

# CILT *Buzz*

THE CHARTERED INSTITUTE OF LOGISTICS AND TRANSPORT SINGAPORE



## Stacking Up Sustainability

EARTH DAY 2025



The Chartered  
Institute of Logistics  
and Transport

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## CHAIRMAN'S MESSAGE

LISTEN 10 min

### ***Dear Colleagues,***

The world's international affairs (geopolitics, trade, economics, diplomacy, etc) are getting more complicated daily, with continued volatility in airfreight, ocean shipping and financial markets, ever changing freight rates and cargo delivery delays. Hence, Supply Chain Security and Resilience must continue to be top of mind for businesses.

**Singapore Budget** — Amid increasing geopolitical, macroeconomic, international and regional trade, as well as supply chain uncertainties, Singapore's economy chalked a creditable 4.4% rebound from 1.8% in 2023, with a modest budget surplus of \$6.8 billion projected for 2025. Economic growth is likely to moderate this year. The Budget provides support for all Businesses, including SMEs, to pursue innovation and seize new opportunities while prioritising Digitalisation, Sustainability and Overseas Expansion.

**Gaza & Ukraine Wars** — The precarious Phase 1 Gaza ceasefire is likely to be extended. But the full contours of a lasting Middle East peace, including a Two State Palestinian Solution, will be challenging and protracted if it happens at all. Trump's unprecedented and undiplomatic bulldozing of Ukraine and undermining Pan-European security by direct peace negotiations with Russia could paradoxically trigger an initial brief ceasefire in the Ukraine War. But USA, as well as the G7 countries have to ensure that clear principles and commitments for a

mutually acceptable, long-term peace in Europe, with robust security backstop guarantees are first established.



**Defence** — European political leaders are shaken at how Trump has trampled and caused a deep crisis of confidence with its reliable post-war allies. European security, military and defence spending will escalate significantly over the next decade or so to develop an effective conventional pan-European military force structure with the possible support of available British and French nuclear deterrence capacities. Germany has now committed to increase its Defence and Military spending. A broader nuclear proliferation risk globally may surface by various vulnerable countries feeling insecure about National Security unless fresh and genuine Non-Proliferation treaties are re-established.

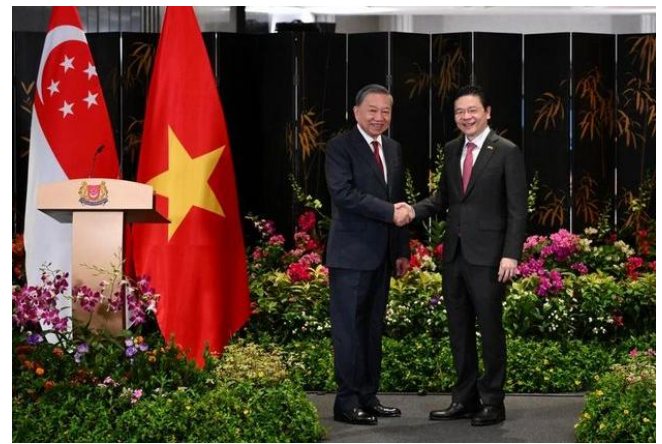


**Euro-Asia Trade & Shipping** — The tit-for-tat retaliatory tariff impositions between USA and the European Union, and USA-China, mean worsening trans-Atlantic and trans-Pacific trade relations. US has meanwhile unilaterally threatened to impose new shipping charges (US\$1m-1.5m) on Chinese-owned and Chinese-operated container vessels entering US ports. If unresolved, such escalating trade wars could oblige the Europeans to consider trading more with China, India and Southeast Asia. UK became the 12<sup>th</sup> member of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) in December 2024 (the USA had pulled out of the TPP in 2017). But Japan reconstituted and created the new CPTPP in 2018 with 11 members (Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam and UK). If the EU concludes an FTA with the CPTPP in future, the current market share of CPTPP could double, exceeding 30% of global GDP.



**Vietnam & Thailand Cooperation Agreements with Singapore** — Vietnam and Singapore recently upgraded and concluded a new Comprehensive Strategic Partnership (CSP), building on the 2023 Green Digital Economic Partnership arrangement.

Apart from cooperation in strategic areas like Defence and Security, Humanitarian Aid & Disaster Relief, Talent Development, Technical and Vocational Education are also included. There are 20 Vietnam-Singapore Industrial Parks (VSIPs) across 14 provinces in Vietnam. Singapore and Thailand also signed 5 MOUs that will boost economic cooperation, trade and investments at the 7<sup>th</sup> Enhanced Economic Relationship Ministerial meeting recently.



**ASEAN & Rising Protectionism** — At a recent American Chamber of Commerce Singapore event, Singapore reiterated the need for USA and Singapore to work closely to achieve win-win outcomes amid rising economic nationalism and protectionism, as well as strengthen the international rules-based trading order for growth in trade and investments. There are 6,000 US companies in Singapore. Singapore has over 250 companies in 45 states in USA. Singapore is the 3<sup>rd</sup> largest Asian investor in the USA after Japan and South Korea.

**FTAs** — Singapore and its ASEAN partners are deepening economic integration by enhancing FREE TRADE AGREEMENTS to further reduce tariffs and non-tariff barriers and enhance Supply Chain Resilience. While US is raising tariffs and igniting a global trade war, Singapore is lowering

duties and trade barriers via ASEAN and the Regional Economic Partnership (RCEP). 6 out of the 10 Southeast Asian nations have NO IMPORT DUTIES on all taxable products as part of the ASEAN Trade in Goods Agreement (ATIGA). The Agreement is being upgraded to boost intra-regional trade and build stronger and more resilient supply chains against external shocks.

**LAND** — LTA has announced a tender for another 600 Electric Buses - comprising 360 3-door single deck buses and 300 3-door double-deckers with progressive deliveries by end 2027. In December 2024 there were 5,800 public buses. With the new electric buses when delivered, the total electric bus fleet will increase to 1,140 buses. LTA plans to procure over 2,000 electric buses over the next 5 years.



**AIR** — Singapore Airlines (SIA) and Salesforce have announced plans to co-develop AI solutions for airlines at Salesforce AI Research Hub in Singapore. SIA is incorporating Agentforce, EINSTEIN in Service Cloud, and Data Cloud into its customer case management system, thereby enabling it to deliver more consistent and personalised services to its customers. SIA will utilise Agentforce, an AI System that deploys Autonomous Agents to perform specific tasks. Customer Service representatives will be able to better understand and anticipate customer needs

and tailor solutions, thereby reducing average response times, facilitating more efficient and proactive customer service.

SCOOT, SIA's subsidiary, has announced that it will receive 14-16 new aircraft in 2025 and additional 4-6 destinations as part of its low-cost airline's capacity expansion. Deliveries include 4 Embraer E190-E2 narrow-body jets, 7-9 narrow-body Airbus A320 and 3 widebody Boeing B787.

**MILITARY LOGISTICS** — MINDEF has projected a 2025 Defence budget of \$23.4 billion (12.4% higher than 2024). As part of strengthening defence self-reliance, it plans to procure 2 new submarines, a new infantry fighting vehicle with anti-drone capabilities, as well as replace its maritime patrol aircraft in the years ahead. The RSN's submarine programme is on track. All four German custom-made submarines will be operational by 2028, with a steady state of total 6 submarine fleet.



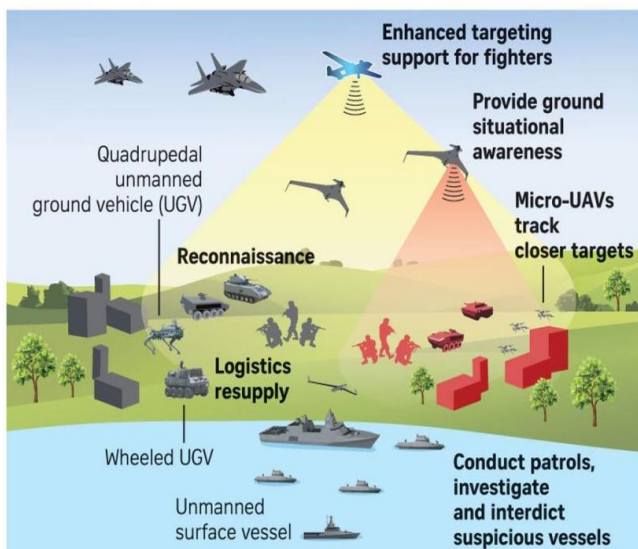
The RSAF will replace its ageing Fokker-50 Maritime Patrol Aircraft. Defence planners are evaluating a few options that include the Boeing P-8A Poseidon and the Airbus C295. The RSAF will order 8 more, previously confirmed, F-35A Fighter jets; this is in addition to the 12 F-35Bs purchased earlier. The ARMY will acquire a new infantry fighting vehicle named TITAN, which will have significantly enhanced

Firepower (30mm cannon) and counter-drone capabilities. Its High Mobility Artillery Rocket System (HIMARS) will be upgraded to integrate newer and more capable rockets. Singapore also continues to expand and strengthen its Network of Friends and Partners where interests are aligned. The SAF has also actively supported several humanitarian and disaster relief operations in various regional countries, including the provision of medical assistance to Gaza.

