

BEC Low Carbon Charter Progress Report 2019

September 2020

Introduction

Climate change poses unprecedented threats to businesses and the well-being of people and communities. The rise in global average temperature contributes to the increase in frequency and intensity of extreme weather conditions, leading to physical risks to businesses such as damage to building assets and disruption to supply chains. In Hong Kong, Typhoons Hato in 2017 and Mangkhut in the following year led to insurance claims worth of at least HK\$3.7 billion¹. Businesses also face transition risks, including policy and legal, market and reputational, as well as technological risks. In light of these circumstances, businesses will benefit from taking swift and bold climate actions to not only future-proof their operations and improve business resilience, but to also create value for the wider community.

BEC Low Carbon Charter

"You can't manage what you don't measure". Targets are key for facilitating and operationalising decarbonisation strategies for businesses. Therefore, to support businesses with their decarbonisation journeys, Business Environment Council (BEC), through the support of its Climate Change Business Forum Advisory Group (CCBF AG), kickstarted the Low Carbon Hong Kong Initiative in 2017 with the publication of the Low Carbon Hong Kong: Supporting Business to Set Targets report, which puts forward the business case for setting decarbonisation targets and explains the target setting process.

Building on this introductory report, BEC commenced the second phase of the initiative with research and engagement activities so as to raise understanding on the business benefits and imperative for climate action, work with businesses in setting decarbonisation targets and strategies, as well as build capacity and overcome challenges encountered in the target setting and decarbonisation journey. Companies among the property and management value chain were identified as the initial focus of the initiative, as reducing emissions from buildings is critical to Hong Kong's low carbon transition. About 90% of the city's electricity consumption and more than 60% of the greenhouse gas emissions are attributed to buildings.

Riding on the success of the Low Carbon Hong Kong initiative, BEC decided to take the lead in creating a charter that encourages and supports businesses to set decarbonisation targets and to take concrete climate action. The <u>BEC Low Carbon Charter</u> was launched in March 2019 to mobilise companies in the property and construction value chain to contribute with collective resolve towards Hong Kong's long-term decarbonisation. After a year of promising progress, BEC has expanded the Charter to welcome organisations from all sectors to join from 2020 onwards.

Objectives of the Report

By joining the Charter, signatories are committed to decarbonise and disclose their progress by completing and returning an annual survey to BEC. By publishing the aggregated and anonymised data, BEC hopes to encourage the business sector to share information with the public, enhance the overall transparency of the Charter, and provide companies with data to benchmark their progress with industry peers. We also wish the signatories' decarbonisation efforts can become a source of inspiration for other companies, so that the achievements of these pioneers can galvanise action and commitment among the wider business community to decarbonise and scale up the impacts of business climate actions.

¹ Typhoons Mangkhut and Hato caused at least HK\$2.9 billion and HK\$857.9 million of insurance claims respectively. https://insuranceasianews.com/typhoon-mangkhut-hong-kongs-claims-breakdown/; https://www.comp.com/typhoon-mangkhut-hong-kongs-claims-breakdown/;

https://www.scmp.com/business/companies/article/2177679/insurance-claims-could-reach-all-time-high-2018-climate-change



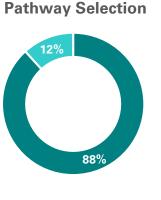
(Arranged in alphabetical order)

The Charter in Numbers

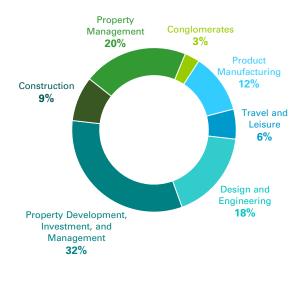


Companies in the property and construction sector joined the Charter in 2019

The BEC Low Carbon Charter saw 34 companies across Hong Kong's property and construction value chain joining as initial signatories when the Charter was launched in March 2019.



Pathway 1 Pathway 2



Signatories' Business Profiles

The Charter allows a signatory to choose one of the two pathways. Pathway 1 signatories commit to begin or continue their target setting and decarbonisation journey with reference to the goals of the Paris Agreement, whereas Pathway 2 signatories commit to set and achieve sciencebased emission reduction targets validated by the Science Based Targets initiative (SBTi)². 12% of the initial signatories have decided to take on the challenge and pledged to set science-based targets. Amongst the 34 signatories that joined the BEC Low Carbon Charter in 2019, 88% of them have pledged to join Pathway 1.

BEC Low Carbon Charter was launched with an initial focus on the property and construction value chain. In the chart on the left, signatories are categorised according to their positions in the property and construction value chain. Nearly onethird of the 2019 signatories are property developers that are also involved in investment and management of real estates. Property management companies account for the second largest group among the signatories. The Charter is also widely supported by construction companies, corporates that offer design and engineering services e.g. architectural firms and sustainability consultancies, construction material companies, as well as enterprises from the travel and leisure industry.

² The SBTi assists companies in setting ambitious decarbonisation targets that are aligned with the latest climate science. More information can be found on <u>https://sciencebasedtargets.org/</u>



The signatory companies of the BEC Low Carbon Charter are of different shapes and sizes. Amongst the 34 signatories, approximately half are listed companies with market capitalisation ranging from HK\$182.2 million to HK\$135.8 billion³. The other signatories are privately held companies and statutory bodies. Around 60% of the signatories in 2019 are large organisations with more than 1,000 employees, and BEC is glad to be able to also attract several small- and medium-sized enterprises (SMEs) to join the Charter.

Stages of Decarbonisation

Stage 1

Inventory

50%

of companies are working on sources and inventory for Scope 1 & 2 emissions

of companies are reducing Scope 1 & 2 and mapping Scope 3 emissions

22%

of companies set Scope 3 targets and are reducing emissions accordingly

Stage 3 Scope 3 Target of companies set

targets based on the Paris Agreement, which aims to limit global temperature rise to 1.5 – 2°C

Stage 4

of companies are committed to eliminate their carbon emissions or balance their emissions by offsetting

Stage 5 Net-zero Target

Stage 2

Scope 1 & 2 Target & Scope 3 Mapping Scope 1 & 2

Scope 1: direct emissions from company's owned or controlled sources, including the combustion of fuels in mobile and stationary sources Scope 2: indirect emissions from purchased electricity Scope 3: all indirect emissions (excluding Scope 1 & 2 emissions) that occur in the value chain of the company

Paris-based Target

³ Accessed on 16 June 2020 at http://www.etnet.com.hk/

Progress and Achievements

The following sections are a synthesis and analysis of the progress and achievements of the initial signatories who joined the Charter before 2020. All the data below were derived from the progress reports submitted to BEC.

