



Green Freight Movement

by
Green Freight Asia

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Supported by UPS foundation

About Green Freight Asia

Green Freight Asia (GFA) is an association of industry players that collaborates with companies, non-governmental organisations (NGOs), and governments, working together to improve energy and fuel efficiency, reduce carbon emissions, and lower operational costs throughout the supply chain.

Since its establishment in 2013 by DHL, UPS, HP, IKEA, and Lenovo, GFA has been dedicated to supporting sustainability efforts and promoting greener supply chains in the logistics and freight sector of the Asia Pacific (APAC) region. The GFA Board of Directors currently consists of representatives from UPS, DHL, and Kaltimex Energy.

Headquartered in Singapore, GFA engages companies through a membership network that spans various sectors across the entire APAC region. GFA welcomes organisations from any industry or sector that have an interest in pursuing decarbonisation and relevant solutions as members.

Founding members



Board of Directors



About Green Freight Asia

As our network continues to grow, we recognise the sector's potential to drive change. In light of this, GFA encourages its members to inspire and influence their supply chains in implementing green initiatives for a more sustainable future through our 6 programmes.

 <p>Measurement Reporting and Verification</p> <p>Assisting companies in collecting and analysing data to develop accurate GHG reports, identifying areas with high emissions, and presenting opportunities for improvement.</p>	 <p>Labelling and Certification</p> <p>Enabling shippers to identify carriers committed to efficiency and reducing their carbon footprint through the GFA label.</p>	 <p>Partnership Impact</p> <p>Facilitating partnerships between companies and solution providers from various industries, including photovoltaic systems, telematics, fuel additives, and waste-to-value technologies.</p>	 <p>Carbon Offsetting</p> <p>Preparing companies for future regulatory requirements while identifying energy and fuel efficiency solutions.</p>	 <p>Eco-driving</p> <p>Offering training programmes to enhance driving behaviour, resulting in energy savings and a reduced carbon footprint.</p>	 <p>Sustainability Insights</p> <p>Encouraging ongoing engagement through capacity-building workshops, reports, knowledge sharing, and best practice dissemination to improve operational efficiency.</p>
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Programmes offered by GFA available to all members

About Green Freight Asia

One such programme is the GFA Labelling and Certification Programme, which serves as a benchmark for evaluating companies' sustainability initiatives and operational performance.

GFA Labelling and Certification Levels



Certification levels from Minimum (Leaf 1) to Enhanced (Leaf 4)

GFA Members actively seek the GFA Labelling and Certification Programme on an annual basis to demonstrate their progress towards achieving their sustainability targets. This certification serves as a valuable recognition of their efforts in promoting environmentally friendly practices throughout their operations.

About Green Freight Asia



Following the signing of the Paris Agreement in 2015, governments implemented Environmental, Social, and Governance (ESG) disclosure requirements and carbon emission reduction targets. In response to these regulations, businesses are swiftly taking action to comply. Many companies are proactively creating sustainability reports and striving to stay ahead of the curve.

To assist these companies in their Greenhouse Gas (GHG) reporting efforts, GFA has expanded its services to include the Measurement, Reporting, and Verification Programme. GFA offers comprehensive measurement and reporting of GHG emissions across a company's business operations, serving as a valuable guide in their sustainability endeavours.

Measurement, Verification and Reporting Programme



Phases of the MRV programme

Background

The urgency to address climate change as a crisis is now widely acknowledged, prompting governments, organisations, and industries to assess their policies and operations with the utmost urgency to understand their environmental impact.

There is a strong drive among companies to adopt sustainable practices and build resilience, with a particular focus on reducing GHG emissions and air pollution.

Asia, home to 37 of the 40 most polluted cities in the world, is a hotspot of atmospheric pollution. This poses severe harm to the environment and significant public health risks, leading to increased mortality and the prevalence of preventable diseases in urban areas.

Climate change, poor air quality, and extreme weather events have a more pronounced impact on rural and underserved communities, which may lack adequate systems to recover from heat waves, floods, and droughts.

Given the transboundary nature of GHG emissions and their effects, reducing emissions requires collective efforts from companies and organisations throughout the region to mitigate both the impacts and drivers of climate change.

Background

Transportation and global supply chains are major contributors to GHG emissions and air pollutants, responsible for 23% of global energy-related GHG emissions. These emissions not only contribute to climate change but also directly impact human health and quality of life.

Specifically, road freight emissions are a major concern. Therefore, the logistics and freight industry holds the potential to significantly change the current trajectory of energy-related GHG emissions.

As regulations tighten, sustainable solutions are necessary for global supply chains to stay relevant. In particular, the logistics and freight sector can reduce its environmental impact by measuring, reporting, and ultimately reducing its carbon footprint.

This calls for coordinated efforts across the value chain for decarbonisation and access to innovative solutions such as fuel reduction technologies, Internet of things (IoT) optimisation, biofuels, and other climate-friendly options.

However, small and medium enterprises (SMEs) face various challenges, including limited access to technology, skills, financing and a lack of information or knowledge, hindering their ability to meet sustainability expectations.

Background

GFA's programmes and organisational structure align with knowledge sharing and capacity building to address the climate crisis.



Past events conducted by GFA

Thus far, GFA has played a significant role in the industry by facilitating information exchange and fostering collaboration among companies through various events. These events include Best Practice sharing sessions in 2017, in-person Eco-driving workshops with AAS Academy in Singapore in 2018, and the GFA 2018 forum on the adoption of green technologies amongst others.

Background

Given the risks posed to global supply chains by climate change, as highlighted by the recent Intergovernmental Panel on Climate Change (IPCC) report, there is a pressing need to achieve the UN Sustainable Development Goals (SDGs) - in particular, SDG 9 which focuses on building resilient infrastructure and promoting collective growth, SDG 13 urging climate action and SDG 17 which emphasises the establishment of partnerships and the spirit of collaboration.



UN Sustainable Development Goals (SDG)

GFA's objectives of promoting sustainability and empowering the industry to take action are aligned with the mission and values of the UPS Foundation. In particular, 'Planet Protection' is a key area of focus for the UPS Foundation, which echoes GFA's programmes and purpose.

In 2022, the Green Freight Movement (GFM) was developed with support from the UPS Foundation to address the growing need for enhanced sustainability practices among SMEs in the logistics and freight sector in the APAC region.

Introduction

Green Freight Movement



The GFM's primary focus is to ensure that participants are motivated and guided in implementing sustainability-related solutions and initiatives within their respective organisations.

The events centered around two main themes:

- (1) Empowering the Industry: Transport, Logistics, and Supply Chain Management in Southeast Asia, and
- (2) Resilient Supply Chains: Starting the sustainability journey for SMEs.