**NEX GEN DEFENCE (UAS)** — As part of Next Gen Defence Force planning, Singapore will invest further in unmanned capabilities. This will entail setting up 2 new centres to drive the development and integration of Unmanned Vehicles within the RSAF and ARMY; a new group to build up the SAF's counter-drone capabilities and new commands to defend Singapore's core digital infrastructure. To build up the SAF's Counter Unmanned Aerial Systems (UAS) capabilities, an SAF Counter-UAS Development and Operations Group will be established.

### Unmanned capabilities in the Singapore Armed Forces

#### Operational uses



In the RSAF, a UAS Warfare & Tactics Centre has been set up to develop UAS warfare & integration with other Defence Forces, working with industries and tech agencies. The ARMY will establish a similar centre, called Drone Accelerator for Rapid Equipping, to scale up operations of unmanned platforms for its units.

**CYBER DEFENCE** — Over the past decade, the SAF has reorganised and equipped itself to incorporate emerging technologies and capabilities. This includes the formation of Digital and Intelligence Service (DIS) in 2022 to better deal with future threats in the digital sphere.

The DIS will establish 2 new Commands to spur digitalisation and stay ahead of hostile digital threats. One is the SAF C4 & Digitalisation Command to consolidate Software and hardware capabilities). The other is the Defence Cyber Command to consolidate SAFs cyber-security operations and capabilities & partner other Government agencies.

**SAFTI CITY** — The SAF also announced the Opening of a new 17 ha state-of-the-art URBAN TRAINING FACILITY at SAFTI CITY. The facility will facilitate the preparing, developing and strengthening of tactics and skills for a variety of security threats and related missions, including Homeland Security, Counter-Terrorism and Disaster Relief Operations.

**Karmjit Singh**  
Chairman



## 18<sup>th</sup> Annual Africa Forum 2025 28-30 April 2025



To be held in Kigali, Rwanda, this premier event will bring together leaders, innovators, and thinkers from across the continent to discuss key issues, share insights, and forge new collaborations across the logistics, transport and supply chain landscape.

[REGISTER](#)

## CILT (Langfang) Conference 2025 16-18 June 2025



The CILT (Langfang) Conference is organised in partnership with the Hebei Provincial Government, Langfang Municipal Government, and the China Communications and Transportation Association.

### Theme of the Conference:

Digital-Intelligent Integration Drives Industry Change, Cost Reduction and Efficiency Enhancement Achieve High-Quality Development

### Focus Areas:

- Technological Innovation
- Digital Transformation
- Sustainable Development
- International Cooperation
- Talent Development

[MORE INFO](#)

# aBuzz

## WiLAT event in celebration of International Women's Day

WiLAT Singapore marked International Women's Day with an elegant High Tea Networking Event, bringing together ladies leaders from the logistics industry for an afternoon of inspiration and connection.

The highlight of the event was a presentation by Ms Audrey Goh, Senior Cross-Asset Strategist at Standard Chartered Bank, who shared her practical and memorable "SMILE" investment tips. Her insights empowered attendees with actionable strategies for financial success.

Held at the luxurious venue sponsored by Savoir Beds, the theme, "Luxury Sleep to Financial Freedom," resonated perfectly as participants explored the link between restful sleep and financial well-being. Guests enjoyed delightful canapés and champagne, fostering meaningful conversations and professional connections.

WiLAT Singapore extends heartfelt thanks to all attendees and supporters for making this celebration a success. We look forward to hosting more events that inspire and empower women in our community.



## CILT Singapore launches Transformation & Digitalisation in Supply Chain Webinar Series 2025

CILTS is pleased to launch a new series of webinars focusing on Transformation and Digitalisation in Supply Chain, commencing with the inaugural webinar on **Trends and Technologies** on **24 April 2025 (Thursday) at 4.00 pm (SGT)**.



### DISCUSSION ISSUES:

- Emerging Technologies – AI, IoT, Blockchain, and Robotics in logistics
- Industry 4.0 & Smart Logistics – Automation, real-time tracking, and connected systems
- Digital Twin Technology – Simulating supply chains for optimization and scenario planning

### KEY TAKEAWAYS:

- How digital transformation is reshaping supply chains – Learn how businesses leverage real-time data and automation to increase efficiency, reduce costs and enhance decision-making
- SME visibility & competitiveness – Discover how small and medium enterprises (SMEs) can implement scalable digital tools for end-to-end supply chain visibility
- Practical industry use cases – Case studies from leading logistics firms on adopting digital-first strategies

### Panelists



**ADRIAN GOH**  
Chief Executive Officer  
CARGO COMMUNITY NETWORK



**A/PROF KHO CHOON SIONG**  
SINGAPORE INSTITUTE OF  
TECHNOLOGY



**TAHERAH KUHL**  
Vice President  
Global Business Services  
DASSAULT SYSTEMES



**EDDIE SNG**  
Director  
CILT SINGAPORE  
MODERATOR

REGISTER

## DB Schenker's Drive for Gender Diversity in Logistics



Catherine Soo  
Chief Executive Officer  
Singapore and Malaysia Cluster  
DB Schenker

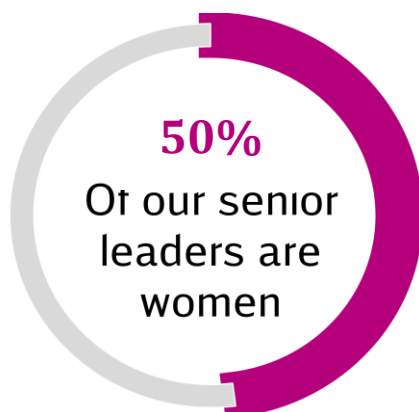


At DB Schenker, we recognize that diversity is more than just a buzzword—it is a critical driver of innovation, performance, and workplace culture. As a global leader in logistics and supply chain solutions, we are committed to fostering gender diversity at all levels of our organization, ensuring an inclusive environment where everyone can thrive.

### POLICIES AND INITIATIVES SUPPORTING WOMEN

DB Schenker's gender diversity strategy is backed by concrete policies and initiatives designed to create equal opportunities:

- **Mentorship and Sponsorship:** We connect female employees with experienced leaders to provide guidance, career growth, and leadership support.
- **Flexible Work Arrangements:** To promote work-life balance, we offer flexible work schedules, remote work options, and family-friendly policies.
- **Inclusive Hiring Practices:** We ensure gender-neutral job descriptions, diverse interview panels, and active outreach to attract a broader talent pool.



# Industry: LATEST

## Singapore issues new guidelines on sustainable e-commerce packaging

LISTEN 3 min

The Alliance for Action (AfA) on Packaging Waste Reduction for the E-commerce Sector has published a set of Guidelines on Sustainable E-commerce Packaging. The Guidelines were developed by members of the AfA, comprising 14 companies across the e-commerce supply chain (including marketplaces, retailers and packaging producers), organisations and experts. The AfA was co-led by the Singapore Manufacturing Federation (SMF) and Singapore Post (SingPost) and supported by the National Environment Agency (NEA).

The AfA estimates that about 186,000 parcels were delivered in Singapore per day in 2023, generating as much as 15,900 tonnes of mailing packaging in that year alone. E-commerce contributes to packaging waste, which is a key priority waste stream to address under Singapore's Zero Waste Masterplan. All stakeholders in the e-commerce ecosystem, including businesses and consumers, have an important role to play in managing packaging materials responsibly.

The Guidelines provide a comprehensive list of concrete 3R (Reduce, Re-use, Recycle)

solutions tailored to various types of e-commerce packaging, including cardboard boxes, mailers and fillers. For example, the Guidelines lay out seven different "Reduce" solutions for cardboard boxes alone, from simply expanding the range of box sizes available to avoid packing in oversized boxes to switching to lighter alternative packaging. Each solution is augmented with step-by-step actions for businesses to consider and the expected benefits and drawbacks. The Guidelines also benchmark the solutions based on the estimated effort, cost, and environmental impact to allow companies to select the one that best suits their needs.

Beyond 3R solutions, the Guidelines provide operating models for e-commerce marketplaces to promote sustainable packaging to consumers and drive awareness and responsibilities among suppliers. Another additional feature of the Guidelines is a scorecard that company leaders can use to assess the maturity of their management practices in relation to sustainable packaging and pinpoint areas for improvement.

