

BEC EnviroSeries Conference



November 2022

The flagship event, BEC EnviroSeries Conference “**Formulating Business Roadmaps Towards Net Zero**”, was held on 29 November 2022. The conference covered industry-specific discussion on the development of sectorial net-zero roadmaps and what steps should be taken towards 2030, 2035 and 2050 for bridging ambition and actions. Peer companies within specific industry shared their best practices in accelerating transformation for decarbonisation. As the saying goes, “**all roads lead to Rome**”. With collaboration across sectors and industries, we shall be able to see **all roads leading to net zero** in the near future.

We would like to share with you the recap of each session and bitesize takeaways:

Session 1: Innovation and Technology – Walk the Talk

At the panel discussion, we discussed how data would be utilised for sustainability goals and how companies would strike a balance between ambition and feasibility. There are emerging opportunities for decarbonisation and companies should ride on the trend and bridge the gap between target setting and execution.

Key takeaway:

An enabling environment for advancement of technology should be cultivated by unlocking value of data. Collaboration of market players would make cutting-edge innovation possible and would go a long way for the decarbonisation journey.

Data is the hidden gem of every company and by utilising data, company would shed light on the pathway towards a net-zero target. A data-driven approach that connects raw data with solutions would make possible for an efficient service formulation. Mr Erdal Elver, President and CEO of Siemens, shared with us how a company would leverage the full value of data along the data chain – from sensors, controllers, edge computing to cloud. Cases and services were shared to show how data would be utilised for achieving sustainability goals.

When it comes to innovation and technology for sustainability goals, it is not easy to strike a balance between ambition and feasibility. Prof Davis Bookhart, Director of the Sustainability/ Net-Zero Office of the Hong Kong University of Science and Technology (“HKUST”) shared with us how an ambitious smart campus can be actualised through HKUST’s “Sustainable Smart Campus as a Living Lab” programme. He added that a transformation for sustainability will require companies to be well prepared to change in its overall business strategy; and to remove barriers for adopting advanced technology. Learning from best practices and taking collective actions in bridging target setting and implementation would be the best way to strike a balance between ambition and feasibility.

“Core Climate”, a new marketplace for climate related products and opportunities, would further remove the financial barriers for sustainability actions, according to Mr Sandro Desideri, Co-CEO of Ianus. Ir Kenny Wong, Head of Carbon and Environmental Excellence, Green Living and Innovation Division, Hong Kong Productivity Council shared that at the decarbonisation journey, green procurement would accelerate the progress of suppliers to decarbonise, and SMEs would be able to embrace the shift to enhance competitiveness.

Energy is always the fuel of change. The session also touched on the difficulties faced by the energy sector.

For instance, the substantial costs associated with implementing a new energy source, establishing new infrastructure for energy generation, overcoming technological challenges in the transportation of fuels, etc. Good communication and supports from government could unleash the full potential in the energy sector for a sustainable future.

 [Watch the Session 1 Playback](#)

Session 2: Transport and Logistics - Towards Zero Emissions

The panel discussion in Session 2 touched on the importance of target setting for decarbonisation and panellists shared with us on their specific roadmap and decarbonisation actions. Transformation across fuel supply chain shall also be taken into account towards zero emissions.

Key takeaway:

Target setting is the first step of decarbonisation actions. At the transport sector, different actions should be taken in the air, in the ocean and on the ground to achieve its committed targets and a transformation of the entire fuel supply chain should be considered especially in the post-COVID era.

In creating a roadmap, it is important to set checkpoints and destinations for guiding our actions. In Hong Kong, some pioneers have already determined science-based and quantitative emission reduction targets in the short to medium term and committed to carbon neutrality or net zero by mid-century. For instance, MTR has set science-based targets for railway and property businesses in Hong Kong for 2030, covering scope 1, 2 & 3 emissions, striving to achieve carbon neutrality by 2050; Cathay Pacific is now using Sustainable Aviation Fuel (“SAF”) for 10% of its total fuel consumption by 2030 and committing to net-zero carbon emissions by 2050; Airport Authority Hong Kong (“AAHK”) is with a midpoint target of 55% absolute reduction by 2035 from a 2018 baseline; achieving net-zero carbon by 2050; and DHL is aiming to reduce absolute scope 1 and 2 GHG emissions by 42% by 2030 from a 2021 base year and 25% of scope 3 emissions, reducing all logistics-related emissions to net zero by the year 2050.