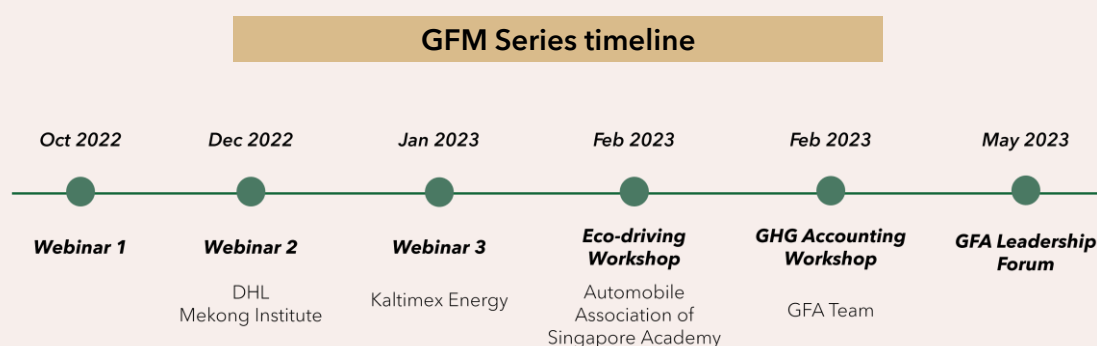
The GFM intended to promote the development of climate-resilient supply chains in the logistics and freight industry by supporting SMEs in their journey toward decarbonisation.

Introduction

Green Freight Movement

By empowering SMEs and enhancing their capabilities with tools and knowledge to integrate sustainability into their operations, the project aimed to drive industry growth and foster inclusive development.

Through the GFM, GFA and the UPS foundation sought to empower SMEs by facilitating connections and networks with major industry players. This provided SMEs with an opportunity to learn and adopt best practices while also fostering knowledge-sharing. At the same time, industry leaders stood to gain valuable insights into the challenges and opportunities encountered by SMEs, who form a significant portion of their value chains.



The GFM offered a range of engagement sessions, including webinars, online workshops, and a leadership forum, spanning from October 2022 to May 2023. By participating in the programmes, companies will be equipped with valuable industry insights to enhance their toolkit for decarbonising operations and driving sustainable practices within their respective organisations.

Event Overview: Sustainability Webinars

The Sustainability Webinars comprise three online events that were live-streamed. These webinars were open to the public and may be accessed free of charge by anyone in GFA's network. The webinar recordings were also archived on [GFA's website](#) for future viewing.

These webinars showcased the knowledge and expertise of GFA's partners and collaborators, reaching a wider audience.

After each session, in-depth post-session summary materials were provided. These materials are tailored to enhance the webinars and are accessible on GFA's website.

The event materials were translated into regional languages, including Bahasa Indonesia, Simplified Chinese and Vietnamese. This translation effort aimed to maximise outreach and awareness across Southeast Asia and enable a larger audience to benefit from the materials in their preferred language.

Translated post-event reports



Translated reports of sustainability webinars found on GFA's website

Event Overview: Sustainability Webinars

The reality that more than 80% of a company's greenhouse gas (GHG) emissions stem from its supply chain is a matter of great concern. This statistical revelation poses a significant and pressing challenge for companies, particularly as reporting on Scope 3 emissions becomes the industry norm. Specifically, within the logistics and freight sector, the issue of supply chain emissions presents unique challenges.

Our webinars were dedicated to addressing the intricate nature of emissions within the value chain. The invited speakers delved into the complexities surrounding supply chains and carefully examined the varied challenges faced by businesses operating in the logistics and freight industry.

The webinars provided invaluable insights and strategic approaches to confront this issue. Through these webinars, we strive to support and facilitate the decarbonisation efforts that are crucial for a sustainable future within the supply chain domain.

Mr K.K. Ralhan, CEO and Director of GFA, started off the Green Freight Movement with his welcome address during the first webinar. Following that, Ms Lin Shiumei, Vice President Corporate Affairs for Asia Pacific Region at UPS, took the stage to represent UPS. She emphasised the importance of taking proactive steps towards building resilience in business operations and urged all attendees to tap into the expertise within the green freight community to become more environmentally conscious.

Sustainability Webinars: Webinar 1

Decarbonising the Supply Chain



The main emphasis of Webinar 1 was to underline the pressing need for industries to take proactive measures to green their operations. Our objective was to inspire participating companies to shift towards more environmentally-friendly freight methods, utilising insights gained from these sessions.

The intended outcome of this first session was to enable participants to grasp their role in contributing to climate change and appreciate the collaborative effort necessary for organisations to enhance the sustainability potential of the logistics and freight industry.

Sustainability Webinars: Webinar 1

Session 1 Speaker

Sarah Ong

Senior Manager, International Sustainability, UPS

Ms Sarah Ong leads UPS's sustainability strategy and programmes across Asia Pacific, Middle East, and Africa. With extensive experience integrating sustainability into logistics, food production, and green building, she collaborates with internal and external stakeholders to achieve UPS's Environmental, Social & Governance (ESG) goals. Her expertise includes corporate carbon measurement, sustainability reporting aligned with global standards (GRI, TCFC, CDP), and previous leadership in environmental campaigns and partnerships at the World Wildlife Fund (WWF).

Sustainability Webinars: Webinar 1

For this session, we invited Ms Sarah Ong, Senior Manager of International Sustainability at UPS, as our expert speaker. Ms Ong provided valuable insights from UPS, a prominent industry leader, showcasing their progressive approach to embracing sustainability.

During her presentation, she discussed UPS's sustainability initiatives and emphasised their use of innovative technologies and partnerships to reduce carbon emissions throughout their value chain. Given the global nature of UPS's operations, they consider climate-related disclosures, sustainability reporting, and restrictions on diesel vehicles as key factors.

Despite the challenges associated with transitioning to low-emission vehicles, UPS has embraced opportunities to optimise its business model, foster innovation through partnerships, and promote the adoption of decarbonisation solutions.

Notably, UPS operates a large global fleet of alternative fuel and advanced technology vehicles and collaborates with various manufacturers worldwide to develop multiple low- and zero-emission transportation solutions.

In the Asia Pacific region, UPS has been using electric vehicles for ground operations in China, Hong Kong, Singapore, and Japan since 2017.

Sustainability Webinars: Webinar 1

Additionally, UPS utilises Renewable Natural Gas (RNG) to decarbonise heavy goods vehicles across the U.S., Latin America, and Canada, and they are currently testing hydrogen fuel-cell trucks in the U.S.