Based on real-world case studies, companies may uncover opportunities to reduce packaging needs by up to 90 per cent, such as by switching from a corrugated cardboard box to a similar-sized paper mailer. Sealed Air had found that with quicker deliveries, apparel retailers required less protection for their packages and the amount of material used in its plastic and paper mailers could be reduced by 30 per cent to 50 per cent. Watsons Singapore also managed to reduce its use of bubble wrap and reaped packaging cost savings of 5 per cent to 10 per cent, by shredding and repurposing used cardboard boxes into filler material.

The Packaging Partnership Programme, administered by SMF, will be organising workshops to promote the adoption of the guidelines among businesses.



[Click on image to download](#)

SOURCE

[National Environment Agency](#)



April 22 is Earth Day, a day when billions of people around the globe participate in environmentally conscious activities geared toward protecting our planet. It is also the United Nations' [International Mother Earth Day](#).

# Vision for Change

Our world needs transformational change. It's time for the world to hold sectors accountable for their role in our environmental crisis while also calling for bold, creative and innovative solutions. This will require action at all levels, from business and investment to city and national government.

And most importantly, it involves individuals. When your voice and your actions are united with thousands or millions of others around the world, we create a movement that is inclusive, impactful and impossible to ignore.

Every Earth Day can drive a year of energy, enthusiasm and commitment to create a **NEW PLAN OF ACTION FOR OUR PLANET.**

The first Earth Day took place in 1970. Take a look at the [history of Earth Day](#).



The theme for Earth Day 2025 is [Our Power, Our Planet](#), inviting everyone around the globe to unite behind renewable energy, and to triple the global generation of clean electricity by 2030.

SOURCE

[Earthday.org](https://earthday.org)

A photograph of a modern white and red train traveling through a dense, lush green forest. The train is positioned horizontally across the middle of the frame, surrounded by tall trees and vibrant pink blossoms. The scene is captured from an elevated perspective, showing the train's path through the verdant landscape.

# SINGAPORE GREEN PLAN 2030

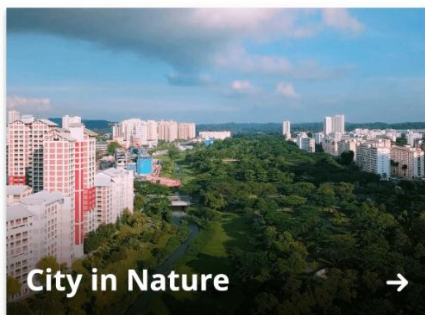
Singapore is the only country in the world to freeze the growth of the vehicle population. We are one of a few countries to have closed the water loop and to reuse every last drop of water repeatedly. We do not subsidise the use of fossil fuel, and we tax the emission of carbon.

Since the early 2000s, we have transitioned to natural gas, which is the cleanest form of fossil fuel for power generation. Today, about 95 per cent of our electricity is generated using natural gas, and we will progressively transition to greener energy sources.

We have put together a 10-year plan called the **Singapore Green Plan 2030**. The Green Plan is a whole-of-nation sustainable development agenda, with firm action plans, touching on almost every dimension of our lives.

**GOAL: Achieve NET ZERO emissions by 2050**

## 5 pillars of the Singapore Green Plan 2030



SOURCE

[SG Green Plan](#)

# SUSTAINABILITY FOR LOGISTICS ENTERPRISES IN SINGAPORE

## SUSTAINABILITY PLAYBOOK

**The logistics sustainability playbook, developed as part of the Enterprise Sustainability Programme, describes key sustainability trends in the sector and will help you develop and implement strategies to make your business more sustainable. These strategies enable you to capture opportunities arising from the green economy and future-proof your business against green transition risks.**

The logistics industry enables flow of goods for industries representing more than half of Singapore's GDP – ranging from essential domestic sectors such as construction, to externally oriented sectors such as manufacturing and trade.

Logistics is critical to Singapore's status as a globally competitive and connected trade and connectivity hub. To maintain this status, we will need to stay ahead of global trends, including the need to ensure green supply chains.

Businesses across sectors have begun making Net Zero declarations. Given that logistics services contribute a significant share of global carbon emissions and that MNCs are requiring their logistics service providers to go green, it is important for logistics companies to bring forward decarbonisation plans and help develop green supply chains.

**[DOWNLOAD SUSTAINABILITY PLAYBOOK](#)**



# SUPPLY CHAIN SUSTAINABILITY AT THE CROSSROADS: NAVIGATING THE WAY AHEAD

Corporate Sustainability appears at a crossroads. Having moved through a phase of wide-ranging sustainability commitments and pledges, this agenda finds itself in its delivery period. But as delivery is pursued, real-world challenges are emerging.

It was against this backdrop that climate policy experts, entrepreneurs, non-governmental organisation (NGO) representatives, financiers and consultants gathered in Zurich, in July 2024 at the Point Zero Forum. To discuss what concerted action is needed to help business manage the practical challenges their early actions, in pursuit of greater sustainability, have generated.

This report attempts to capture the salient points from a dedicated roundtable focused on supply chain sustainability, hosted at the Point Zero Forum, in which PwC Singapore took part. In the first instance, three broad trends were explored that might suggest business is – or will be soon – moving in a more sustainable direction. These are:

- **Changing consumer sentiment** – customers are now demanding sustainable products and services and are willing to pay for them.
- **A more holistic approach to investor valuation** – where supply chain sustainability risks and a company's ability to manage them are important considerations for investors.

- **New and emerging regulations and standards** - Businesses that remain unconvinced of the upside risk potential and downside risk mitigation arising from sustainable supply chain management may be compelled to act in any event by (EU) legislation.

Left alone, however, these trends are unlikely to be sufficient to deliver widespread, long-term corporate sustainability. For one, many of the small and medium-sized enterprises (SMEs) that populate large corporate supply chains simply do not have the time or inclination to embrace sustainability on a practical level. Even if doing so might help ensure their long-term competitiveness. The reasons for this have been explored in research published following the Japan Fintech Festival – see [here](#).

The final section of the report seeks to articulate what might be done as per discussants at the Point Zero Forum, along three core dimensions (a so-called ‘**3D approach**’ – **duty, data, dialogue**) to help enhance corporate sustainability, with a particular emphasis on supply chains. In sum:

- Larger market players should embrace the notion of a corporate anchor duty, genuinely supporting their supply chain participants embrace sustainability. Not just demanding it of them.
- Data is critical and its collection and processing need not be as complex as often presented. However, sectoral differences remain, and these cannot be ignored.
- Effective dialogue is an essential pre-requisite to progress. But it must be targeted, not open-ended. A sectoral pilot programme lends itself to providing focus, in support of actioning an effective duty of care and identifying the crucial data points needed to measure and manage sectoral sustainability.

## [DOWNLOAD REPORT](#)

[SOURCE](#)[PWC](#)



# GREEN FINANCE

## A Pathway to Sustainable Growth

LISTEN 11 min

Green finance is a transformative approach to funding that aligns financial systems with environmental sustainability. It encompasses investments and financial instruments aimed at fostering a low-carbon, resource-efficient, and inclusive economy. This article delves into the concept of green finance, highlights global examples, explores its implementation in Singapore—particularly in the supply chain and transport sectors—and examines its benefits and emerging opportunities.

### What is Green Financing?

Green financing refers to the allocation of capital to projects and initiatives that contribute to environmental sustainability. This includes renewable energy projects,

energy-efficient infrastructure, sustainable agriculture, and conservation efforts. Green finance is often facilitated through instruments such as green bonds, sustainability-linked loans, and carbon credits. The overarching goal is to mitigate climate change, reduce environmental degradation, and promote sustainable development.

### Leading Examples of Green Finance Around the World

**1. United States:** The U.S. leads in green bond issuance, with \$118.6 billion issued in 2018 alone. These bonds fund renewable energy projects, sustainable infrastructure, and energy-efficient buildings.

**2. European Union:** The EU's Green Deal Investment Plan aims to mobilize \$1.14 trillion by 2050 to achieve net-zero emissions. This includes investments in renewable energy, sustainable transport, and circular economy initiatives.

**3. China:** Ranking fourth globally in green finance development, China has made significant strides in renewable energy and green infrastructure projects. The country has also established the Global Green Finance Development Index to track progress.

**4. France:** France tops the Global Green Finance Development Index, showcasing robust policies and market mechanisms to support green investments.

## GREEN FINANCE IN SINGAPORE: FOCUS ON SUPPLY CHAIN AND TRANSPORT

Singapore has emerged as a leader in integrating green finance into its economic framework, particularly in the supply chain and transport industries.

**1. [Sustainability Playbook for Logistics Enterprises](#):** Developed by Enterprise Singapore, this playbook provides a step-by-step guide for logistics companies to adopt green practices. It includes resources for sustainability strategies, such as electrifying vehicles and implementing energy-efficient solutions.