Maersk has developed a set of 2030 targets across its value chain. The target setting strategy has shed light on its climate action plan for better estimation of alternative fuel supply. It has enabled the company to consider a more ambitious target to achieve net zero in 2040, one decade ahead of its initial 2050 commitment.

The pathway of decarbonisation actions in the transport and logistic sectors required actions in the air, in the ocean and on the ground. All our panellists demonstrated proactive frameworks that have guided their companies to reach the net-zero target.

In the air, we have AAHK and Cathay Pacific. AAHK shared how the company has determined to work with its business partners to reduce emissions, which account for over 50% of the airport’s scope 3 emission apart from its own operation emission. The goal is driven by its business partners' carbon support programmes covering the four pillars of finance, governance, technology and innovation, and capacity building.

Cathay Pacific then shared its five-pillar decarbonisation approach with a timeframe; approaches covering

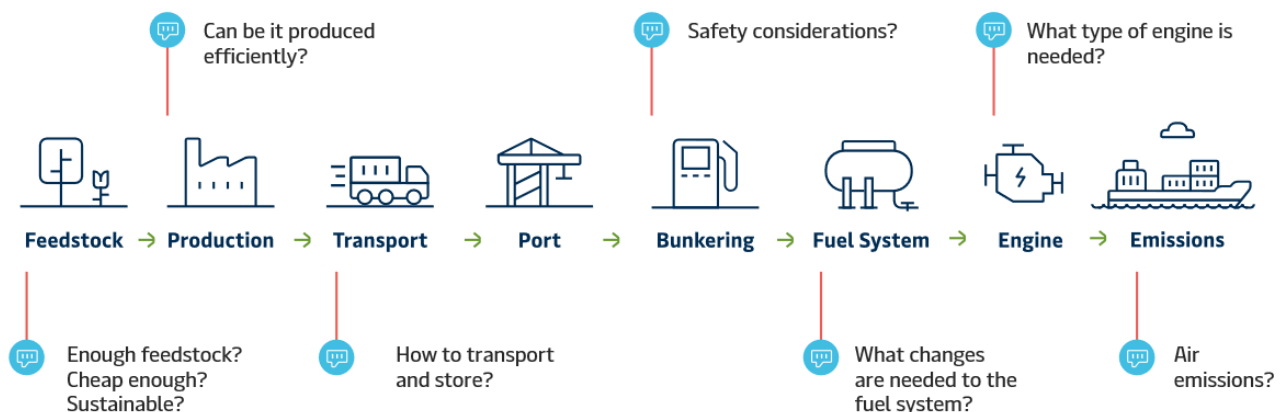
aircraft design, operational improvements, as well as carbon offsets were mentioned. The company is now actively accelerating SAF uptake until 2040, and conducting research and development over new technologies beyond 2040.

In the ocean, Maersk shared how prioritisation would lead to leapfrogging directly to green fuels. The company pointed out that green methanol in combination with biodiesel would be certain and scalable pathway for this decade, while green ammonia would be considered in a longer timeframe.

On the ground, it is good to see that MTR has centred its climate change strategy on continuing to be a low-carbon public transport operator in Hong Kong and sets its decarbonisation approach with impact priorities: 1) energy reduction and efficiency, 2) electrification, 3) renewable energy uptake, and 4) low carbon value chain actions.

DHL, the freight specialist, also shared with us how DHL has shifted from an offsetting approach to developing a carbon insetting strategy, i.e. to fund projects aimed at reducing carbon emissions in the freight sector directly. DHL further develops methods and guidelines for carbon inset accounting and reporting, which justifies carbon inset investments like alternative sustainable fuels and fleet renewal across the company.