Why decarbonise?

More than half of the initial signatories indicated that their urge to contribute to sustainability has driven them to decarbonise. A lot of signatory companies hope to contribute to the making of a sustainable society through committing to deep decarbonisation. Some companies also aspire to fulfil their obligations as global citizens through reducing their share of carbon emissions. Corporates, in this sense, have recognised that the development of the society and the business sector is intertwined. Apart from pledging to boost sustainable development, around one-third of the companies acknowledge the potential risks and opportunities brought by climate change and companies' responsibilities in mitigating the relevant risks through decarbonisation.

Most Mentioned Reasons

- Commitment to corporate social responsibility and sustainable development
- Responsibility in tackling climate change
- Demonstration of business leadership
- Response to stakeholder's expectation
- Recognising company's environmental impacts
- Echoing with company mission
- Stimulating ambition and innovation on carbon reduction measures
- Response to industry changes
- Support for government

Our ongoing initiative to reduce greenhouse gas (GHG) emissions is meaningful and is the right thing to do as an industry leader to offset climate change

Committing to a decarbonisation target could raise our company's reputation and our position in the environmental industry to show the clients and the industry partners that we are taking the lead and setting ourselves as an example in actively combating climate change consistently

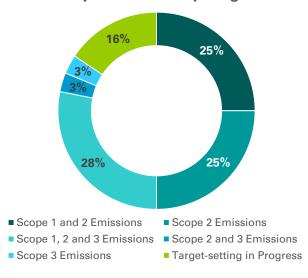
Savings in energy usually bring savings in costs, which is one immediate business benefit of setting decarbonisation targets __

Decarbonisation Targets



Reporting Boundary

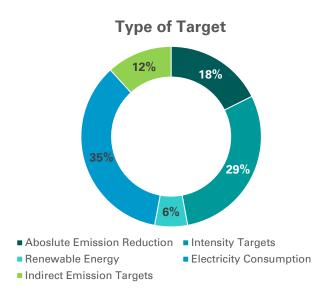




While around one-third of the signatories have decided to pilot their decarbonisation schemes to selected business activities or sites, almost half of the signatories have applied their decarbonisation targets to the entirety of their businesses in Hong Kong. A number of companies has also pledged to decarbonise in operations and properties which they have direct control over. It is worth noting that 5 companies have went further from applying the emission reduction targets to all their Hong Kong operations to extending their targets to territories outside of their main operating location, including mainland China, Singapore, Japan, and the United States.

Amongst all signatories, 28% of the signatory companies have already set emission reduction targets for all their direct and indirect emissions. Signatories have also tailored targets according to their own business needs; approximately a quarter of the companies focused on reducing their indirect emissions from electricity consumption, and another quarter have decided to start their decarbonisation journeys by reducing Scope 1 and 2 emissions. Some companies are committed to reduce their Scope 3 emissions by waste reduction schemes.

Signatories' absolute emission reduction targets for Scope 1 and 2 range from 2% - 50%. Intensity targets for the two scopes are set at 10% - 63%, with 7 of these companies committed to set intensity targets at or over 25%. Around 10% of the companies have set absolute emission or intensity targets for Scope 3. A number of companies have also aimed for reducing electricity consumption and their goals range from 2% - 50%.

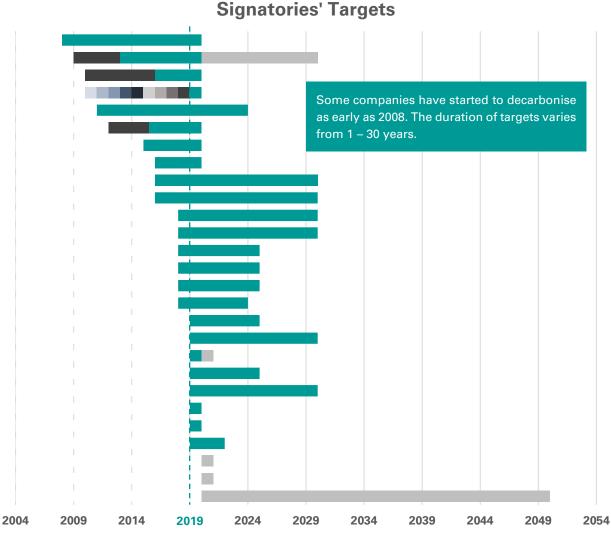


Our signatories have committed to decarbonise by setting various types of targets, and almost one-fifth of the companies have set multiple targets. Some companies have even set 3 goals, targeting different elements in the carbon reduction process. Consequently, the types of targets are counted by the total number of targets instead of companies, and the companies that are still setting targets are not included. The most popular decarbonisation targets are goals aiming at reducing electricity consumption and intensity targets. Other emission indirect targets include transitioning to hybrid vehicles and recycling etc.

What are Absolute Emission Reduction and Intensity Targets?

- Absolute Emission Reduction Target: a target that sets definitive amount of carbon emissions to be reduced over time
- Intensity Target: a target that covers the emission rate of a given pollutant relative to the intensity of a specific activity (usually a metric most relevant to a company's operations), e.g. emissions per staff or revenue generated

Both types of targets are recognised by the SBTi. While carbon intensity allows more comparability and may be more applicable to developing economies, it may not reduce the overall carbon emission of the entity.



Note: Each bar represents a target set by a company. If multiple targets are set in overlapping timeframes, only the target covering the longest period of time is shown.

Different colours represent the different targets set, for example one company (4th from top) has set annual targets since 2010. Targets that cover the reporting year (2019) are represented in **teal**.