**2. [UOB Green and Sustainable Trade Financing](#):** United Overseas Bank offers tailored solutions to simplify sustainable

financing for businesses. This includes short-term trade facilities for sectors like green transport and renewable energy.

## BENEFITS TO COMPANIES

Green finance can significantly enhance business performance over time by fostering sustainability, innovation, and resilience. Here are the key ways it contributes to long-term success:

### 1. Cost Savings Through Efficiency

Adopting green practices often involves upgrading to energy-efficient technologies and optimizing resource use. Over time, this reduces utility costs, waste disposal fees, and raw material expenses, leading to substantial savings.

### 2. Attracting Investors

With growing awareness of climate change, many institutional investors prioritize Environmental, Social, and Governance (ESG) criteria. Companies engaged in green finance are better positioned to attract these investors, ensuring steady capital flow.

### 3. Access to New Markets

As demand for sustainable products and services rises, businesses that integrate green finance can tap into emerging markets. This diversification of revenue streams enhances their market competitiveness.

## 4. Risk Mitigation

Green finance helps companies adapt to stricter environmental regulations and avoid potential fines or legal issues. It also mitigates risks associated with fluctuating energy prices by investing in renewable energy sources.

## 5. Building Brand Reputation

Sustainability initiatives resonate with consumers who are increasingly prioritizing eco-friendly brands. Companies that adopt green finance can strengthen customer loyalty and gain a competitive edge.

## 6. Driving Innovation

Green finance often requires investment in new technologies, such as renewable energy systems or sustainable supply chains. This fosters a culture of innovation, enabling companies to develop cutting-edge solutions and trends.

## 7. Enhancing Employee Retention

Employees are more likely to feel motivated and aligned with companies that demonstrate a strong commitment to sustainability. This enhances workforce satisfaction and reduces turnover costs.

## 8. Future-Proofing the Business

By aligning with global sustainability goals, companies position themselves for long-term viability. Green finance ensures they remain relevant as consumers, regulators, and investors increasingly demand eco-conscious practices.

## 9. Contributing to Economic Resilience

Green finance promotes diversification and stability, particularly during economic downturns. Companies involved in renewable energy, sustainable transport, or circular economies often weather crises more effectively than their traditional counterparts.

By integrating green finance, businesses not only fulfil their environmental responsibilities but also unlock growth opportunities, reduce operational risks, and ensure sustained profitability. In essence, green finance paves the way for companies to thrive in a future shaped by sustainability.

### KEY CHALLENGES IN ADOPTING GREEN FINANCE

Adopting green finance can be highly beneficial for companies and society, but it does come with its own set of challenges. These obstacles often require companies to adapt their strategies, operations, and financial approaches.

#### 1. High Initial Costs

Transitioning to sustainable practices, such as adopting renewable energy or upgrading infrastructure, often involves significant upfront investment. Smaller companies may find it especially difficult to afford such changes, even if long-term savings are expected.

## 2. Limited Access to Funding

Not all businesses have equal access to green financing options. SMEs, in particular, may face difficulties in securing green loans or investments due to stricter eligibility criteria.

## 3. Regulatory & Compliance Complexity

Navigating the regulatory framework around green finance can be challenging. The lack of uniform standards for what qualifies as "green" often creates confusion and makes compliance difficult.

## 4. Lack of Awareness and Expertise

Many businesses lack the expertise to evaluate and adopt sustainable initiatives. Identifying suitable green projects, calculating carbon footprints, and understanding financial instruments like green bonds require specialized knowledge.

## 5. Risk Management Concerns

Green finance often involves investments in new technologies or emerging markets, which may be perceived as higher-risk. Companies might be hesitant to commit to such ventures without robust risk mitigation strategies.

## 6. Short-term Profit Pressure

Businesses driven by short-term financial results may resist the adoption of green finance, as sustainable initiatives often yield benefits over a longer time horizon.

## 7. Inconsistent Measurement Standards

Measuring the impact of green projects can be complex due to inconsistent or unclear metrics. Companies may struggle to demonstrate their sustainability achievements effectively to stakeholders.

## 8. Lack of Consumer Demand

In some cases, companies may face a lack of consumer interest or willingness to pay a premium for sustainable products, which can disincentivize green practices.

## ADDRESSING THE CHALLENGES

**Despite these obstacles, companies can overcome them through:**

- **Partnerships:** Collaborating with financial institutions, governments, and NGOs to gain access to funding and expertise.
- **Training Programmes:** Building internal capacity by training employees in sustainability and green finance principles.
- **Innovative Solutions:** Exploring cost-effective technologies and digital tools to implement green practices efficiently.
- **Policy Advocacy:** Encouraging policymakers to establish clear standards and offer incentives for green investments.

By tackling these challenges head-on, companies can unlock the full potential of green finance, not only for their own growth but also for societal and environmental well-being.



# GREEN DEFENCE

## Sustainability in Singapore's Military Services

LISTEN 7 min

**Sustainability has evolved into a critical framework for sectors worldwide, and Singapore's military service is no exception. As a nation with limited resources and strategic vulnerabilities, incorporating environmental sustainability into military operations aligns with Singapore's broader goals for resilience and efficiency.**

This article examines the pressing issues, inherent challenges and exciting opportunities for sustainability in Singapore's military services. It also highlights specific practices and emerging technologies that are paving the way for a greener and more sustainable defence sector.

## **KEY ISSUES IN SUSTAINABILITY FOR THE MILITARY**

### **1. High Energy Consumption**

Military operations are traditionally energy-intensive. From fuel for vehicles and aircraft to electricity for bases and facilities, the demand for non-renewable energy sources poses a significant challenge.

### **2. Resource Scarcity**

Singapore's limited natural resources, including land, water, and energy, make sustainable management critical. Military exercises and installations can put added pressure on these resources.

### **3. Waste Generation**

The disposal of hazardous materials, single-use plastics, and e-waste from high-tech equipment represents an ongoing environmental concern.

### **4. Ecosystem Impact**

Training activities, particularly those conducted in natural areas, can disrupt ecosystems and biodiversity. Managing this impact is essential for long-term environmental health.

## **CHALLENGES IN ACHIEVING SUSTAINABILITY**

### **1. Operational Requirements**

Military effectiveness must always take precedence. Striking a balance between operational readiness and sustainability is a complex endeavour.

### **2. Technology Integration**

Adopting greener technologies often requires significant investment and retrofitting of existing systems. Ensuring these technologies meet rigorous military standards can be a bottleneck.

### **3. Cost Considerations**

While sustainability initiatives may yield long-term savings, their upfront costs can be substantial. This challenge is especially significant in areas like renewable energy integration.

## 4. Security Concerns

Incorporating renewable energy systems like solar panels or wind turbines requires careful planning to avoid vulnerabilities, such as susceptibility to extreme weather or sabotage.

## OPPORTUNITIES FOR A SUSTAINABLE MILITARY

### 1. Innovation Leadership

Sustainability presents an opportunity for the Singapore Armed Forces (SAF) to lead by example in advancing green defence technologies and policies.

### 2. Collaboration with Industry

The SAF can collaborate with universities, startups, and global defence industries to innovate sustainable technologies.

### 3. Optimized Resource Use

Sustainability efforts often lead to enhanced efficiency, reduced costs, and minimized waste, all of which benefit the SAF's operational and environmental goals.

### 4. Global Reputation

By prioritizing sustainability, Singapore can reinforce its global image as a forward-thinking and environmentally responsible nation.

## EXAMPLES OF SUSTAINABLE PRACTICES IN SINGAPORE'S MILITARY FORCES

### 1. Green Infrastructure at Military Camps

SAF installations incorporate eco-friendly features like solar panels, energy-efficient lighting, and rainwater harvesting systems. Examples include solar installations at Changi Naval Base, which reduce dependence on grid electricity.

### 2. Electric and Hybrid Vehicles

The SAF has begun transitioning its logistics and transport fleet to hybrid and electric vehicles, aligning with Singapore's nationwide efforts to phase out internal combustion engines.

### 3. Sustainable Training Practices

Simulated training environments have been adopted to reduce the environmental impact of live exercises. This minimizes resource use and avoids damage to ecosystems.

### 4. Water Conservation Programmes

Military camps have installed water-efficient systems and recycling programs to reduce consumption. Some camps use greywater recycling systems to irrigate greenery within the premises.

### 5. Zero-Waste Initiatives

Recycling and waste segregation are actively promoted in military installations. Biodegradable packaging has replaced

single-use plastics in some contexts, including meal provisions for soldiers.

## **NEW TECHNOLOGIES IN SUSTAINABLE MILITARY OPERATIONS**

### **1. Renewable Energy Solutions**

The SAF is exploring renewable energy technologies, such as portable solar chargers for field use. These reduce reliance on traditional fuel-powered generators during missions.