UPS Renewable Natural Gas Vehicle

Furthermore, UPS is committed to implementing sustainable practices across customer touchpoints. They achieve this through initiatives such as paperless shipping, offering biodegradable packaging options, reducing single-use packaging through tape-free boxes and reusable RNC bags, and partnering with Sealed Air to establish a Packaging Innovation Centre focused on developing reduced-cost sustainable packaging solutions.



UPS Supply Chain Solutions Asia Pacific Innovation Centre

Addressing the challenges posed by the post-COVID landscape, Sarah discussed launching the UPS Asia Pacific Innovation Centre in Singapore. This center aims to support businesses in the region by facilitating the adoption of digital solutions to enhance supply chain efficiency.

Sustainability Webinars: Webinar 1

The center serves as a launchpad for incubating and testing next-generation technologies that improve warehousing and distribution efficiency while enabling timely end-to-end visibility of supply chain performance for UPS and other carrier companies.

Ms Ong emphasised stakeholder engagement as a key driver for UPS's sustainability efforts. UPS recognises the importance of being accountable to investors, regulators, and customers whose Scope 3 emissions are linked to UPS's Scope 1 emissions. Additionally, UPS acknowledges the significance of demonstrating environmental responsibility to its employees, who seek meaningful work and strive to make a positive impact.

Sustainability, for UPS, extends beyond regulatory compliance and aligns with its purpose of advancing the world toward a sustainable future for all.

Sustainability Webinars: Webinar 1

Session 2 Speaker

Millie Pardoe

Corporate Engagement Manager, EV100 (Climate Group)

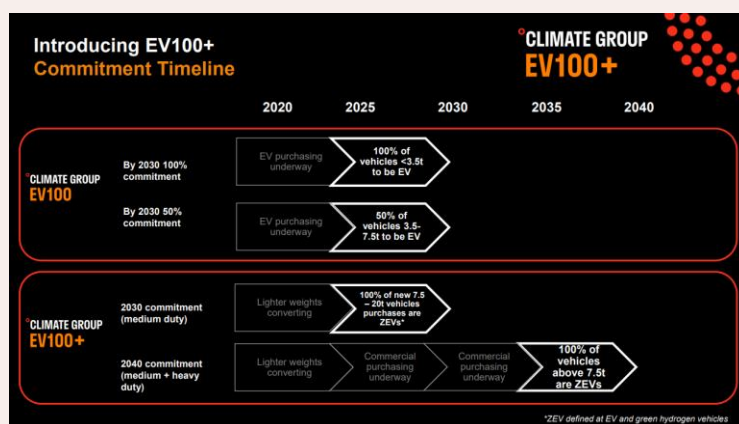
Ms Millie Pardoe drives membership growth and encourages corporations with large fleets to make ambitious commitments for fleet electrification, advancing climate action as the EV100 Corporate Engagement Manager. Previously, she contributed to the Business Development team at EDF Renewables, focusing on high-powered EV charging infrastructure networks. Beyond her role at Climate Group, she actively promotes climate awareness and action as a certified Climate Realities Leader and a production team member for the London Climate Change Festival.

Sustainability Webinars: Webinar 1

To present our participants with market-ready solutions that have proven to benefit the environment, we invited Ms Millie Pardoe from EV100.

She discussed the Climate Group's initiatives, EV100 and EV100+, which focus on corporate leadership in electromobility. She highlighted the challenges and opportunities faced by corporations as they transition to decarbonised transport in the APAC region.

EV100 is an initiative that encourages companies to make ambitious commitments to transition to electric vehicles (EVs). By joining EV100, companies commit to electrifying their fleets by 2030, creating demand for EVs, and driving improvements in EV policies, availability, and affordability. In the APAC region, 34 of the 127 EV100 members have pledged to electrify over 200,000 vehicles by 2030.



Climate group's commitment timeline

Sustainability Webinars: Webinar 1

The increased urbanisation and surge in online shopping have resulted in more vehicles on the road, leading to congestion and higher emissions. Decarbonisation is essential in addressing this issue.

IKEA India is a notable example of a company leading the way in the APAC region's road to decarbonisation. In 2019, when there were limited EV options available, IKEA India proactively started switching to EVs by retrofitting their existing Light Commercial Vehicles for deliveries. This approach allowed them to achieve the goal of making 100% of their deliveries electric by 2025 while waiting for suitable EV models to enter the market. Early adoption of EVs also enabled IKEA India to incorporate EVs into the design and construction of new stores, ensuring adequate charging infrastructure.



Last mile EV vehicles in India

Similarly, IKEA China transitioned to 100% zero-emission transport in Shanghai in 2020, with 90% of customer orders achieving zero emissions across China. IKEA China has committed to using EVs or other zero-emission transport for 100% of its truck's last-mile deliveries by 2025.

Sustainability Webinars: Webinar 1



IKEA China's electrification plan

Elaborating on the biggest challenges and opportunities unique to the APAC region in implementing EVs, Ms Pardoe mentioned that while global EV production struggles to meet demand, the APAC region possesses significant tech talent and natural mineral reserves, creating an opportunity to establish local supply chains and scale up EV production in the coming years. She emphasised the importance of government intervention, such as offering rebates or lower taxes for early EV adopters, to foster market growth in this region.

Sustainability Webinars: Webinar 2

Private Sector Strategies



In today's evolving business landscape, we observe a growing number of companies taking significant strides toward sustainability. However, there are companies that have already established themselves as leaders in this movement.

Regardless of where a company currently stands on its journey towards sustainability, there are valuable insights to be gained by understanding the direction in which the industry as a whole is heading.

Webinar 2 focused primarily on keeping businesses informed on emerging trends and best practices to effectively position themselves for success while also playing an active role in building a greener future.