Among all signatories, around 10% have set multiple targets of different timeframes, and some of them have even set 3 targets separately for the short-, medium-, and long-term.

While around one-fifth of the companies chose to set annual targets to decarbonise, a significant number of signatories have adopted a longer term approach for their decarbonisation journeys. On average, businesses have fit their emission reduction targets into an 8.2-year timeframe. Around a quarter of the signatories have set targets for 11 - 15 years. We find the results to be very promising, as decarbonisation is a long-term effort, and it would be ideal for companies to think and plan ahead of time.

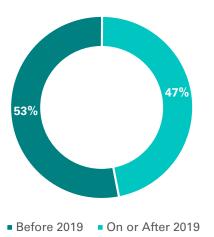
At the same time, we would like to encourage companies to advance further by formulating deep decarbonisation plans and visions that go beyond 2030. To date, one-third of the signatories have mapped their decarbonisation actions to 2025, with less than one-fifth (19%) setting targets for 2030 or beyond.

Common Decarbonisation Initiatives

Initiatives Ranked according to	o their popularity
Use energy efficient appliances, equipment and vehicles	 Lights: Switch from T5/T8 to LED lights or upgrade the existing LEDs Adopt light zoning and install daylight dimming controls Remove part of the decorative lights Vehicles: Phase out inefficient fleet vehicles and pursue vehicle models with less emission e.g.
	 electric vehicles and hybrid vehicles Transit from diesel to electricity and use renewable fuels e.g. B5/B10 biodiesel (biofuel blend consisting of 5 and 10 percent pure biodiesel respectively)
	 Other Equipment: Use products with Grade 1 energy label/higher efficiency model Use products with energy saving mode Install auto shutdown timers on computers Utilise Internet of Things (IoT) technologies like light and motion sensors to control indoor lighting and temperature
Retrofit offices and operations sites	 General Apply the latest building energy code/sustainability code when retrofitting Use more translucent partitions to maximise daylight penetration Use insulation that reduces cooling loss at the sun-facing curtain wall Collect rainwater and grey water for harvesting, flushing and cleansing Use energy efficient lifts, elevators, heating, ventilation, and air conditioning (HVAC) systems and water pumps with variable speed drives to reduce electricity consumption
	 Air Conditioning Install fans as a replacement in winter/cooler times Increase control settings e.g. temperature, wind speed, timer
Adopt renewable energy	 Install solar PV panels, wind and water turbines for own use or sell them through Feed- in Tariff (FiT) Use renewable fuels e.g. B5/B10 biodiesel Purchase renewable energies through Renewable Energy Certificates (REC) schemes offered by the two utilities companies
Establish internal sustainability protocols	• Develop and implement energy saving plan, green procurement/purchasing manual, green finance framework, as well as green building design, property management and maintenance manual (for the Property and Construction sector)
	 Examples of Practical Measures at Operational Level: Lights off during lunch time Eliminate paper invoices/paper cheque and use electronic forms Switch off idling engines Higher temperature set point for air-conditioning

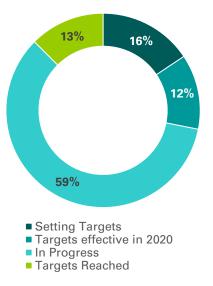
Raise awareness among employees	 Build internal awareness through trainings and workshops; encourage employees to join seminars or forums on energy saving measures Demonstrate support for external green programmes 		
Reference international standards	ISO Standards		
	ISO 50001: Energy Management System		
	ISO 14001: Environmental Management System		
	ISO 14064: Greenhouse Gas Validation and Verification		
	Green Building Standards		
	• WELL Standard: Evaluate the built environment's impact on human health and wellbeing		
	LEED Certification: Rate the sustainability of new constructs, interior fit outs, operations and maintenance of buildings		
	• BEAM Plus: Evaluate sustainability performance relating to the planning, design construction, commissioning, management, operation and maintenance of a building		
	Others		
	GRI: Sustainability reporting		
	Sustainable Development Goals: Global blueprint for sustainable development		
Promote energy-	Business Partners and Suppliers		
saving and decarbonisation	• Organise stakeholder engagement sessions to share the importance of transition to low		
among business	carbon business models and green procurement policies (if any)		
partners, suppliers, end-users and	Work with them to set decarbonisation targets and reduce carbon and energy footprint		
clients	Clients and End-users		
	 Promote green activities to clients and end-users; provide updates on such activities through circulars and newsletters 		
	Launch campaigns to encourage recycling and responsible consumption		
Form structures overseeing sustainability	• Form sustainability working group/committee/taskforce to oversee and coordinate the incorporation of decarbonisation targets into daily operations of the company		
Office recycling	Set up more collection points and reverse vending machines		
Use data analytics and energy management platforms	 Install separate meters for different facilities to collect more granular resource consumption data 		
	 Use data analytics and energy management platforms to enhance data availability and transparency for analysis with real-time responses 		
Conduct energy audits and	 Conduct energy audits with the help of external energy and sustainability consultants to identify energy management opportunities 		
establish emission reporting system	 Establish internal carbon auditing systems or install relevant software to measure account, and report emissions 		
	• Engage with sustainability/energy consultants to identify decarbonisation opportunities		
Introduce low- carbon products to the market	Reduce the lifecycle emissions of products produced by the company		

Impacts



Year When Target was Set

Signatories' Progress



Although over half of the signatories have set decarbonisation targets prior to joining the BEC Low Carbon Charter, BEC is delighted to see that 48% of the participating companies started their target-setting exercise in or after 2019 – the year the Charter was launched. This shows the BEC Low Carbon Charter's ability in motivating the private sector in taking the first step in their decarbonisation journeys. It is hoped that by demonstrating business leadership on climate change, the Charter will inspire more companies and organisations to take ownership of climate change and step up their commitment to decarbonise.

Building on previous decarbonisation efforts and harnessing the momentum brought by the BEC Low Carbon Charter, 13% of the signatories have already reached their decarbonisation targets, and a handful of them have achieved parts of their targets. Over half of the signatories have set their targets and tailored programmes to reduce their emissions, and they are making good progress in advancing towards their company targets. The other signatory companies are either on their way to determine their targets or are scheduled to start decarbonising in 2020.