### **2. Advanced Battery Systems**

Lightweight, long-lasting batteries are being developed for use in unmanned systems, communications devices, and vehicles to enhance energy efficiency.

### **3. Eco-Friendly Materials**

Research is underway into biodegradable materials for use in uniforms, gear, and packaging. This reduces long-term waste generation.

### **4. AI-Driven Efficiency**

Artificial intelligence is being employed to optimize supply chain logistics, reduce fuel consumption, and predict maintenance needs for military vehicles and equipment, thereby cutting down waste and inefficiencies.

### **5. Green Drones and Autonomous Systems**

Battery-powered or solar-assisted drones and robots are being adopted for surveillance and transport, replacing traditional petrol-based systems.

## **A SUSTAINABLE FUTURE FOR SINGAPORE'S MILITARY**

While challenges remain, the SAF's sustainability initiatives are a testament to its commitment to environmental stewardship without compromising operational effectiveness. By leveraging technological innovation and fostering partnerships, the SAF is creating a defence force that aligns with Singapore's long-term environmental goals.

The road to sustainability is a continuous process that requires adaptability, foresight, and innovation. For Singapore, the integration of sustainability into its military service is not just a necessity but an opportunity to set a global benchmark for green defence operations.

# SAFE INTRODUCTION OF ALTERNATIVE FUELS

## Focus on ammonia and hydrogen as ship fuels

LISTEN 7 min

The International Maritime Organization's (IMO's) strengthened GHG strategy has set the decarbonization pathway for shipping, with the ultimate goal of achieving net-zero emissions by 2050. Together with new EU regulations, these will be important drivers for decarbonizing international shipping.

Given their long lifespan, ships should be prepared for the introduction of future regulations putting a cost on emissions and limitations on the GHG intensity of fuels. Hydrogen and ammonia, used in internal combustion engines or fuel cells, are expected to be important in the necessary fuel transition towards 2050, even though there are challenges related to technology readiness, fuel availability, and cost.

This paper outlines the process of shipowners obtaining approval for ammonia- and hydrogen-fuelled ships in today's immature regulatory landscape.

Further, it describes the efforts required by maritime stakeholders to safely introduce ammonia and hydrogen as marine fuels and to progress towards their widespread use. We also consider what it takes to enable seafarers to operate ammonia- and hydrogen- fuelled ships safely.

### Safety and approval

Both hydrogen and ammonia have properties that introduce new safety challenges, triggering the need for increased focus on safety in ship design, construction, and operation.

Ammonia has been transported and used as a refrigerant at sea. However, introducing ammonia as marine fuel creates toxicity challenges related to bunkering, onboard storage, supply and consumption.

These challenges may vary depending on ship type and bunkering location.

Hydrogen has a long history of use in a wide variety of industries other than maritime, and the majority of hydrogen today is used in fields like oil refining, ammonia production, and methanol production.

Understanding hydrogen and its safety-related properties in a maritime context will be key for its safe and efficient introduction as a ship fuel. A key challenge is to avoid the chain of events that can lead to an explosion, from which the potential consequences can be severe.

### **Obtaining approval for ammonia- and hydrogen-fuelled ships**

There are currently no detailed and prescriptive IMO regulations to support Flag State approval for vessels using hydrogen or ammonia as fuel. The IMO approved the first version of non-mandatory interim guidelines for ammonia in late 2024 and will continue developing similar hydrogen guidelines in 2025. The additional efforts to arrive at mandatory regulations are expected to take years. Given an accelerated development process, the earliest opportunity for new mandatory regulations in the IGF Code is 2028.

Meanwhile, the IMO provides a risk-based approval methodology for new fuels and technologies where the safety level must be

demonstrated to be equivalent to that of a conventional oil-fuelled ship. The approach is commonly referred to as the **alternative design approval process (ADA)**. The shipowner will typically have a more prominent role in the ADA compared to a conventional newbuild project, and close interaction between the owner, designer, shipyard, Flag Administration and Class is required.

### **Safety is more than rules**

Maturing fuel technologies and ship designs When new technologies are introduced in shipping, the industry-standard safety level will be established by the approval process between regulators, designers, shipyards and equipment suppliers translating new requirements into workable designs. Developing cost-efficient ship designs without compromising safety is challenging and requires close interaction between all stakeholders.

### **Enabling seafarers to operate safely**

Operating ships safely using ammonia or hydrogen as fuel will require changes to the safety management system, generate the need for new competencies on board and ashore, and may also affect the organizational set-up.

The International Safety Management (ISM) Code sets clear objectives and requirements for shipboard operations. The entire ship's Safety Management System (SMS) will be affected by using hydrogen or ammonia as fuel, including normal operation, maintenance, and emergency preparedness. Until International Convention on Standards of Training,

Certification and Watchkeeping for Seafarers (STCW) courses for seafarers on ships utilizing ammonia or hydrogen as fuels are in place, training on such ships should be developed based on existing resources in consultation with the Flag Administration.

Analysing accidents in other industries helps devise strategies to prevent accidents related to hydrogen and ammonia systems on ships. One such example is a recent EMSA study that reviewed accident databases for hydrogen-related accidents (EMSA, 2024). Nearly half the incidents analysed were related to human and organizational factors.

This emphasizes that training the operating personnel and including fuel-related hazards in the safety management systems will be crucial to preventing future incidents.

The safe introduction and progress towards widespread adoption of ammonia and hydrogen as fuels require a collaborative and open-minded approach among maritime stakeholders, integrating specific fuel regulations into the IGF Code, maturing fuel technologies and ship designs, and enabling seafarers to operate safely.

**This report uncovers key insights to assist shipowners in obtaining approvals and ensuring the safe adoption of ammonia and hydrogen as ship fuels.**

**Inside, you will find:**

- **Overview of the order book and the technological development status of ammonia and hydrogen as marine fuels**
- **Important safety considerations specific to ammonia and hydrogen**
- **A detailed breakdown of roles and responsibilities to help you navigate regulatory compliance**
- **Key steps needed to ensure safe adoption of ammonia and hydrogen on ships**

**Download now to learn how you can navigate the evolving regulatory landscape for ammonia- and hydrogen-fuelled ships.**

**[DOWNLOAD FULL REPORT](#)**



# Marine Fuels Webinar Week

## 7-11 April 2025

**REGISTER NOW**

### PROGRAMME

**Monday, 7 April, 4.00-5.00pm (SGT)**

**Ammonia as a marine fuel –**

**Overcoming safety and cost considerations by 2030**

This webinar will focus on resolving safety concerns stemming from ammonia's toxicity, address the higher costs of low-carbon ammonia and evaluate technological progress especially around NOx and N2O emission mitigation to offer a realistic roadmap for the adoption of ammonia fuel by 2030.

Join us as we discuss:

- The first ammonia-fuelled marine engines
- Current and anticipated IMO safety guidelines
- Innovations in engine technology and vessel design
- Strategies for cost reduction and supply chain optimisation

- Retrofitting existing vessels and developing new ammonia-ready vessels
  - Pilot projects and real-world trials demonstrating the viability and safety of ammonia as a fuel
  - NOx, N2O emissions and the ETS maritime extension, and the technology available to mitigate these emissions
- 

**Tuesday, 8 April: 9.00-10.00pm (SGT)**

## **LNG as a marine fuel: balancing emissions reduction with long-term decarbonisation goals**

LNG as a marine fuel presents itself as a practical decarbonisation pathway for the industry. However, shipowners and operators must also consider long-term decarbonisation goals amid evolving regulations like FuelEU Maritime. This webinar offers insights into leveraging LNG today while planning for a carbon-neutral future.

Join us as we discuss:

- The expansion of LNG-fuelled fleets and how it influences the development of bunkering infrastructure
  - Well-to-wake analyses, methane slip challenges, and comparisons with conventional fuels
  - Regulatory impacts on LNG adoption, focusing on GHG intensity targets and penalties for non-compliance.
  - Challenges in scaling up LNG bunkering infrastructure, particularly increasing bunkering vessel capacity
  - Investment trends, fuel price forecasts, compliance costs and potential savings
  - LNG's role as a transitional fuel and the future potential of bio-LNG and synthetic LNG
- 

**Wednesday, 9 April: 4.00-5.00pm (SGT)**

## **Methanol's moment: navigating shipping's fuel shift**

With the FuelEU Maritime Regulation now in effect, the adoption of methanol, particularly bio- and e-methanol, is gaining traction as a viable, sustainable fuel option. Challenges remain, however. The high production cost of green methanol, derived from renewable sources, and competition from other alternative fuels are key obstacles. Concerns also linger over the

availability and scalability of green methanol, the development of robust bunkering infrastructure, and the need for comprehensive crew training.