Sustainability Webinars: Webinar 2

Session 1 Speaker

Kaleb Chesworth

Transport Business Development APAC, DHL Supply Chain

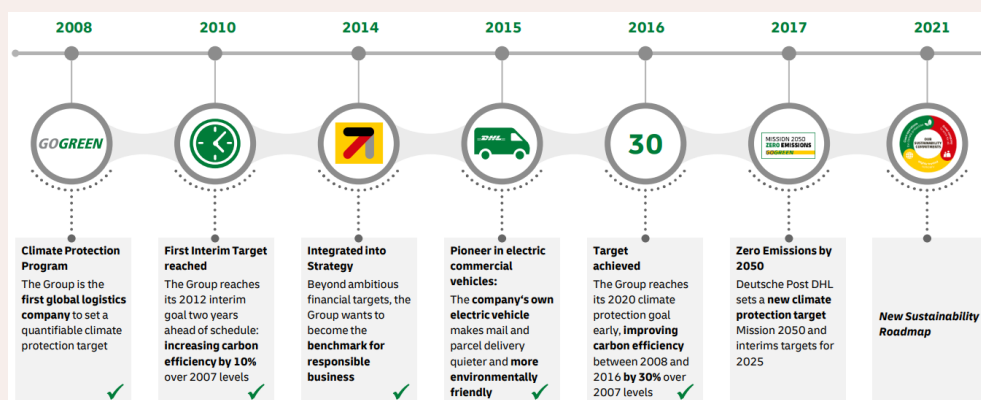
Mr Kaleb Chesworth, who is based in Bangkok, serves as the leader of transport business development in the Asia Pacific region for DHL Supply Chain. With almost twenty years of experience in the transport industry, Mr Chesworth began his career as a truck driver and subsequently pursued higher education. He has held operational positions in various global logistics companies and served as a country transport lead for a prominent global electronics company. His extensive expertise in transport operations and solutioning enables him to collaborate with customers throughout the region and develop sustainable solutions.

Sustainability Webinars: Webinar 2

While some companies are currently in the process of transitioning towards sustainability, others have made significant progress in this endeavour. Our expert speaker from DHL shared invaluable insights into the sustainability initiatives and roadmaps of this leading company in the transport and logistics sector.

During the webinar, Mr Chesworth discussed DHL's sustainability objectives in the APAC region, the challenges encountered in achieving sustainability within the transport sector, and the ongoing efforts to reduce transport emissions in APAC.

DHL is deeply committed to sustainability and has implemented a range of initiatives to curb carbon emissions. Their eco-friendly journey began in 2008 with the "Go Green" programme, aligning with emission reduction targets established by the United Nations Development Project.



DHL's path towards sustainability thus far

Sustainability Webinars: Webinar 2

With a vision to achieve zero emissions by 2050, DHL aims to reduce its emissions by 29 million tonnes of CO₂ by 2030, prioritising clean operations and sustainable fuel.

In addition to optimising their networks and decreasing fuel consumption, DHL leverages connected control towers in every country of operation. These control towers facilitate vehicle co-loading, and vehicle size reduction to improve operational efficiency. Transparent carbon reporting further enables customers to track their progress in reducing their carbon footprint through DHL's innovations.

DHL plans to adopt an "Asset Right" strategy, aiming to electrify 60% of their last-mile delivery vehicles by 2030. They focus on markets and vehicles that are easy to upgrade, with government investments and regulatory support facilitating the transition. Moreover, DHL emphasises the use of renewable energy sources for charging these electric vehicles, reducing reliance on fossil fuels.

To address challenges such as the lack of charging infrastructure, DHL actively collaborates with local governments to garner support for electric vehicle charging infrastructure and forms partnerships to achieve sustainable outcomes.

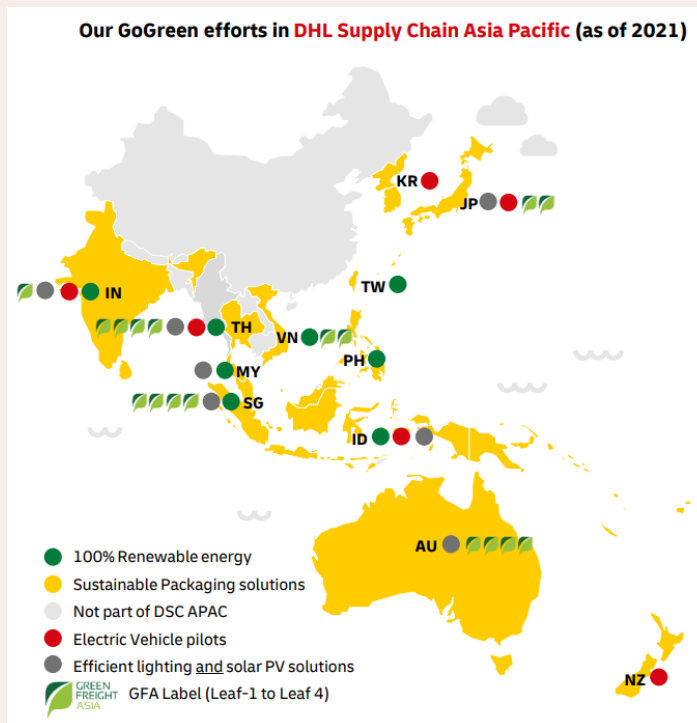
Sustainability Webinars: Webinar 2

Under the "Burn Less" initiative of its sustainability plan, DHL utilises technologies like telematics to enhance fleet performance and driver safety in Indonesia. Another successful initiative, TRAILAR, initially established in the UK and launched in Thailand, harnesses solar power for auxiliary services, leading to reduced fuel consumption. DHL aims to expand the use of telematics and the TRAILAR initiative across the APAC region.

DHL also collaborates with Original Equipment Manufacturers (OEMs) to introduce hydrogen-powered heavy vehicles in New Zealand. Additionally, DHL conducts trials of battery electric vehicles (BEVs) with subcontractors in India and Indonesia, encouraging their participation in the "Go Green" Programme to foster environmental consciousness across the entire grid.

Given the absence of government regulations or standardised practices, DHL has introduced the GFA Labelling and Certification programme. Through this programme, DHL is able to evaluate the advancements made by each country in terms of GFA Labelling and Certification Programme, collaborate with certified carriers, and establish a benchmark that can be applied across the APAC region.

Sustainability Webinars: Webinar 2



Overview of DHL's sustainability efforts in APAC

DHL's initiatives in the APAC region exemplify their unwavering commitment to sustainability and their collaborative approach toward achieving environmentally friendly practices in the logistics and freight sector.

Sustainability Webinars: Webinar 2

Session 2 Speaker

Robby Rosandi

*Project Coordinator, Trade and Investment Facilitation
Department, Mekong Institute (MI)*

Mr Robby Rosandi oversees the funding mechanisms for the Mekong Institute, which have been established through the Mekong-Republic of Korea Cooperation Fund (MKCF). He is responsible for monitoring and evaluating the implementation of regional projects in Cambodia, Laos, Myanmar, Vietnam, and Thailand. His portfolio includes capacity development projects focused on Green Freight and Logistics Development in the Mekong Countries, with a particular emphasis on benefiting small and medium-sized enterprises (SMEs) from both the public and private sectors. Mr Rosandi holds a master's degree in Small and Medium-sized Enterprise (SME) Development from Leipzig University, Germany, and is currently pursuing a Doctoral degree at Khon Kaen University, Thailand.

