioxide Equivalent  NPAT Net Profit After Tax  NOX Nitrogen Oxides  N2O Nitrous Oxide  Prevention of Pollution from Ships  SSR Singapore Registry of Ships  SSP Shared Socioeconomic Pathway  STS Ship-to-ship  TAMUG Texas A&M University at Galveston  TCE Time Charter Equivalent  TCFD Task Force for Climate-Related Financial Disclosures  TRCF Total Recordable Case Frequency  UMT-MMS University Malaysia Terengganu - Port Management and Maritime Services  UN United Nations  UNSDG United Nations Sustainable Development Goals  VLCC Very Large Crude Carrier  VLEC Very Large Ethane Carrier  VLEC Very Large Ethane Carrier  VLCC Volatile Liquid Organic Compound  Pool Volatile Organic Compound  VOC Volatile Organic Compound  Voc Volatile Organic Compound			SHI	Samsung Heavy Industries			
Mbpd       Million Barrels Per Day       SRS       Singapore Registry of Ships         MCV       Modular Capture Vessel       SSP       Shared Socioeconomic Pathway         MMASB       Malaysian Maritime Academy Sdn Bhd       TTAMUG       Texas A&M University at Galveston         MT       Metric Tonnes       TCE       Time Charter Equivalent         MOU       Memorandum of Understanding       TCFD       Task Force for Climate-Related Financial Disclosures         MPA       Maritime and Port Authority of Singapore       TRCF       Total Recordable Case Frequency         MSOSH       Malaysian Society for Occupational Safety and Health       UMT-MMS       University Malaysia Terengganu - Port Management and Maritime Services         MTCO2e       Metric Tonnes of Carbon Dioxide Equivalent       UN       United Nations         NLAT       Net Loss After Tax       UNSDG       United Nations Sustainable Development Goals         NPAT       Net Profit After Tax       VLCC       Very Large Crude Carrier         NOX       Nitrogen Oxides       VLCC       Very Large Ethane Carrier         N2O       Nitrous Oxide       VLOC       Volatile Liquid Organic Compound         OPEC+       Organization of the Petroleum Exporting Countries Plus       Y-o-Y       Year-On-Year	MARPOL		SOx	Sulphur Oxides			
MCVModular Capture VesselSSPShared Socioeconomic PathwayMMASBMalaysian Maritime Academy Sdn BhdSTSShip-to-shipMTMetric TonnesTCETime Charter EquivalentMOUMemorandum of UnderstandingTCFDTask Force for Climate-Related Financial DisclosuresMPAMaritime and Port Authority of SingaporeTRCFTotal Recordable Case FrequencyMSOSHMalaysian Society for Occupational Safety and HealthUMT-MMSUniversity Malaysia Terengganu - Port Management and Maritime ServicesMTCO2eMetric Tonnes of Carbon Dioxide EquivalentUNUnited NationsNLATNet Loss After TaxVLCCVery Large Crude CarrierNDATNet Profit After TaxVLCCVery Large Ethane CarrierNOXNitrogen OxidesVLOCVolatile Liquid Organic CompoundN2ONitrous OxideVLOCVolatile Organic CompoundOPEC+Organization of the Petroleum Exporting Countries PlusVOCVolatile Organic Compound	Mhnd	•	SRS	Singapore Registry of Ships			
MMASBMalaysian Maritime Academy Sdn BhdSTSShip-to-shipMTMetric TonnesTCETime Charter EquivalentMOUMemorandum of UnderstandingTCFDTask Force for Climate-Related Financial DisclosuresMPAMaritime and Port Authority of SingaporeTRCFTotal Recordable Case FrequencyMSOSHMalaysian Society for Occupational Safety and HealthUMT-MMSUniversity Malaysia Terengganu - Port Management and Maritime ServicesMTCO2eMetric Tonnes of Carbon Dioxide EquivalentUNUnited NationsNLATNet Loss After TaxVLCCVery Large Crude CarrierNDXNitrogen OxidesVLECVery Large Ethane CarrierN2ONitrous OxideVLOCVolatile Liquid Organic CompoundOPEC+Organization of the Petroleum Exporting Countries PlusY-o-YYear-On-Year	-	•	SSP	Shared Socioeconomic Pathway			