Common Challenges



1. Lack of Understanding in Decarbonisation

"Understanding is the first step to acceptance"

There is a general lack of understanding on the importance of decarbonisation at all levels within companies. The unfamiliarity in sustainability and climate change is unfavourable to the company's decarbonisation exercise, as an essential part of carbon reduction measures require behavioural change, which is highly dependent on individuals' awareness and willingness to alter personal habits.



2. High Upfront Costs in Retrofitting

Retrofitting and upgrading to more energy efficient equipment incur substantial costs at the beginning of such investments. Therefore, decarbonisation measures can only be implemented effectively if the top management understands the importance of the issue and are willing to commit financially.



3. Insufficient Internal Communication

"... the affected parties need to be well informed of the changes and commit to the changes"

Multiple company representatives find inter-departmental communication relatively hard due to the extensive effort needed to communicate scientific knowledge and the importance of the issue. In some instances, feedbacks and comments were needed from their colleagues within a short timeframe, but the responses were often delayed as the relevant colleagues did not see the importance attached and would need further explanation to understand the purpose and the task itself.



4. Lack of Support from Clients and Business Partners

Signatories have expressed disappointment over the lack of support from their business partners and clients. That is partly caused by the lack of awareness on the importance of decarbonisation. At the same time, some of the measures promoted by our signatories were deemed to be unsuitable for business partners' own agenda and business needs. Sometimes upstream and downstream stakeholders were also not willing to participate in and provide data to support decarbonisation initiatives due to the confidentiality of sensitive business information. These barriers have slowed down decarbonisation progress in some cases.



5. Setting a Realistic yet Robust Target

While taking sustainability in mind, profit-making is still one of the top priorities of businesses. Therefore, the unpredictability and uncertainties ahead may prompt companies to pursue a more conservative target. Moreover, companies need to balance their profitability and environmental performance, as well as interests of different internal and external stakeholders. Therefore, they may be more inclined to set less ambitious targets.

Activities in 2019

To support Charter signatories identifying and overcoming different challenges, including the ones mentioned in the previous section, BEC put together the following events and publications in 2019:





Stepping Up to the BEC Low Carbon Charter: How to Set & Achieve Decarbonisation Targets

Two workshops were held on 21 June and 20 September 2019 respectively to assist the BEC Low Carbon Charter signatories and interested companies in operationalising and achieving their decarbonisation targets. Sustainability professionals were invited to share target-setting frameworks, potential roadmaps, tools, and solutions to challenges encountered to provide a clearer picture for companies to advance their decarbonisation journeys. BEC Low Carbon Charter signatories like Swire Properties, Cundall, and Airport Authority Hong Kong also shared their experiences and insights with industry peers during the workshops.



Publication of Executive Briefings

In June 2019, BEC published two executive briefings titled "Setting Robust Decarbonisation Targets for Business" and "Achieving Significant Decarbonisation in the Property & Construction Sector". The two short publications aim to provide a step-by-step guideline for companies to set targets suitable for individual business needs and share operational measures that facilitate robust decarbonisation along the property and construction value chain.

How to Overcome Decarbonisation Challenges

For Companies:

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1. Buy-in from Internal and External Stakeholders

"A visionary view by the management and a commitment towards sustainability and climate protection became a dominated (success) factor."

Backing from the board and executive suite can smoothen internal processes related to the decarbonisation exercise, provide financial resources needed during the process, and keep other departments engaged and committed. With executive endorsement, it is more likely that decarbonisation can be embedded in the corporate culture. Buy-in from company staff is also indispensable to trigger behavioural change, an important element of corporate emission reduction. While support from within is needed for successful decarbonisation, companies should also seek support from external stakeholders. Communication and engagement with customers, clients, and business partners can facilitate the process, as decarbonisation, especially the reduction of Scope 3 emissions, would rely on the contribution of external stakeholders.



2. Internal Capacity Building to Strengthen Support

"Internal education for our team is crucial – people who at the project management level need to know how to ask the right questions and what measurement tools/ targets (KPIs) will be."

As aforementioned, there is still a general lack of understanding of the urgency and depth of climate actions needed in the coming years. Internal capacity building programmes can build up climate awareness at all levels of the company, from frontline staff to C-Suite members. Only with a better understanding on climate change, people will be able to relate this global problem to their own lives and be aware of the importance of the issue. With increasing awareness on the issue, support on emission reduction measures can be built up within the company, and that is vital to the company's decarbonisation journey.



3. Engagement, Review and Monitoring on a Regular Basis

"Regularly review the performance against the target setting to closely monitor the progress and identify any further potential measures to achieve target"

"(The Company) views engagement as a principal tool in securing the necessary support to implement footprint reduction measures"

Deep decarbonisation requires reviewing and monitoring of the emission reduction progress and targets on a regular basis, as the macro environment changes from time to time. Data availability and quality is crucial during these processes, as a substantial amount of good-quality data has to be available to conduct a well-rounded evaluation. Regular engagement with relevant internal and external stakeholders can keep the company informed on stakeholders' expectations and comments on the current state of decarbonisation. This would help enhance company's understanding on ways to bring the cause forward.

For Other Stakeholders:



4. Platform for Experience and Data Sharing

As Hong Kong is still in its early stages of transitioning to a low carbon economy, it is relatively difficult for companies to accurately identify their own standing without enough quality data on decarbonisation. It may also be unclear to some companies what other measures they can adopt after the low-hanging fruits are picked. An experience and data sharing platform will help facilitate dialogues within the business community on target-setting, benchmarking, and best practices.



5. Government Support

Companies reiterated that gaining support from the Government can help forward the decarbonisation agenda. Government's commitment to decarbonise will prompt businesses to recognise the importance of business climate action, and senior management will then be more motivated to engage in decarbonisation and more willing to invest in sustainability and emission reduction initiatives. It is also widely regarded that financial support from the government will be useful to steer decarbonisation as retrofitting casts a substantial financial burden on companies. Governmental monetary support also signifies the administration's commitment in reducing the city's carbon emission.