Sustainability Webinars: Webinar 2

In this session, Mr Rosandi discussed the obstacles faced by SMEs as they aim to reduce carbon emissions in their supply chains. He emphasised the importance of developing technological capacity and implementing effective governance to overcome these challenges.

The Mekong Institute (MI), an intergovernmental organisation, focuses on agricultural development, trade facilitation, and sustainable energy and the environment. It advocates for policy changes through project implementation, advisory services, and research.

In this region, logistics costs poses a significant challenge, accounting for a substantial percentage of GDP. The transport sector's greenhouse gas emissions contribute to over 20%, with some countries reaching as high as 30%.

The road freight industry predominantly consists of SMEs with outdated fleets. Fuel costs represent a significant portion of operating expenses (40-60%), and fleets often run empty for a considerable amount of time (25-50%). These inefficient fleets contribute to increased greenhouse gas emissions and reduced competitiveness and profitability.

Sustainability Webinars: Webinar 2

MI studies have identified factors that hinder technology adoption, including asymmetric information, liquidity constraints, network externalities, and regulatory barriers. These factors heavily influence SMEs' decisions regarding technology adoption.

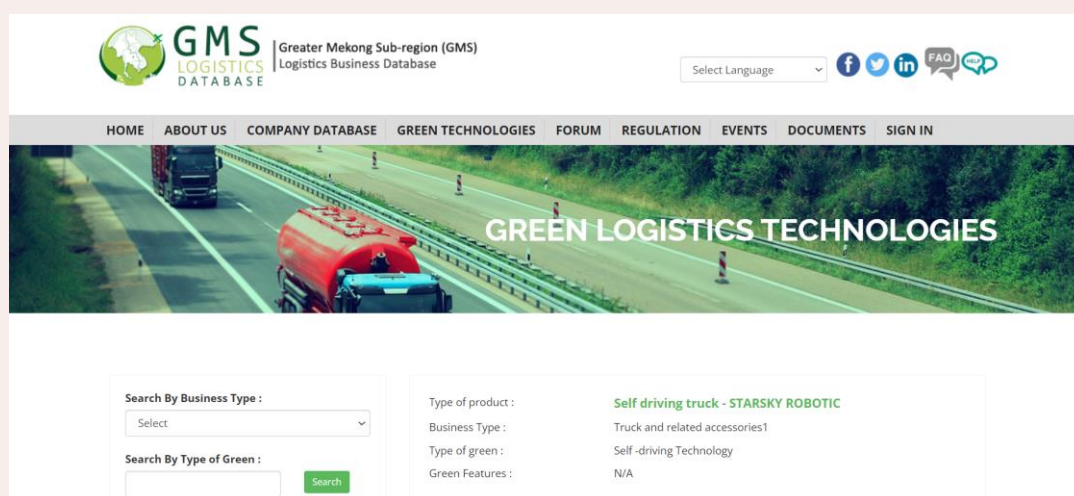
Liquidity constraints pose a major hindrance to the adoption of energy-efficient technologies by SMEs. The high upfront capital investment is challenging. Uncertainties surrounding the efficiency of technologies after investing further deter companies from adopting new solutions. Lack of information and negative industry experiences also discourage the exploration of new technologies.

To support SMEs, various stakeholders play crucial roles. By reducing regulatory barriers to imported technologies through tax incentives, governments can facilitate the adoption of these technologies. Governments should also ensure uninterrupted access to electricity and the Internet.

Banks can provide low-interest rates on green finance, while global manufacturers can establish local suppliers to enhance accessibility through local after-sales services.

Sustainability Webinars: Webinar 2

Lastly, Mr Rosandi emphasised the importance of creating awareness about green technology to combat climate change. To that end, the Mekong Institute's GMS Green Logistics Technologies database serves as a valuable resource, providing information on available green logistics technologies, including product features, suppliers, and prices.



GMS' Green Logistics Technologies Database

Sustainability Webinars: Webinar 3

Future Trends



As the industry progresses towards adopting sustainable alternatives, our focus shifts towards gaining a deeper understanding of future developments and trends. By tapping into industry knowledge and foresight, we aim to gather valuable perspectives to navigate the path towards a greener and more efficient future.

In this last webinar, we specifically explored various methods that utilise green technology to convert waste into energy or fuel.

Sustainability Webinars: Webinar 3

Speaker

Purnima Ralhan

Director of Sustainability, Kaltimex Group

Ms Purnima Ralhan is the Director of Sustainability at Kaltimex Group with 15 years of experience as an educator in biology, chemistry, and environmental sciences. She holds a bachelor's degree in Molecular Biology and a master's degree in Education. Her passion for environmental preservation led her to collaborate with organisations like WWF-Indonesia, rehabilitating coral reefs, protecting turtle and orangutan populations, and promoting sustainable seaweed farming and mangrove planting. Ms Ralhan has been with Kaltimex Energy for three years, initially in management and now focusing on introducing sustainable solutions.

Sustainability Webinars: Webinar 3

During the webinar, Ms Ralhan shared insights on waste-to-fuel solutions implemented by Kaltimex Energy (KE) to reduce carbon emissions. KE's sustainability goals and vision involve energy efficiency and providing total power solutions to its clients. Each country in which KE operates has set up its roadmap to expand into renewable energy technologies.

She began by highlighting the alarming statistic of 140 million tonnes of post-consumer waste generated annually, causing severe plastic pollution and harm to coastal communities. KE addresses this issue through scalable, decentralised waste processing technologies provided by Biofabrik.

The first technology, Biofabrik's WASTX PLASTIC P1000, converts 1000kg of plastic waste into syncrude oil, carbon black, and syngas in a day. The process is highly decentralised, with plants stored in 20ft or 40ft containers.



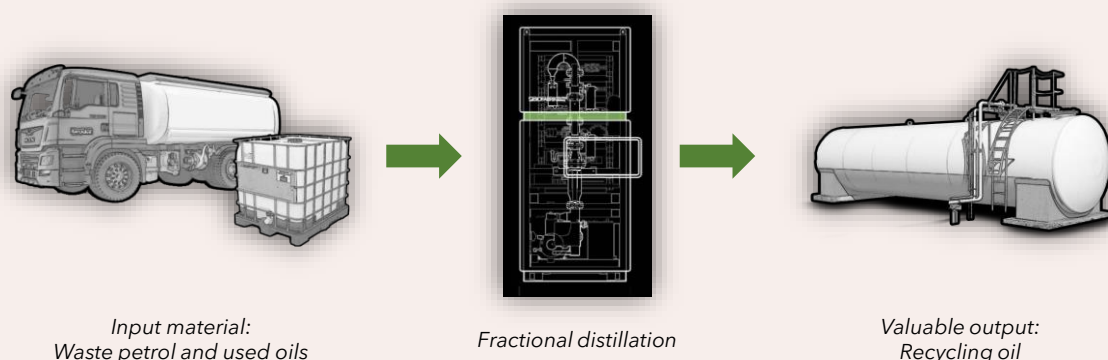
WASTX PLASTIC P1000

Sustainability Webinars: Webinar 3

The products generated from the conversion process include carbon black, which can be sold separately, and syngas, which can be used to power generators. While plastics are in the machine, hydrocarbons are being depolymerised, resulting in syncrude oil/pyrolysis oil. This oil can immediately be used in construction equipment and boilers or sold to petrochemical companies.