Join us as we discuss:

- How the implementation of FuelEU Maritime drives demand for lower carbon intensity fuels like methanol
- The considerations behind dual-fuel engine choices in new buildings and their role in future-proofing fleets
- Developing methanol bunkering infrastructure and a reliable fuel supply chain
- Challenges surrounding the scalability and cost-effectiveness of green methanol production
- The importance of crew training and safety protocols for the safe handling and use of methanol as a marine fuel
- Progress in lifecycle greenhouse gas emission standards to establish a unified framework for low-carbon fuels

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**Thursday, 10 April: 9.00-10.00pm (SGT)**

## **Nuclear-powered shipping: commercialisation by 2030?**

This webinar offers a critical assessment of the practical steps needed to overcome the issues preventing the widespread adoption of nuclear power in commercial shipping. Experts will delve into the progress of small modular reactor (SMR) technology, address safety and security concerns, navigate complex regulatory landscapes and explore viable business models for nuclear-powered vessels.

Join us as we discuss:

- The viability of fourth-generation SMR technologies, including molten salt reactors, helium-cooled gas reactors and lead-cooled reactors for maritime applications
- Analyse the latest developments in regulatory frameworks, including the role of the Nuclear Energy Maritime Organization (NEMO) and the IAEA's ATLAS program, to establish international safety and security standards
- Examine strategies for addressing public perception and building community readiness by increasing transparency and allaying safety concerns
- Infrastructure requirements for nuclear fuel supply, reactor maintenance, and waste management, both onshore and offshore

- Extended vessel lifecycles and reduced refuelling needs versus the high initial investment costs
- Ongoing projects and collaborations, such as the NuProShip initiative, that are paving the way for the deployment of nuclear-powered commercial ships

**Friday, 11 April: 4.00-5.00pm (SGT)**

## **Biofuel's balancing act: compliance, competitiveness, and carbon reduction under FuelEU Maritime**

Biofuels present a tangible solution for immediate greenhouse gas intensity reduction. However, concerns persist around biofuel supply limitations, sustainability certification and impacts on EU port competitiveness. This webinar cuts through the complexity, providing actionable insights on navigating FuelEU Maritime rules while maintaining operational efficiency and preparing for future regulatory developments and shipping's carbon-neutral future.

Join us as we discuss:

- FuelEU Maritime compliance strategies, including MRV requirements under EMSA's TtIS system and using pooling mechanisms to optimise compliance.
- Sustainable biofuel sourcing and certification, focusing on RED criteria and well-to-wake lifecycle analysis for GHG accounting.
- Biofuel availability and infrastructure, considering current supplies, future needs, and AFIR's role in developing EU port bunkering facilities.
- Integrating drop-in biofuels like FAME and HVO into fleets, addressing technical compatibility, operational challenges, and risks such as equipment damage.
- Competitiveness and carbon leakage concerns, including surcharges' impact on consumers and the risk of shipping re-routing from EU ports.
- Long-term fuel strategies beyond 2030, assessing alternative fuels like e-fuels and anticipating future revisions to FuelEU Maritime aligned with IMO developments.

**REGISTER NOW**

Recordings of the webinars will be accessible at [www.rivieramm.com/webinar-library](http://www.rivieramm.com/webinar-library) following the live event taking place.

# QUEEN BEE ENABLED SUSTAINABILITY TRANSITION (QUEST)

## Supporting SMEs in sustainability journey

**The Singapore Business Federation (SBF), in partnership with Singapore Post (SingPost), Ernst & Young LLP (EY) and OCBC Bank, has launched a Queen Bee Enabled Sustainability Transition (QUEST) programme to enable SingPost's local small- and medium-sized enterprise (SME) suppliers on their sustainability journey.**

All listed companies in Singapore will be required to make climate-related disclosures starting from the financial year (FY) commencing on or after 1 Jan 2025. Large non-listed companies – defined as having annual revenues of at least S\$1 billion and total assets of at least \$500 million – will be required to do so starting from the FY commencing on or after 1 Jan 2027.

The QUEST programme is tailored to address the critical gap between the growing expectations of larger companies and the current lack of expertise amongst their suppliers to deliver credible and accurate carbon emissions data necessary for climate reporting.

SingPost is the first logistics provider in Singapore to participate in the QUEST programme. In alignment with its sustainability goals, SingPost has enhanced its procurement criteria to include sustainability requirements for their supply chain partners.

Through this programme, SingPost, with the MoU partners, will engage with SMEs in its supply chain, facilitating an ecosystem of support that will provide know-how to participating suppliers on environmental, social and governance (ESG) requirements that both local and international companies

are increasingly putting in place as a basis to procure products and services. Through expert-led workshops, SME suppliers will develop their Scope 1 and 2 carbon inventories, as well as identify and implement effective decarbonisation strategies.

EY, a global professional services organisation, plays a critical role in this collaboration as they helped develop a sector-agnostic programme to guide SMEs in measuring and managing their greenhouse gas emissions. The programme provides valuable insights into preparing SMEs to manage the evolving green procurement criteria and supplier codes of conduct by large listed or multinational corporations. Through structured training sessions and tailored strategies, participants would gain practical skills to implement decarbonisation strategies within their organisations, meet regulatory requirements and achieve their decarbonisation goals.

Last but not least, OCBC's involvement brings crucial financial backing needed by SMEs to implement their decarbonisation strategies. Building on its strong track record of supporting Singapore SMEs in their sustainability journeys, the Bank will provide participating SMEs with knowledge and access to sustainable financing options, enabling them to invest in decarbonisation technologies and practices.

The QUEST programme, supported by Enterprise Singapore, is expected to include approximately 25 of SingPost's SME suppliers in its first cohort, with potential for expansion based on participants' feedback.

SOURCE

[Singapore Business Federation](#)



Singapore-listed companies have made progress in climate reporting, but less than a third of them provided all the information required under a framework by the Task Force on Climate-Related Financial Disclosures (TCFD).

This is a globally recognised framework for companies to disclose climate-related impacts, risks and opportunities.

It comes at a “critical period” when listed companies are getting ready to meet the mandatory climate reporting requirements that kick in from the 2025 financial year, said Professor Lawrence Loh, director of the NUS Business School’s Centre for Governance and Sustainability.

The centre and the Singapore Exchange Regulation (SGX RegCo) reported their findings in a review released on March 11. The review found that most listed companies have made initial steps towards climate reporting.

**Of the 529 companies whose sustainability reports were reviewed, 97**

**per cent carried out climate reporting, having at least one disclosure based on the TCFD recommendations.** This is an increase over the 73 per cent in the previous review in 2023.

But only 28 per cent of all listed firms provided the 11 recommended disclosures under the TCFD.

But from the 2025 financial year, all listed companies regardless of sector will be required to do climate reporting, which makes it vital that these gaps are addressed.

But beyond meeting requirements, Prof Loh noted that climate reporting is also about being business-ready.

“Smaller listed companies, in particular, will have to pay even more attention as they will have to see that adopting climate actions is in their very self-interest to do business in global markets, particularly Asia and Europe,” he said.

SOURCE

[The Straits Times](#)

# Singapore releases new emissions targets for 2035, on track to reaching net zero by 2050

LISTEN 4 min

**Singapore has committed to reduce its greenhouse gas emissions to between 45 million and 50 million tonnes (Mt) by 2035, down from around 60Mt in 2030.**

**This new climate target for 2035 puts Singapore on track to reach net-zero emissions by 2050, with the planned decline in emissions on a linear trajectory.**

Singapore's new climate targets were submitted to the UN on Feb 10, the official deadline for countries to submit their 2035 targets.

Of the almost 200 countries party to the Paris Agreement, the world's climate pact, more than 10 have submitted their new pledges, including Britain, the US, Brazil and the United Arab Emirates.

Singapore's total greenhouse gas emissions in 2022 were 58.59Mt of carbon dioxide equivalent (CO<sub>2</sub> eq). CO<sub>2</sub> eq is a term used as a measurement of total greenhouse gases emitted. The Republic contributes about 0.1 per cent of the world's greenhouse gas emissions.

"The lower bound of 45Mt CO<sub>2</sub> eq keeps us on a linear path to our net-zero target in 2050, in line with international expectations," said the National Climate Change Secretariat (NCCS) in a statement on Feb 10.

"The range target (of 45Mt to 50Mt CO<sub>2</sub> eq) takes into consideration the reality that as an alternative energy-disadvantaged island state, Singapore's pace of decarbonisation depends heavily on developments in nascent mitigation technologies, and international collaboration," NCCS added.

Climate change is caused by the ever-increasing amounts of planet-warming greenhouse gas emissions being released from human activity, such as burning fossil fuels like coal, oil and natural gas for energy.