Worldwide collaborative efforts from the industry, academia and governments would be essential in developing low-carbon or zero-carbon technologies as alternative solutions, in order to help businesses to transition into a low-carbon economy.

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Case Studies

The following section consists of 4 case studies which feature key carbon reduction initiatives of selected companies among the 34 BEC Low Carbon Charter signatories. It is hoped that through sharing the signatories' diverse emission reduction experiences, more companies and business leaders will be encouraged to join force in decarbonisation and bolster corporate climate actions.

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Photo Source: Airport Authority Hong Kong

Since 2008, Airport Authority Hong Kong has established the Hong Kong International Airport (HKIA) Carbon Reduction Programme, which provides a platform for the airport community to measure, reduce and report carbon emissions and share best practices. In the past nine years, AAHK has worked together with its business partners (BPs) to make two pledges to collectively reduce HKIA's airport-wide carbon emissions. By the end of 2015, AAHK and its BPs achieved a 25.6% reduction in airport-wide carbon intensity compared to the 2008 baseline, surpassing the target of reducing carbon intensity by 25% set in 2010. In 2016, AAHK made the second pledge to reduce carbon intensity by a further 10% by 2020 compared to 2015 levels.

Since BPs account for 60% of the airport-wide carbon emissions, AAHK recognises that engagement and collaboration with BPs can accelerate the rate of carbon reduction and hence plays a crucial role in its carbon management strategy. To encourage participation amongst its BPs, AAHK first set up a proprietary online Carbon Audit System (CAS) which provides a useful tool for its BPs to calculate, analyse and report their annual carbon emissions by simply inputting data from easily sourced information such as monthly

electricity and fuel bills. The cost of system development, training and auditing is funded by AAHK, making the programme free for BPs to join.

To support its BPs in meeting the second carbon intensity target, AAHK has further strengthened its engagement and support strategies. This includes an annual Senior Executive Roundtable which brings together senior executives of BPs and raises issues relevant to the high-level "business case" for carbon reduction. In addition, Technical Working Group meetings are held twice every year to equip BPs' technical staff with the latest knowledge on carbon and energy saving technologies, and to encourage the sharing of best practices within the airport community.

The HKIA Carbon Reduction Award Scheme has also been developed to recognise BPs' efforts in reducing carbon emissions. A key aspect of this award scheme is to provide a platform on which BPs with good

carbon management or reduction initiatives can share their achievements across the wider airport community. Many of these best practices have been captured in the "HKIA Carbon Reduction Award Scheme: Best Practice Sharing" AAHK released in January 2020. The publication presents the business case of the 24 winning projects from 13 BPs in the HKIA Carbon Reduction Award Scheme 2018, with an aim to encourage the airport community to make use of their collective experience to further drive carbon reductions in pursuit of HKIA's airport-wide carbon reduction target.



Photo Source: Airport Authority Hong Kong



Photo Source: Airport Authority Hong Kong

As HKIA is reaching the end of its second carbon reduction target, AAHK is developing a new 15-year airport-wide target which will focus on achieving absolute emission reductions. The target setting process will involve and encourage the whole airport community and the key energy supplier to work together to achieve decarbonisation as a key component of Hong Kong's low carbon economy.

BEC Remarks:

AAHK has not only established and implemented comprehensive roadmaps to facilitate decarbonisation. It has also proactively engaged with its business partners to reduce their carbon emissions through awareness raising events and technical programmes that target different groups of the company.

Case Study 2 Kerry Properties Limited (KPL)

Kerry Properties Limited ("KPL") puts sustainability at the heart of its business and leadership. Guided by its Sustainability Policy Statement, KPL aims to mitigate climate change by embedding sustainable decisionmaking and action throughout the lifecycle of its properties, from building design, construction, to operation and maintenance stages. Carbon reduction targets with base year 2011 and 2015 were set for its operations in Hong Kong and the Mainland



Photo Source: Kerry Properties Limited

respectively, including a 30% carbon intensity reduction at Hong Kong head office and properties under management, and a 10% decrease in carbon intensity across four selected properties in the Mainland (both achieved ahead of the 2020 schedule). These targets cover Scope 1, 2 and 3 carbon emissions.

A tiered and robust structure is in place to govern related work. At the helm of this structure is a Sustainability Steering Committee (the "Committee") which is tasked not only to mitigate risk brought forth by climate change, but also to proactively grasp new business opportunities along the way. Established in 2016, this Committee is led by Board members and formed by senior management executives and representatives from relevant departments. The role of the Committee is to discuss, set forth and steer KPL's sustainability agenda in order for the Group to fully embrace sustainability.

To transform the Committee's sustainability initiatives into action, several sub-committees have been formed on the operational level. One example is the Environmental Sub-committee, which is responsible for formulating decarbonisation targets for the Committee's review and endorsement. In view of the urgency in taking more ambitious action towards climate change, KPL also established a Carbon Management Strategy Taskforce in 2020 to explore the feasibility of setting long-term carbon reduction goals, including the adoption of science-based targets.

KPL's commitment to environmental protection is extended to its partners through the creation of a sustainable supply chain. This includes sustainable procurement under a Green Procurement Manual (the "Manual") developed in 2014, specifying the environmental credentials, including products' energy efficiency and use of clean technology. The Manual is mandated for products routinely used in different business activities, including 60 selected items for use by the property management division and the head office, as well as 16 items for property development. This coverage has been extended from Hong Kong to our property management division in the Mainland. Seeking continuous improvement of the products' past performance, latest provisions of green products in the market, and environmental standards are taken into consideration. The implementation of green procurement practices is also included in the internal audit requirement to ensure compliance with the Manual.