Biofabrik's WASTX OIL GO2000 transforms 2500 litres of waste oil/fuel daily into recycled oil/fuel through fractional distillation. It yields kerosene, petrol, gas oil, flux oil, naphtha, and vacuum gas oil from kerosene waste, petrol waste, heating oil/diesel waste, and waste oil.

Studies have shown that when 1 litre of waste oil contaminates a water body, 1 million litres of drinking water can be contaminated. It is, therefore, crucial for waste oil to be recycled as much as possible.



WASTX Oil GO2000 Used oil recycling process

Sustainability Webinars: Webinar 3

This automated, decentralised, and scalable method is crucial for recycling waste oil, reducing environmental contamination, and offering profitable opportunities in the market.

WABIO's bio-CNG technology converts agriculture or food waste into bio-CNG, reducing methane emissions and producing solid output usable as fertiliser. With its high yield, increased efficiency, and low land use, this technology creates a good opportunity for the sale of carbon credits.

KE's upcoming project in Indonesia will use WABIO's bio-CNG technology to convert corn cob feedstock into bio-CNG, removing around 90,000 tonnes of CO₂ from the atmosphere annually.

During the Q&A session, Ms Ralhan discussed the future landscape of the alternative energy market in APAC, emphasising the advantages of renewable energy in reducing dependency on global supply chains and cutting costs associated with waste disposal.

For companies starting with renewable energy solutions, she highlighted research on local regulations and available technologies, as well as learning from sustainability initiatives of other companies as key steps to make sustainability work without compromising profitability.

Event Overview:

Workshops

The capacity-building component of the GFM revolved around the topic of Resilient Supply Chains - Initiating the sustainability process for SMEs in the APAC region. The capacity-building workshops provided participants with practical guidance and actionable steps to embark on their sustainability endeavours.

The workshops primarily focused on easily accessible techniques to reduce emissions, enhance efficiency, and lower costs for vehicle fleets. Specifically, the workshops concentrated on two key areas:

- (1) Eco-driving and
- (2) GHG accounting encompassing Scope 1, Scope 2 and Scope 3 emissions.

Following the workshops, participants received training materials in regional languages. By equipping participants with these materials, the aim was to empower them with the necessary knowledge and resources to effectively incorporate sustainable measures into their operations and foster long-term sustainability within their organisations.

These capacity-building workshops primarily target companies that are new to the concept of sustainability. As per principles of the UPS Foundation, priority admission was granted to SMEs with social initiatives or programmes that support underserved communities.

Workshops:

Workshop 1

The Automobile Association of Singapore Academy (AASA) conducted the first online workshop on eco-driving and speed management. This workshop offered participants a conceptual overview of these topics and aimed to provide them with the knowledge and skills to implement eco-driving techniques in vehicle fleets.

The workshop was led by Mr Tay Chay Sim, a Senior Technical Consultant and Trainer at AASA. Mr Tay has extensive experience in delivering safe driver courses to various classes of drivers, including private and commercial drivers. He holds international accreditations from prestigious organisations such as the International Road Transport Union (IRU) Academy, The Royal Society for Prevention of Accidents (RoSPA), DriveTech UK, and the Institute of Adult Learning in Singapore.

Eco-driving is a driving technique focused on optimising fuel efficiency, reducing carbon emissions, and promoting safer driving practices. By implementing eco-driving techniques such as smooth acceleration and deceleration, maintaining a constant speed, and avoiding unnecessary idling, drivers can achieve significant fuel savings and reduce their carbon footprint. This benefits both the environment and companies.

Furthermore, eco-driving improves driver road safety. By following eco-driving principles, such as maintaining a safe following distance and anticipating traffic flow, overall road safety is enhanced, reducing the risk of accidents.

Workshops: Workshop 1

For SMEs, embracing eco-driving practices offers several advantages. Firstly, it leads to substantial cost savings on fuel expenses, directly improving the company's financial performance. Additionally, reduced fuel consumption positions companies as environmentally responsible entities, appealing to environmentally conscious customers and stakeholders.

This workshop served as a platform for companies to understand the importance of eco-driving and the positive outcomes it brings. It aimed to motivate companies to provide their drivers with ongoing eco-driving training, recognising the long-term benefits associated with these practices.

Workshops:

Workshop 2

The second online capacity-building workshop, conducted by GFA aimed to introduce participants to the fundamental principles of carbon emissions accounting, based on the Greenhouse Gas Protocol.

Greenhouse Gas (GHG) accounting is essential for companies for various reasons, with climate change being one of the most critical factors. Excessive GHG emissions from burning fossil fuels are the primary cause of climate change, resulting in severe consequences such as droughts, floods, heatwaves, rising sea levels resulting in disrupted supply chains worldwide.

To address climate change, the Paris Agreement was established to set goals for limiting global temperature increase, enhancing climate resilience, and aligning financial flows with low GHG emissions. Countries submit their Nationally Determined Contributions (NDCs) outlining actions to reduce emissions and build climate resilience. Governments often implement reporting programmes that require businesses to set targets and disclose comprehensive reports, including GHG accounting, to follow through with their NDCs.

Several global frameworks assist companies in measuring and managing GHG emissions, including the GHG Protocol, which is the most widely adopted framework used by 90% of Fortune 500 companies. It provides a standardised approach for organisations to measure and report GHG emissions from their supply chain activities.

Workshops:

Workshop 2

The workshop was structured into three parts. Firstly, we discussed the importance of GHG accounting for companies. Next, we guided the participants through the various steps involved in the GHG accounting process, including the identification and accounting of Scope 1, Scope 2, and Scope 3 emissions within a company's value chain. Lastly, we provided an overview of GFA's Measurement, Reporting, and Verification Programme.

GHG accounting offers several benefits to companies. It helps identify emission hotspots within their operations, leading to actions to mitigate these emissions. GHG accounting also provides companies with a competitive advantage by demonstrating transparency and environmental consciousness, attracting sustainability-focused investors and clients. Furthermore, understanding GHG risks and complying with environmental policies enables companies to navigate regulatory requirements and ensure long-term success in a competitive business environment.