In the post-COVID era, growth in trade and passenger travel is expected and it will continue to increase the GHG emissions from transport operations. Panellists shared their perspectives on decoupling economic activities and emissions and mentioned that the potential of alternative fuels shall be explored for Hong Kong to stay competitive because alternative fuels are the future of many industrial operations. In terms of this, acceleration needs to be supported by early-stage regulations, infrastructure development, and regional supply agreements. The figure below shows the transformation that needs to happen across the entire fuel supply chain.



 [Watch the Session 2 Playback](#)

Session 3: Construction and Properties - Life Cycle Perspective

Session 3 focused on the strategies and solutions for the industry to decarbonise, starting at the design and planning stage of construction and building projects. The panel shared challenges the industry is facing and how collaborations drive changes, as well as their views and expectations of the future development.

Key takeaway:

As the electric grid continues to decarbonise, it is expected that embodied carbon will become a more significant portion in the whole lifecycle of buildings. Electrification of construction sites would help cut the emission from construction processes. To achieve net zero, some system changes would be needed with industry-wide concerted efforts to tackle the challenges. The creation of a low-carbon “ecosystem” means opportunities along the entire value chain. Sharing among stakeholders is key to identify the suitable solutions.

As the main contractor, Gammon has committed to a near-term Science Based Target (“SBT”) and is working hard to tackle its major emissions, corresponding with the upfront carbon due to construction processes and construction materials. As diesel use is the major source of its scope 1 & 2 emissions, site electrification with phasing out of diesel equipment forms a core strategy for reduction. Using green or low carbon rebar and concrete, with other alternative materials would help cut the scope 3 emissions. Reduced material use due to improvements in design and construction method also plays a role.

Ronald Lu and Partners has an established SBT and has been designing buildings with lower and more efficient energy use. RLP grouped a number of strategies that can reduce energy use and carbon content of materials according to the impact and potential challenges. They discussed them as quick-wins, exemplars and moon-shots.

Manufacturing of cement is energy intensive. Most of the emission comes from making cement clinkers. Using Pulverised Fly Ash (“PFA”) and Ground Granulated Blast Furnace Slag (“GGBS”) as substitutes are viable solutions. Developers switching from Ordinary Portland Cement (“OPC”) to GGBS concrete can halve their embodied carbon from concrete. Green Island Cement (“GIC”) estimates the change in material use will reduce its carbon footprint by around 70%. Using alternative fuel like biomass and reducing fossil fuel consumption can further reduce 30% of the company’s carbon. The last mitigation measure is carbon capture and utilisation. The captured carbons need to be converted into marketable products. GIC is also looking for cooperation opportunities with other organisations to optimise solutions for Hong Kong.

The Construction Industry Council (“CIC”) collaborates with organisations in various projects to provide scientific tools for companies to measure progress in achieving carbon targets. For example, the CIC Green

Product Certification helps create a low-carbon ecosystem of the industry in Hong Kong; CIC Carbon Assessment Tool helps one estimating emissions from a project; CIC Sustainable Finance Certification Scheme brings the bankers and financial institutions into the field. A collective will and contributions from all stakeholders are necessary in achieving net zero. CIC continues to facilitate collaborations within the industry as well as other sectors and organisations in Hong Kong.

It is important for giant developers to set a target that includes embodied carbon and start influencing all experts across the value chain in reducing it. In addition, benchmarks for new construction and renovation projects should be in place, together with a holistic strategy and disclosure of embodied carbon performances. Swire Properties' pilot study with Gammon and HKUST in the One Taikoo Place project was amongst the first local studies in providing credible data for cradle to site embodied carbon. Subsequently, Swire Properties set up performance-based requirements for procurement and included low-carbon procurement specifications in contracts for new developments. It is also working in supplier selection process for mainland projects.

To summarise, one low-hanging fruit is early electrification with low-carbon energy to cut scope 1 and 2 emissions. While *Hong Kong's Climate Action Plan 2050* provides a clear vision for operational carbon, a stronger signal for the market to adopt super low energy building should be introduced. For embodied carbon, concerns about scope 3 emissions from the private sector call for cross-border partnerships and policy updates. In addition, verified embodied carbon data in the local context will be helpful for businesses in setting meaningful and informed targets.

 [Watch the Session 3 Playback](#)

Session 4: Hospitality – Climate Actions and Behaviour Change

This session featured challenges faced by the hospitality sector, solutions that they have taken in decarbonisation actions, and suggestions in encouraging behaviour changes of customers.