In 2018, the Group expanded its effort by releasing the Sustainable Procurement Policy Statement (the "Policy Statement"), which is applicable to all purchasing decisions of the Group. This Policy Statement helps extend the Group's responsible action and consideration to supply chain partners. To assist suppliers to better understand the Policy Statement and the Manual, KPL's property management division has set up a hotline service to handle



Photo Source: Kerry Properties Limited

enquiries. A supplier stakeholder engagement session has also been organised to explain how the Group's green procurement policy was developed and implemented. The session was attended by KPL's management team and more than 160 suppliers were invited to join. As a further commitment to decarbonising its supply chain, KPL has joined Green Council's Sustainable Procurement Charter.

With the implementation of decarbonisation measures, both operations in Hong Kong and the Mainland have achieved the 2020 carbon intensity reduction targets ahead of schedule. The Carbon Management Strategy Taskforce is taking a further step to explore the feasibility of establishing science-based targets. KPL is also reviewing the alignment of future reporting with suggestions from the Task Force on Climate-related Financial Disclosure. This will offer stakeholders a more comprehensive view on how KPL is responding to climate change with regards to governance, strategy development, risk management and metrics and target setting. As an effort to enhance overall resilience to climate change, KPL has devised a set of 2030 targets with reference to the United Nations Sustainable Development Goals, including Goal 13 - Climate Action. Targets were set to promote climate resilience and environmental performance of KPL's properties, with the ultimate goal of driving a lower carbon footprint for its operations.

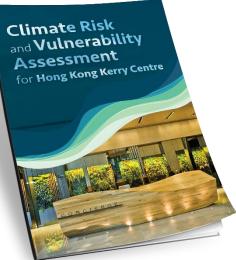


Photo Source: Kerry Properties Limited

BEC Remarks:

Apart from setting decarbonisation targets for its Hong Kong and mainland operations, Kerry Properties Limited has established structures at multiple levels to oversee sustainability and decarbonisation initiatives. Most notably a Carbon Management Strategy Taskforce has been established to formulate climate mitigation and resilience strategies. Policy statement, Green Procurement Manual, and various supporting services are also in place to reduce environmental impacts along the company value chain.

Case Study 3 Sino Land Company Limited



Photo Source: Sino Land Company Limited

Sustainability is integral to Sino Land's business and operations. The Company seeks to 'create better lifescapes' and minimise environmental impact. Sino Land has been working on its decarbonisation journey for more than a decade. In 2015, Sino Land set its second carbon reduction target of 16% reduction in carbon emissions by 2020, based on the 2012 level. By mid-2019, the company has achieved accumulated reduction of carbon emissions of 17.45% against the 2012 level, one year ahead of the target. Sino Land endeavours to reduce the environmental impact of the built environment from master planning to design, construction, operation, maintenance, repurposing and management.

To guide the financing of projects and building enhancements that will deliver environmental benefits in line with its sustainability vision, Sino Land announced its Green Finance Framework in 2018. Identified areas include improving energy and water efficiency, clean transport, sustainable waste management, retro-commissioning and climate change resilience. Examples of features include energy-efficient lighting, chiller replacement and variable speed drives to improve energy efficiency. Under the Framework, Sino Land has raised its first green loan, Sino Land Green Loan 2018, in the amount of HK\$2 billion. It has received Pre-Issuance Stage Green Finance Certification issued by the Hong Kong Quality Assurance Agency. Proceeds from the green loan have been fully allocated to St. George's Mansions.

To reduce emissions from daily operations, Sino Land has formulated Green Office Management Guidelines to provide principles and useful tips for workplace green practices in energy, water and office supplies consumption. Departmental Green Officers have been appointed to promote green practices and initiatives among employees. They are also responsible for carrying out biannual Green Office Audits to assess compliance with the Green Office Management Guidelines. Green Audit site visits are also conducted, covering commercial buildings, residential properties, shopping malls and hotels, to identify areas for improvement and recognise good green practices.

Sino Land supports renewable energy to make its properties more environmentally friendly. The use of renewable energy e.g. solar panels, wind turbines and in-building hydropower system is explored wherever possible. The property management team has in particular enhanced energy efficiency through installing photovoltaic panels in properties under its management. Over 2,700 photovoltaic panels have been installed, generating a total rated power of more than 890kW. To optimise renewable energy harvesting, Sino Land has developed an Integrated Renewable Energy Platform to monitor real-time performances of all photovoltaic panels in its properties, including system status, system capacity and energy output. The company monitors the performance ratio of each site and compare the ratio of the actual and theoretical energy for output data analysis. enabling improvement in system performance efficiency.

Sino Land has set its new decarbonisation target, which is to achieve GHG emission reduction by 30% by 2030 from 2012 level.



Photo Source: Sino Land Company Limited



Photo Source: Sino Land Company Limited

BEC Remarks:

By carrying out retrofitting projects and equipment upgrades to improve energy efficiency, Sino Land has established its own Green Finance Framework to support projects that are able to bring forward environmental benefits. Use of renewable energies, especially solar energy, has been promoted through the installation of PV panels and performance monitoring platform.

Case Study 4 Swire Properties Limited

Driving Long-term Decarbonisation and Climate Resilience

Swire Properties Limited recognises that climate change poses significant risks and also presents significant opportunities to its business, and therefore the company is firmly committed to reducing climate impacts and optimising resource efficiency throughout its



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Source: Science Based Targets initiative

operations. Swire Properties responds to climate change through initiatives on mitigation, adaptation and resilience. To drive long-term decarbonisation for its portfolios around the world that are in line with the Paris Agreement, Swire Properties becomes the first real estate developer in Hong Kong and Chinese mainland to set science-based targets (SBTs), and the SBTs were validated and approved by SBTi in 2019. These approved SBTs are:

Scope 1 and 2	Scope 3	Scope 3	
GHG Emissions Intensity	GHG Emissions Intensity	GHG Emissions Intensity	
↓ 35% per sqm, by 2025	Downstream Leased Assets	Capital Goods	
↓ 52%	↓ 28%	↓ 25%	
per sqm, by 2030	per sqm, by 2030	per sqm, by 2030	
from a 2018 baseline year	from a 2018 baseline year	from a 2016-2018 baseline year	

Source: Swire Properties Limited

Building on the energy-saving efforts under the company's Sustainable Development (SD) 2030 Strategy, Swire Properties has adopted a variety of technologies and strategies at building and portfolio levels to achieve carbon and energy reduction:

- A smart energy management platform has been introduced, which enables better energy data tracking and optimisation through the use of artificial intelligence and machine learning.
- Investing in low-carbon technologies such as HK's first commercial adoption of a bio-diesel trigeneration and adsorption chiller system, and a dual-level roof fitted with a combined green roof and solar PV system.
- Monitoring-based commissioning and retro-commissioning have been introduced to HVAC systems to improve energy efficiency of existing buildings.
- Aiming to expand the use of renewable energy in its Chinese mainland portfolio, the company has conducted a study on renewable energy procurement to evaluate the feasibility, scale, costs and benefits of different available options.
- Since 2011, Swire Properties has also worked with Tsinghua University through its Joint Research Centre for Building Energy Efficiency and Sustainability to develop and test new methods for increasing energy efficiency and improving environmental performance in their projects.