With this knowledge, companies can play a vital role in addressing climate change and fostering a sustainable future by taking the initial steps in accounting for their own emissions.

Event Overview: Leadership Forum

The GFM series concluded on May 10, 2023, with the Leadership Forum in Singapore. This hybrid event attracted a diverse audience from across the APAC region, with participants and speakers joining virtually and in person at the venue.



The session was organised to bring together industry leaders to share best practices and solutions that can drive greener freight choices in the region. Participants had the opportunity to interact, exchange ideas, and identify common areas of interest.



Also, the GFM Leadership Forum commemorated the 10th anniversary of Green Freight Asia, symbolising a decade of GFA's dedication to advancing sustainable road freight transport development and establishing environmentally friendly supply chains in the APAC region since its establishment in 2013.



GFM Leadership Forum

Event Overview: Leadership Forum

The welcome address was presented by Mr K.K. Ralhan, CEO and Director of GFA and Group Chairman of Kaltimex Group. Mr. Ralhan is the owner and founder of Kaltimex Group, which was established in 1996 and currently operates in Indonesia, Singapore, Bangladesh, and the Philippines. He has been the CEO and Director of GFA for the past two years.



Welcome address by Mr Ralhan

In his address, he expressed his gratitude to the supporters of GFA, including some of the founding members such as UPS, DHL, IKEA, and Lenovo, who continue to be an integral part of GFA. He especially acknowledged the support of the UPS Foundation, which was instrumental in developing the GFM series.

Mr Ralhan also shared that the series had received a positive response and generated interest in further opportunities for knowledge sharing in the future.

As GFA is committed to bring forth more implementable solutions, it encourages companies to actively engage their supply chains to become part of the GFA network.

Event Overview: Leadership Forum

The opening remarks on behalf of UPS were delivered by Ms Sarah Ong, who leads UPS's sustainability strategy and programmes in the Asia Pacific, Middle East, and Africa (AMEA) region.

In her address, she emphasised the need to advance green practices in the logistics sector and increase the capacity of industry players to lower emissions and mitigate the effects of climate change, while ensuring environmental and social equality.



*Welcome address on behalf of UPS by
Ms Ong*

Ms Ong shared UPS's goal to innovate delivery methods in densely populated cities and implement new technologies such as electric vehicles, climate-conscious buildings, solar panels, renewable energy sources, and commercially viable sustainable aviation fuel. The company also enables SMEs to build capacity by partnering with organisations like GFA through its Green Exporters Programme. This programme aims to train and educate SMEs on supply chain sustainability and green products.

Ms Ong concluded that the GFM series was developed with a sense of urgency post-pandemic to create greater resilience for businesses grappling with new challenges. She expressed that this engagement would continue beyond the series, fostering ongoing collaboration and support.

Event Overview: Leadership Forum

The scheduled speakers for the programme represented the multiple factors necessary for developing effective solutions throughout the sustainability journey. These included industry experts advocating immediate action, data-driven sustainability solutions, and financial instruments. The diversity of speakers provided valuable learning opportunities to address sustainability in a multi-faceted manner, catering to all types of organisations.



Ms Westlund, IKEA

The first speaker was Ms Fanny Westlund, Sustainability Leader, Supply Chain Operation, Asia Pacific, at IKEA, who joined the session online. Ms Westlund leads the Supply Chain Operation sustainability agenda for IKEA in the Asia Pacific region.

In her role, she enables the business teams to create an IKEA goods flow that serves people and protects the environment.

During her session, she shared about IKEA People and Planet Positive Strategy, which is implemented throughout the franchise system and guides decision-making processes. The strategy focuses on three areas: enabling healthy and sustainable lifestyles through IKEA products, promoting circular and climate-positive action, and creating a fair and equal society.

Event Overview: Leadership Forum

IKEA aims to achieve net zero emissions by 2040 through ocean and land transport through the pillars of reduce, replace, and rethink. As part of these pillars, IKEA focuses on increasing efficiency and electrification to reduce fuel usage, empty mileage, and empty space. They aim to replace fossil fuels with alternative means for long distances through intermodal transport and for short distances through electric vehicles.

IKEA has successfully implemented intermodal solutions, utilising rail, short-sea, and barge shipments in multiple countries, resulting in approximately half the emissions compared to diesel vehicles.

Additionally, IKEA seeks to rethink operations through innovation and collaboration to develop sustainable solutions.

Currently, IKEA is equipping their warehouses with renewable energy sources to generate power on-site and heating as well as charging infrastructure for vehicles.



Virtual presentation by Ms Westlund

Event Overview: Leadership Forum

Within the APAC region, IKEA's operations in China have pioneered the use of electric vehicles (EVs) and hydrogen trucks, collaborating with Original Equipment Manufacturers (OEMs) despite challenges such as high investment, limited range, and refueling. Ms Westlund acknowledged the importance of knowledge exchange and opportunities to interact with other organisations in order to form networks that can influence change.

After the first speaker, attendees learned more about members of GFA through video testimonials submitted by the companies. Videos from the following companies were screened: In Do Trans Logistics (ITL) Vietnam, So Trans Logistics One Member Company Vietnam, MAERSK Contract Logistics Management Hong Kong, and Emirates Logistics UAE.

The companies shared their GFA Label and Certification programme achievements and provided insights into how GFA programmes have guided them on how to improve their sustainability performance, through webinars, knowledge resources, and capacity-building workshops.

Event Overview: Leadership Forum

GFA has recently partnered with STACS, a Singaporean ESG Fintech firm. The GFA Label will be featured on the ESGpedia platform developed by STACS in partnership with the Monetary Authority of Singapore (MAS), allowing companies to showcase their progress in making their operations more sustainable.

The second speaker for the event was Mr Benjamin Tan, ESG Business Development Associate at STACS. He is passionate about sharing the importance of sustainability for corporates and guiding them in starting their ESG journey.

During his presentation, he highlighted how the ESGpedia platform can assist companies in their sustainability journey as it allows companies to aggregate all ESG data, including reports, targets, and certifications, into a single platform under a unique company profile. As the data collected for certification comes directly from the certification body, it ensures high quality, verified, and accurate information.



Mr Tan shared about STACS and ESGpedia

Event Overview: Leadership Forum

The platform caters to the diverse needs of various organisations: SMEs can use it to start on their sustainability journey and align with industry requirements, large corporates can monitor and measure the sustainability performance of their supply chains, and financial institutions can facilitate green finance. Companies can securely share their data with relevant stakeholders and access green finance instruments. Additionally, the platform provides companies with benchmark analysis based on industry sector, region, and other criteria.