MT Metric Tonnes TCE Time Charter Equivalent  MOU Memorandum of Understanding TCFD Task Force for Climate-Related Financial Disclosures  MPA Maritime and Port Authority of Singapore TRCF Total Recordable Case Frequency  MSOSH Malaysian Society for Occupational Safety and Health Services  MTCO2e Metric Tonnes of Carbon Dioxide Equivalent  NLAT Net Loss After Tax  NPAT Net Profit After Tax  NOX Nitrogen Oxides  N2O Nitrous Oxide  OPEC+ Organization of the Petroleum Exporting Countries Plus  MTCD Management and Maritime Texas A&M University at Galveston  TCE Time Charter Equivalent  TCFD Task Force for Climate-Related Financial Disclosures  TRCF Total Recordable Case Frequency  UMT-MMS University Malaysia Terengganu - Port Management and Maritime Services  UN United Nations  UNSDG United Nations Sustainable Development Goals  VLCC Very Large Crude Carrier  VLCC Very Large Ethane Carrier  VLCC Volatile Liquid Organic Compound  VOC Volatile Organic Compound  VOC Volatile Organic Compound		·	STS	Ship-to-ship			
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MPA Maritime and Port Authority of Singapore  MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO2e Metric Tonnes of Carbon Dioxide Equivalent  NLAT Net Loss After Tax  NPAT Net Profit After Tax  NOx Nitrogen Oxides  N2O Nitrous Oxide  OPEC+ Organization of the Petroleum Exporting Countries Plus  MSOSH Malaysian Society for Occupational TRCF  Total Recordable Case Frequency  UMT-MMS University Malaysia Terengganu – Port Management and Maritime Services  UN United Nations  UNSDG United Nations Sustainable Development Goals  VLCC Very Large Crude Carrier  VLEC Very Large Ethane Carrier  VLOC Volatile Liquid Organic Compound  VOC Volatile Organic Compound  Y-o-Y Year-On-Year	MT	Metric Tonnes	TCE	Time Charter Equivalent			
MARITIME and Port Authority of Singapore  MSOSH  Malaysian Society for Occupational Safety and Health  MST  MId-Size Tankers  MTCO <sub>2</sub> e  Metric Tonnes of Carbon Dioxide Equivalent  NLAT  Net Loss After Tax  NPAT  Net Profit After Tax  NOx  Nitrogen Oxides  N <sub>2</sub> O  Nitrous Oxide  OPEC+  Organization of the Petroleum Exporting Countries Plus  MSOSH  Malaysian Society for Occupational UMT-MMS  University Malaysia Terengganu - Port Management and Maritime Services  UN  United Nations  Unsbud United Nations Sustainable Development Goals  VLCC  Very Large Crude Carrier  VLEC  Volatile Liquid Organic Compound VOC  Volatile Organic Compound Y-o-Y  Year-On-Year	MOU	Memorandum of Understanding	TCFD				
MSOSH Malaysian Society for Occupational Safety and Health  MST Mid-Size Tankers  MTCO2e Metric Tonnes of Carbon Dioxide Equivalent  NLAT Net Loss After Tax  NPAT Net Profit After Tax  NOX Nitrogen Oxides  N2O Nitrous Oxide  OPEC+ Organization of the Petroleum Exporting Countries Plus  MST Mid-Size Tankers  UN United Nations  UNSDG United Nations Sustainable  UNSDG Very Large Crude Carrier  VLCC Very Large Ethane Carrier  VLOC Volatile Liquid Organic Compound  VOC Volatile Organic Compound  Y-o-Y Year-On-Year	MPA		TRCF				
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NPAT Net Profit After Tax  NOx Nitrogen Oxides VLCC Very Large Crude Carrier  VLEC Very Large Ethane Carrier  VLOC Volatile Liquid Organic Compound  VOC Volatile Organic Compound	NII AT		UNSDG				
NOx Nitrogen Oxides  N2O Nitrous Oxide  OPEC+ Organization of the Petroleum Exporting Countries Plus  VLEC Very Large Ethane Carrier  VLOC Volatile Liquid Organic Compound  VOC Volatile Organic Compound  Y-o-Y Year-On-Year			VLCC	Very Large Crude Carrier			
N <sub>2</sub> O Nitrous Oxide VLOC Volatile Liquid Organic Compound OPEC+ Organization of the Petroleum Exporting Countries Plus VLOC Volatile Liquid Organic Compound VOC Volatile Organic Compound Y-o-Y Year-On-Year			VLEC	Very Large Ethane Carrier			
OPEC+ Organization of the Petroleum Exporting Countries Plus VOC Volatile Organic Compound Y-o-Y Year-On-Year			VLOC	Volatile Liquid Organic Compound			
Exporting Countries Plus  Y-o-Y  Year-On-Year	_						
	UPEU+	•					
	OPEX						



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