To address the Scope 3 emissions from its downstream leased assets, Swire Properties has taken various measures to help its commercial tenants to decarbonise. Electricity consumption by tenants accounts for approximately 50 to 60% of the total building energy consumption. Therefore, free energy audits have been provided to tenants to help them identify energy-saving opportunities; as of end of 2019, over 9 million kWh potential annual energy savings from tenants' premises have been identified. The Green Kitchen Initiative, targeting Swire Properties' food and beverage tenants, provides technical guidelines to integrate energy-saving and



Photo Source: Swire Properties Limited

sustainable practices into the design and operation of their kitchens. Sustainability fit-out and renovation guidelines are also promoted to office and retail tenants to help them incorporate energy-saving and sustainability considerations into the design and operation of their offices, retail shops and restaurants.

On top of that, Swire Properties has initiated works along its supply chain to reduce Scope 3 emissions (capital goods) generated from its new property development projects. The company has collaborated with supply chain and business partners to reduce the carbon and energy footprints throughout the life cycle of their buildings through procuring building materials with lower embodied carbon, optimisation of building structural design and better site management. An embodied carbon pilot study has been conducted during the construction of One Taikoo Place to understand the carbon emissions of the development project, and the study has identified that construction materials like concrete, rebar and structural steel contributed to nearly 90% of the project's total carbon emission. Based on the results, Swire Properties has developed specific tender requirement on low-carbon concrete, rebar and structural steel to incorporate into standard projects specification.

To reduce emissions from purchased goods and services, another Scope 3 emissions source, a green procurement strategy has been formulated, including guidelines on environmental procurement in accordance with the ISO 14001 Environmental Management System. The green procurement monitoring system has been in place since 2015 to track consumption of office supplies, building services equipment, and building materials that meet specific environmental criteria. In 2019, over HK\$48 million of green procurement spent has been achieved.

As an innovative way to finance and operate a more sustainable and resilient business, Swire Properties has also adopted various green finance mechanisms, including Hong Kong's first certified green bond in 2018, and in 2019, a sustainability-linked loan where the interest rate is indexed against improvement of the company's year-on-year ESG performance. As of end of 2019, 97% of Swire Properties' existing buildings are certified green buildings, of which 84% achieved the highest ratings.

BEC Remarks:

Swire Properties has set science-based decarbonisation targets and has proactively explored how various technologies can improve energy efficiency and resilience. The company has also reduced carbon emissions through offering technical assistance to tenants e.g. free energy audits and sustainability fit-out and renovation guidelines.

Acknowledgements

The BEC Low Carbon Charter Progress Report 2019 is the work of Business Environment Council (BEC)'s Policy & Research team, supported by the BEC Climate Change Business Forum Advisory Group (CCBF AG) Steering Committee.

BEC would like to express our gratitude to the BEC CCBF AG members, technical partner and supporting organisations of the BEC Low Carbon Charter, as well as the BEC Low Carbon Charter 2019 signatories that have greatly assisted in the content and development of this progress report.

Sponsors of the BEC Low Carbon Hong Kong Initiative

BEC Climate Change Business Forum Advisory Group Steering Committee (2019 - 2021)

Airport Authority Hong Kong CLP Power Hong Kong Limited Hongkong Land Limited Link Asset Management Limited NWS Holdings Limited Ove Arup & Partners Hong Kong Limited Siemens Limited Sun Hung Kai Properties Limited Swire Pacific Limited Swire Properties Limited The Hongkong Electric Company Limited

BEC Climate Change Business Forum Advisory Group Steering Committee (2017 - 2019)

Airport Authority Hong Kong CLP Power Hong Kong Limited Link Asset Management Limited Siemens Limited Sino Land Company Limited Sun Hung Kai Properties Limited Swire Pacific Limited Swire Properties Limited The Hongkong Electric Company Limited

Technical Partner

CDP

Supporting Organisations

China Real Estate Chamber of Commerce Hong Kong and International Chapter Limited Hong Kong Green Building Council Limited The Hong Kong General Chamber of Commerce The European Chamber of Commerce in Hong Kong The Canadian Chamber of Commerce in Hong Kong

If you have any enquiries or want to know more about the BEC Low Carbon Charter, please contact: Mr Simon Ng | Director – Policy & Research | <u>simonng@bec.org.hk</u> Ms Chloe Ho | Officer – Policy & Research | <u>chloeho@bec.org.hk</u>

Appendix - 2019 Signatory Progress & Achievements Reporting Form

Introduction

Congratulations on being a signatory of the BEC Low Carbon Charter. Your company is part of an elite group of businesses voluntarily committing to set and achieve decarbonisation targets, disclose progress of setting and achieving targets, and advocate target setting and low carbon practices. Your company's commitment and actions are invaluable in the transformation to a healthy and sustainable Hong Kong.

BEC invites you to share with us your company's journey and progress in working towards the BEC Low Carbon Charter commitments by completing this form. The purpose of this is two-fold: 1) for BEC to understand your company's target setting and decarbonisation experiences and how BEC may offer suitable support, and 2) for BEC to record your company's progress in working towards the commitments with the aim to promote and celebrate the achievements.

By completing and returning this form to BEC, your company fulfils the "disclose annually progress of setting/achieving target(s)" component of the commitment. BEC also encourages your company to disclose progress through other channels of communication.