The 2035 climate change targets were supposed to be informed by the first global stocktake – a UN-level process that concluded in 2023. The stocktake, which happens every five years, prompts countries to review how they can do more to increase climate action.

Outcomes of the first global stocktake, which was co-facilitated by Singapore's chief negotiator Joseph Teo, had called on countries to, among other things, scale up their use of renewables to reduce reliance on fossil fuels.

Singapore currently relies on natural gas for some 95 per cent of its energy needs, while facing constraints in tapping renewable energy.

The most viable form of renewable energy for the Republic is solar energy, which currently contributes only about 2 per cent of the country's electricity needs. Experts predict that by 2050, the proportion of solar energy in the country's overall electricity mix is likely to be about 10 per cent.

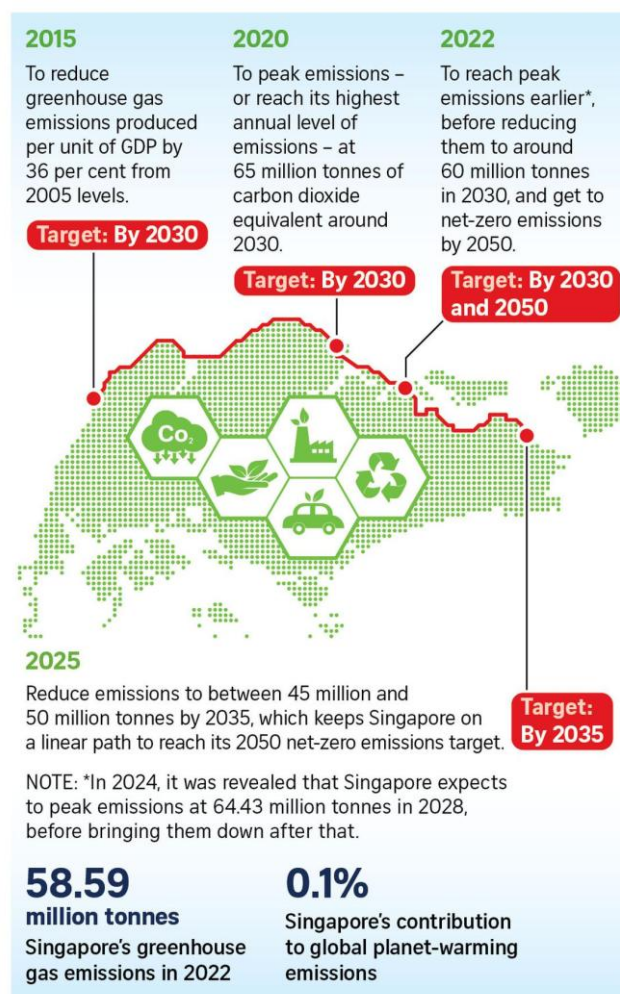
Singapore, in its 31-page submission to the UN, said its new climate target was informed by the outcomes of the first global stocktake, and this ensures its domestic plans and policies to cut emissions are aligned with the stocktake.

For example, the country is maximising the use of solar energy despite its land constraints, by installing solar panels on reservoirs, and exploring their use on walkways, carparks and building facades, the submission stated.

However, Singapore noted that achieving its 2035 target will be a challenge, given the nation's resource scarcity and limited options for alternative energy.

### 10 years of climate pledges

Since 2015, nations must submit their climate targets – which are at the heart of the Paris Agreement – to the UN every five years. On Feb 10, Singapore submitted its next round of climate pledges to be met in 2035. **Shabana Begum** tracks Singapore's targets since 2015.



SOURCE

[The Straits Times](#)



# Solar-powered electric boats to ply Singapore River

Solar-powered electric boats will soon ply the Singapore River, with two of 10 such vessels going into service by April 2025.

Manufactured by local maritime start-up Pyxis, these new solar-powered river boats named Pyxis R ferries will replace half of river cruise operator WaterB's fleet of 20 boats by the end of 2025.

The remaining eight solar-powered boats will be delivered one by one almost every other month for the rest of the year.

The solar panels on each river boat can generate about 22 kilowatt-hours (kWh) of electricity per day. The daily combined electricity generated by 10 boats' solar panels would be sufficient to power 20 HDB flats for a day.

As the river boats are mostly deployed in the evenings and at night, the solar-powered vessels can harvest the sun's energy when they are on standby in the afternoon.

The amount of power required to operate each Pyxis R ferry is equivalent to that needed to run three to four hairdryers, and the solar panels can help reduce the boat's reliance on Singapore's electricity grid.

In addition, Pyxis R ferries are one of the first boats in Singapore to have vehicle-to-grid technology – a system which allows vessels to return excess renewable energy to the grid.

SOURCE

[The Straits Times](#)



## Mid-career switch: Why is the sustainability sector a good choice?

Jobs in the sustainability sector are multi-disciplinary. This broad scope offers a fertile ground for applying your existing skills. The Green Plan 2030 outlines the government's goals for a sustainable future, focusing on energy efficiency, water conservation, waste reduction, and green spaces.

The Singapore government is increasing its push for sustainable development by supporting workers and employers looking to participate in the green revolution. This shift helps safeguard the climate while capitalising on Asia's regional growth, and the low-carbon future presents fascinating career opportunities for jobseekers.

The Ministry of Sustainability and the Environment (MSE) estimated that the sustainability sector — including the agritech and waste management industries — is expected to add 55,000 new and upgraded jobs.

### **What are the types of jobs and what is the salary like in the sustainability sector?**

Green jobs are not just about cleaning or recycling. They span a wide range of industries, including energy, finance, fashion, and transportation.

Speaking at a virtual dialogue session titled “Climate Action: Emerging Stronger From a Crisis,” Minister for Sustainability and the Environment Grace Fu said the

sustainability sector was “very exciting” and had many gaps to be filled.

“When you notice there are gaps, you know that you need to fill the gaps, and I think that’s exactly where we think this is a new sector where jobs are going to grow – and good jobs as well,” said Ms Fu.

Here are some examples listed on the [MyCareersFuture](#) portal:

Role	Salary Range
Sustainability Project Manager	\$5,000 to \$8,000
Associate, Environment Sustainability Design	\$7,000 to \$9,000
Sustainability and Supplier Development Specialist	\$6,000 to \$9,000
Sustainability & Climate Change Specialist	\$3,000 to \$3,300
Executive, Infrastructure & Sustainability	\$2,800 to \$4,000
Project Manager, Sustainable Energy (Marine)	\$6,000 to \$7,000
Researcher (Sustainability)	\$4,000 to \$5,000
Head Sustainability	\$15,000 to \$21,000
Sustainability Consultant	\$4,000 to \$5,500
Regional Sustainability Lead	\$11,500 to \$14,500

## What courses or skills are needed to join the sustainability sector?

Jobseekers or mid-career switchers keen on joining the sustainability sector can up their chances of landing a job by upskilling themselves. WSG offers a [Career Conversion Programme \(CCP\) for Sustainability Professionals](#).

As a CCP participant, you will undergo structured On-the-Job Training (OJT) at a sustainable company. Once you’ve completed the CCP, you will be equipped with the necessary competencies and skills to take on sustainability-related job roles within the company.

If you need professional advice on navigating your career journey to the sustainability sector, [register here to speak to a career coach!](#)

SOURCE

[My Careers Future](#)

# PURSUE CPL & SCPD PROFESSIONAL CERTIFICATES WITH SKILLSFUTURE

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*\*Subject to SkillsFuture eligibility*

Singapore Citizen (SC) aged 40 and above	\$63.50
Singapore Citizen aged below 40 Singapore Permanent Resident (PR)	\$163.50
SC or PR sponsored by SME	\$63.50
Non-SC/PR ( <i>no subsidy</i> )	\$545

**COURSE FEES PER SCPD MODULE**

Additionally, NTUC members are eligible for Union Training Assistance Programme (UTAP) funding.

## PROGRAMME STRUCTURE

The CILTS [Supply Chain Professional Development \(SCPD\) Programme](#) comprises two levels, the **Advanced Professional Certificate** (four modules: SCPD05-08) and the **Professional Certificate** (four modules: SCPD01-04).

The SCPD modules, progressively updated to keep abreast of advancements in the industry, have a substantial fit with the [SkillsFuture Framework for Logistics](#) published by *SkillsFuture*, a Singapore Government initiative and the [Key Knowledge Areas](#) published by CILT International.

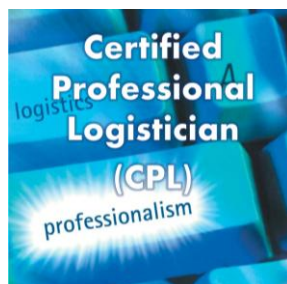
The syllabus for the Advanced Professional Certificate level also addresses the knowledge competency for the **Certified Professional Logistician (CPL)** certification, which is exclusively awarded by CILT Singapore.