The partnership between STACS and GFA provides companies interested in supply chain sustainability with information about the GFA Labelling and Certification programme and allowing them to include it on their ESGpedia profile.

ESG certifications, such as the GFA Label, demonstrate the commitment of companies towards implementing sustainable solutions. These certifications assist external parties in identifying companies that are paving the way in sustainability so that they can receive further support from financial institutions.

In closing, Mr Tan remarked that it is crucial for companies to be aware of all the available solutions so that when they are ready to embark on their sustainability journey, they can make informed decisions about the most suitable resources.

Event Overview: Leadership Forum



Mr Tan shared about UOB's sustainable finance solutions

The final speaker for the event was Mr Kevin Tan, Head of Logistics, Sector Solutions Group at UOB. With over 15 years of extensive consulting and banking experience in the region, dealing with Private Equity, Multinational, and Government Linked companies in the logistics sector. Mr Tan joined UOB in 2019 and currently heads the Logistics sector in the Sector Solutions Group. He is passionate about driving the ESG agenda of companies in this sector and their transition towards a more sustainable future.

Mr Tan shared that UOB has developed five sustainability frameworks that align with internationally recognised ESG principles and are independently validated. Among these frameworks, the Smart City framework covers multiple themes, including renewable energy, green transport, green building construction, and climate change adaptation.

Event Overview: Leadership Forum

One such programme, U-Drive, provides end-to-end solutions for electric vehicles, including manufacturers, dealers, and charging infrastructure. All financing for projects under these themes is considered green finance.

The Green and Sustainable Trade Finance framework recognises labels such as the Forest Stewardship Council (FSC), Recycled Claim Standard (RCS) 2.0, and GFA Label to qualify for green finance instruments.

Additionally, Mr Tan also shared information about the UOB Sustainability Compass, which helps companies identify their sustainability maturity stage, provides a roadmap of steps, understand industry regulations, and learn more about related sustainable finance solutions.

Lastly, UOB is developing the Sustainability Linked Loan (SLL) for Fleet Transitions to help companies reduce carbon emissions by providing incentives for meeting reduction targets. These SLLs can be used to replace old fleets, switch to alternative fuel, improve driver behavior, and achieve CO₂ reduction targets.

Mr Tan concluded by emphasising that sustainability is a journey with long-term goals, and companies should start implementing small measures now to avoid losing relevance in the future.

Event Overview: Leadership Forum

GFA 10 Years Commemoration

GFA was established in 2013 with the objective of supporting the logistics and freight sector of the Asia Pacific region in their sustainability efforts and building green supply chains. This event served as an opportunity to celebrate 10 years of GFA and acknowledge the support and commitment of its members and network.

As a token of appreciation for our long-term supporters, active members, and collaborating organisations, GFA expressed gratitude and presented them with plaques.



Plaques presented during the event

Event Overview: Leadership Forum

The GFA Ambassador Award was presented to long-term members, as well as members whose support spans across the region and involves multiple operations in GFA programmes.

The recipients of this esteemed award were follows:

1. UPS Asia Group
2. DHL Supply Chain Singapore
3. Maersk Contract Logistics Management Asia Limited
4. IKEA Supply AG (virtual)
5. Lenovo Singapore (virtual)
6. Shinkai Transport Systems, Japan (virtual)



UPS Asia Group



DHL Supply Chain Singapore



*Maersk Contract Logistics
Management Asia Limited*

Event Overview: Leadership Forum

The second award of the day was the Outstanding Commitment Award, bestowed upon companies who have been consistently committed to GFA and promoted the sustainability agenda in their respective countries over the past 5 years or more.

Accepting the awards virtually were:

1. 20Cube Logistics, Bangladesh
2. Al-Futtaim Logistics, UAE
3. Emirates Logistics L.L.C, UAE
4. MKD Transcorp Pty Ltd, Australia
5. Shanghai Cstar Logistics, China
6. Singapore Haulage Services, Singapore

Event Overview: Leadership Forum

The last category is the Sustainability Excellence Award, recognising companies that have leveraged our six programmes to drive tangible change within their businesses, making their operations more sustainable and environmentally responsible.

The recipients were:

1. Kaltimex Energy, Singapore
2. In Do Trans Logistics, Vietnam (virtual)



Kaltimex Energy, Singapore

Event Overview: Leadership Forum

Lastly, the Automobile Association of Singapore Academy (AAS Academy) was recognised for its longstanding collaboration with GFA, playing a pivotal role in imparting essential eco-driving knowledge and skills to embrace sustainable practices.



AAS Academy

Event Overview: Leadership Forum

The event culminated with gratitude and appreciation extended to all the esteemed participants, distinguished speakers, and the dedicated organising team of the Green Freight Movement. Their collective contributions and unwavering support were acknowledged as instrumental in making the event a resounding success.



In-person attendees at the Leadership Forum

SERIES CONCLUSION

The Green Freight Movement served as a powerful platform for fostering connections, forging new partnerships, inspiring further action and positive change in the pursuit of a greener, more resilient, and sustainable logistics and freight industry in the APAC region.

The series has made a measurable impact in the industry, successfully engaging multiple organisations and stakeholders across 28 countries worldwide. Throughout the series, representatives from over 70 organisations and companies actively participated in three webinars, two workshops, and a leadership forum. The sustainability webinars, in particular, attracted 198 participants, who gained valuable insights on a diverse range of topics presented. The capacity building workshops, designed to offer specific solutions for companies to adopt, drew around 68 participants, equipping them with practical skills to apply in their operations.

We extend our heartfelt gratitude to all the participants who joined us in the Green Freight Movement events. We are grateful for your active engagement and presence and look forward to continued support as we strive for positive change in the sector.

SERIES CONCLUSION

It is through the collective efforts and shared commitment of each individual and organisation involved that such impactful events can be orchestrated, paving the way for meaningful progress within the logistics and freight sector of the Asia Pacific region. This series exemplified the potential of collaboration and collective action, which lies at the heart of the GFA network.

As we wrap up the Green Freight Movement series, GFA expresses sincere appreciation to the UPS Foundation for their unwavering support and guidance. As a non-profit association, GFA was able to leverage their support and tap into the wider industry network to deliver the GFM series.

Looking ahead, the GFA team and Board of Directors are committed to expanding opportunities for industry players to collaborate and collectively build a sustainable future. In the upcoming years, GFA aims to facilitate greater cooperation, knowledge sharing, and collective efforts that will drive positive change and foster sustainability within the logistics and freight sector in the APAC region.

Thank you for being part of the Green Freight Movement!



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