Key takeaway:

There are many difficulties faced by the hospitality industry for decarbonisation; however, those challenges are not unsolvable if resources could be pooled strategically in response to the needs of climate actions. What is more, behavioural change of customers towards green goals is also possible if green alternatives and related carbon-footprint information would be offered for customers to make “green choice”. The hospitality industry can also further bridge the gap between customers and government to make possible the collective climate actions.

There are many challenges awaited to be overcome when speaking of climate actions in the hospitality industry. To name a few, loose regulatory pressure on decarbonisation, lack of data transparency, insufficient information and data, high dependence on supplier and local infrastructure, fragmented regulatory landscape, and challenging operation environments; all contributed to the difficulties faced by the industry.

An integrated approach which aligns with business strategy and operations is key to the transformation of the sector for decarbonisation objective.

Mr Joshua Wong, Senior Manager, Corporate Responsibility and Sustainability, The Hongkong and Shanghai Hotels (“HSH”), shared with the audience the company’s climate actions on decarbonisation. HSH identifies climate change as the core issue and embed climate risk and opportunity into business strategy and financial reporting to drive transformation. For example, HSH has been quantifying risks according to future climate and policy scenarios and developing a more holistic transition plan covering future market trend.

Ms Mehvesh Mumtaz Ahmed, Global Head of Social Impact, Rosewood also shared Rosewood’s commitment on decarbonisation and how the hotel implemented different strategies, brought meaningful contributions and solutions across its value chain to overcome difficulties. Change of modus operandi is one of the approaches that would bring impact to the supply chain, communities, and environment positively.

A holistic change in value chain is the holy grail for decarbonisation for many industries and the hospitality industry is no exception. To achieve it, utilising IoTs and AI technology could help significantly reducing the industry’s waste production. Mr Benson Lam, Director of Sustainability, Regal, raised that the company has adopted an approach which reduced 30% of waste compared to the base year. Ms Gigi Lau, Head of Marketing and Sustainability, Compass HK, also suggested that companies could build digital solutions to

track food waste, single-use plastic and responsible sourcing through procurement procedures and policies for decarbonisation objective.

Green procurement is a possible solution that would help. Today, nearly 90% of Hong Kong's food is imported overseas. Local food sourcing is impracticable in Hong Kong. The sector would explore the possibility of sourcing food from the Asia Pacific region to minimise the emissions of food logistics, as suggested by Gigi.

Apart from logistics, almost 80% of the food sector's emissions are from the land, such as deforestation to grow genetically modified (GM) crops, feeding livestock with GM crops, and use of fertilisers and pesticides. Ms Peggy Chan from the Zero Foodprint Asia ("ZFPA") shared a project which supported local farmers adopting regenerative agricultural practices and shifting to less fossil fuel-intensive farming practices to achieve decarbonisation goal and land restoration.

It is also important to create impacts and to drive behavioural changes of customers. The way to achieve that is to grow with customers, to inform and to support customers' change of habits for an eco-friendly outcome. For instance, green food menus should be available for customers and staff to choose from. Ms Ahmed recommended that consumers should be able to know the carbon footprint while choosing diets from the menu and it would be possible if data measurement of the carbon footprint of food, including deforestation, monoculture farming and carbon emission of factories are all consolidated and shared for customers to make wise choices.

Last but not least, the hospitality industry can also further bring the voices and expectations of consumers to the government for the policy makers to create an enabling environment for behavioural changes of individuals from all walks of life.

 [Watch the Session 4 Playback](#)

About Business Environment Council Limited 商界環保協會有限公司

Business Environment Council Limited ("BEC") is an independent, charitable membership organisation, established by the business sector in Hong Kong. Since its establishment in 1992, BEC has been at the forefront of promoting environmental excellence by advocating the uptake of clean technologies and practices which reduce waste, conserve resources, prevent pollution and improve corporate environmental and social responsibility. BEC offers sustainable solutions and professional services covering advisory, research, assessment, training and award programs for government, business and the community, thus enabling environmental protection and contributing to the transition to a net-zero economy.

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