CPL candidates taking the four advanced SCPD modules shall proceed to sit for the CPL Examination upon meeting eligibility conditions of work experience and qualifications. Successful candidates shall be awarded the CPL certificate.

*Click on image for more information:*



Enrol for SCPD



Certified Professional Logistician (CPL)







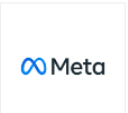
SCPD modules

## CPL RENEWAL

Successful completion of an SCPD module is accepted as proof of Continuous Professional Development for CPL renewal.

# MY CAREER PORTAL

Click on image for details:

	<b>DKA AEROSPACE PTE. LTD.</b> <b>Supply Chain Director</b> 📍 North 🕒 Full Time 👤 Senior Management ⚙️ Logistics / Supply Chain	<b>\$11,000</b> <b>to \$14,000</b> <i>Monthly</i>
	<b>FLINTEX CONSULTING PTE. LTD.</b> <b>Regional Supply Chain Manager</b> 📍 Central 🕒 Permanent 👤 Manager ⚙️ Logistics / Supply Chain	<b>\$10,000</b> <b>to \$15,000</b> <i>Monthly</i>
	<b>PERSOLKELLY SINGAPORE PTE. LTD.</b> ⚡ TYPICALLY REPLIES IN 30 DAYS <b>Business Consulting - Supply Chain &amp; Operations</b> 📍 Islandwide 🕒 Contract 👤 Executive ⚙️ Consulting	<b>\$17,000</b> <b>to \$23,000</b> <i>Monthly</i>
	<b>THE EDGE PARTNERSHIP HOLDINGS PTE. LTD.</b> ⚡ TYPICALLY REPLIES IN 30 DAYS <b>Senior Supply Chain Manager / Director</b> 📍 Central 🕒 Permanent 👤 Middle Management ⚙️ Logistics / Supply Chain	<b>\$10,000</b> <b>to \$12,000</b> <i>Monthly</i>
	<b>FACEBOOK SINGAPORE PTE. LTD.</b> ⚡ TYPICALLY REPLIES IN 30 DAYS <b>Data Science Manager, Analytics - Supply Chain Products</b> 📍 Central 🕒 Permanent 👤 Professional ⚙️ Information Technology	<b>\$14,900</b> <b>to \$26,090</b> <i>Monthly</i>

For more career search:

SOURCE

[My Careers Future](#)

## EDUCATION

### EVENTS ON CILTS WEBSITE

To keep up with the latest developments and sharing in the Supply Chain, Logistics and Transport industry, check out the [EVENTS](#) section of our website, which includes the following insightful webinars:

- [SECURING LAST-MILE DELIVERIES](#)

**10 APR 2025**

This webinar is designed for building supply distributors seeking to move from reactive operations to proactive, digital-first logistics. Attendees will walk away with actionable insights to prevent theft, resolve disputes, and meet customer demands without straining their teams.

- [TRANSFORMING AIRSIDE OPERATIONS ON THE JOURNEY TO REACH NET-ZERO](#)

**22 APR 2025**

Airports worldwide are making significant strides in reducing their carbon footprints. This webinar focuses on how leading airports are implementing airside changes to meet their environmental targets and how data and analytics can support this journey.

Join us as we explore how leading airports are implementing airside changes (procedural, technological, and strategic plans) to meet their environmental goals. Our expert panellists will share insights on how changes they are making meet capacity and sustainability challenges.

- [COST SAVINGS AND DRIVING SUCCESS](#)

**30 APR 2025**

Join us for an exclusive conversation with Scott DeGroot, former VP of Global Planning at Kimberly-Clark (Now with the University of Tennessee), as he shares how he got support for innovative supply chain strategies to drive cost savings, improve efficiency, and enable reinvestment in advanced systems.

Scott will discuss real-world lessons from his experience making transformation initiatives happen:

- Getting IT support
- Moving quickly to leverage AI-driven supply network planning solutions
- Using success to unlock other opportunities

The benefits were significant: The initiative reduced transportation costs, optimized the use of core carriers, improved OTIF, and funded investments in other supply chain technology.

## KNOWLEDGE CENTRE

**CILTS Members** have **exclusive access** to our online Knowledge Centre, a rich repository of more than **1,600 publications and webinars** on **SUPPLY CHAIN, TRANSPORT, MILITARY LOGISTICS AND MANAGEMENT / SELF DEVELOPMENT**.

To access Knowledge Centre, use your CILTS member-registered email address to log in at [www.cilt.org.sg/account/knowledge-centre](http://www.cilt.org.sg/account/knowledge-centre)

If you have not set your password yet, click on "Forgot Password". If you need help to log in, please contact [secretariat@cilt.org.sg](mailto:secretariat@cilt.org.sg).



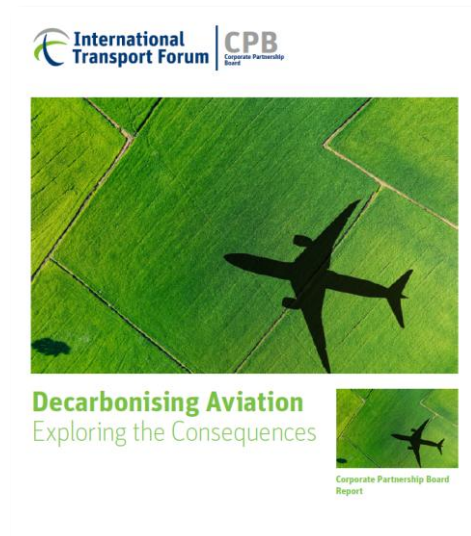
This report helps policy makers to implement new mobility measurement and monitoring frameworks. This study draws lessons from ten case studies around the world and offers a set of practical recommendations to ensure effective data reporting and monitoring frameworks. The work is based on expert interviews and updated research following.

## PUBLICATIONS

Click on image to read:



Transitioning to low-carbon transport reduces greenhouse gas emissions and also significantly improves public health, for example, by encouraging active mobility and lowering air pollution levels. These improvements contribute to decreased health-care expenditures, with the potential to balance investment costs in the long run.



Governments have a key role to play in establishing policy frameworks which create the market conditions necessary to facilitate a massive and rapid uptake in SAF production and use. The broader consequences of decarbonising aviation are multifaceted. Policymakers need to consider the consequences of decarbonising aviation on connectivity, tourism, equity, and the labour market.

## The Environmental Impact of Right-Sizing Packaging

paccurate

Consumers are receiving more packages than ever, and businesses are also sending them something they didn't order: a box of air. The average shipment contains up to 64% air in some product categories, far higher than the mere 25% of empty space per package which ecommerce executives have estimated in a recent survey.

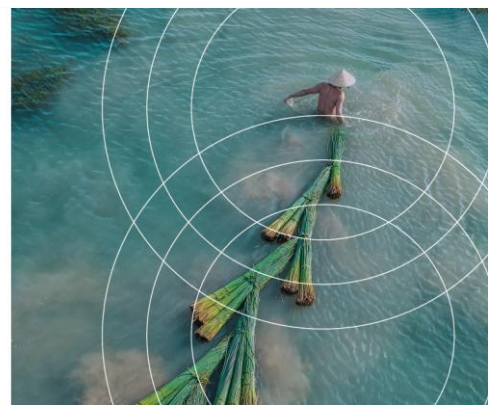


Consumers demand agility. They expect lightning-fast deliveries while sustainability mandates eco-conscious solutions. Optimizing delivery networks for both cost and speed remains paramount, but efficiency must now embrace the rise of electric vehicles and stricter environmental regulations.

## Is Trade Really Toxic? How imports support American jobs



Eighty percent of Americans feel that the global economy hurts them, according to a Pew study. This is a worrying reversal in a country that built the current international economic order and has benefited disproportionately from its riches. America's challenge is that not everyone has benefited from globalization equally. Rising economic inequality compounds existing political and social tensions, deepening divisions in society.



## The Visionary CEO's Guide to Sustainability

On average, fewer than 40% of companies across sectors are on track to meet their various sustainability commitments, but it's possible to navigate the challenging trade-offs with vision and pragmatism.

## Who We Are

The Chartered Institute of Logistics and Transport Singapore is part of the leading, global professional body for those engaged in supply chain, logistics and transport – covering all sectors of the industry, namely air, land and sea, for both passenger and freight transportation.

Our primary objectives are to support our members in continuous professional development to future-proof their careers, as well as to work in close collaboration with the public and private sectors, Government agencies and the academia to develop opportunities and synergy for industry transformation and growth, underpinned by strategic thrusts in digitalisation and sustainability.

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# Wishing Our Muslim Members & Friends

SELAMAT HARI RAYA  
*Aidilfitri*