Handling of Information

The information you provide in this form will be used solely for materials/publications related to the BEC Low Carbon Charter and in anonymised/aggregated forms so that the identity of individual signatories will not be disclosed. The only exception is section E of the form where you have the option to provide information that can be made fully public. BEC strongly encourages you to provide information in that space for sharing your experience and achievements.

Be assured that BEC's aim is to track the collective progress of BEC Low Carbon Charter signatories and individual companies' own progress over time, not to compare companies against one another.

Instructions

Enter information directly into this form and submit the completed form in either Microsoft Word or PDF format by email to <u>jonathanho@bec.org.hk</u>. You will receive an email acknowledging receipt of the form upon successful submission.

You may amend a submitted response at any time before the deadline by re-submitting a revised and completed form to BEC. The newest form will supersede any previously submitted forms and render any previous versions obsolete.

This form should be submitted no later than 15 January 2020. BEC encourages you to submit the form as early as possible. BEC may follow-up and contact your contact person should clarification be needed.

BEC aims to make this reporting process easy and simple for signatories. For each question, you may make use of relevant information that may have already been compiled or be in your company's public reports. If you wish to reference information in your company's public reports, your responses may include "see page [#] of our report [link]", for example.

BEC understands that some signatories may have set decarbonisation targets using energy consumption or other units as units for measurement. If this applies to your company, BEC encourages you to translate the targets and achievements into carbon terms as far as possible as you respond to this form.

For any enquiries, you may contact Mr Jonathan Ho at jonathanho@bec.org.hk or 2784 3956.

A. General Information

1. Company name.

[GRI Standards Disclosure 102-1]	
Click or tap here to enter text.	

2. Describe your organisation's business profile.

Describe your company's business and the sector(s) which your company operates in.

[GRI Standards Disclosure 102-2]

Click or tap here to enter text.

3. Contact person name, title, email address, and phone number.

This person will be your company's primary representative in all BEC Low Carbon Charter-related liaison with BEC. You may appoint multiple contact persons, or request that other colleagues be copied in emails directed to the contact person.

Click or tap here to enter text.

4. What is your reporting period?

You are offered the flexibility to determine your own reporting period. Include start and end dates. All information reported subsequently will be assumed to be of the period reported here.

[GRI Standards Disclosure 102-50]

Click or tap here to enter text.

5. What is your reporting boundary?

The BEC Low Carbon Charter Pathway 1 offers you the flexibility to determine the scope of which the charter applies to your company, e.g. your business in its entirety, your business operations in Hong Kong, or specific segments of your business in Hong Kong, etc. Describe here the boundary which you have set. For signatories signing Pathway 2, describe the boundary that you have submitted or plan to submit to the Science Based Targets initiative. All information reported subsequently will be assumed to be of the scope reported here. If the scope is not your company in its entirety, provide an indication of the size of the covered segments compared to your company's entire portfolio.

[GRI Standards Disclosure 102-46]

Click or tap here to enter text.

B. Motivation

1. Why did your company publicly commit to set and achieve ambitious decarbonisation targets?

Describe why decarbonisation is important to your company. Were there any climate-related business risks and/or opportunities identified or specific incidents that motivated this commitment? Be specific.

Click or tap here to enter text.

2. Has your company observed any business benefits from committing to set and achieve decarbonisation targets?

These may be in the form of strengthened brand reputation, increased customer and investor loyalty, improved resilience and innovation, or greater bottom line savings.

Click or tap here to enter text.

C. Progress

Determine Scope 1 & 2 emissions sources and establish inventory.	Stage 2 Scope 1 & 2 Target + Scope 3 Mapping				
	Set target for	Stage 3 Scope 3 Target			
	Sectore 1 & 2 emissions, reduce Scope 1 & 2 emissions, and begin to map Scope 3 emissions.	Cat target for	Stage 4 Paris-Aligned Target		
		Set target for Scope 3 emissions and reduce Scope 3 emissions.	Set decarbonisation target aligned with climate science and the goals of the Paris Agreement, and reduce emissions accordingly.	Stage 5 Net Zero	
				Set longterm target and strategy for a net zero carbon emission pathway, and reduce emissions accordingly.	

Scope 1, 2, and 3 refer to carbon emissions as defined by <u>Greenhouse Gas Protocol</u>. Net Zero refers to the scenario where there are zero net carbon emissions, where the emission of carbon and the reduction/capture of carbon balances out. Net zero emissions must be achieved eventually to fully mitigate climate change and to stabilise the climate.

1. With reference to the figure above, how far along is your company in its decarbonisation journey?

For example, if your company has just begun the target setting and decarbonisation journey and is currently collecting data to understand your company's emissions, then you are in Stage 1. If your company has set a target through the Science Based Targets initiative, then you are in Stage 4.

Click or tap here to enter text.

2. If your company has not yet set a target but is undertaking preparatory actions, describe the actions and initiatives taken in working towards setting a target.

This may include research on target setting and decarbonisation, speaking and liaising with experts or consultants, communications between colleagues and teams, meetings with senior management, establishing a data collection system, collecting relevant data, calculating a baseline, determining target scope and boundary, forecasting scenarios, etc.

Click or tap here to enter text.

3. If your company has mapped out and established an inventory of carbon emissions, describe your company's carbon footprint.

Specify whether these are Scope 1, 2, or 3 carbon emissions, the units, and any other relevant definitions and supplementary information.

[GRI Standards Disclosure 305-1, 305-2, 305-3, 305-4; HKEx ESG Reporting Guide KPI A1.2]

4. If your company has set a target, describe the target, the method used to determine the target, and when the target was set and became effective.

Include the base year, target year, ambition (reducing how much), units and metrics, and the scope of the target. The scope here refers to Scope 1, 2, or 3 carbon emissions, rather than the reporting boundary described in section A question 5. If your company has set an energy-based target, it is recommended that it be translated into carbon terms.

[GRI Standards Disclosure 103-2]

Click or tap here to enter text.

5. If your company has set a target and has begun decarbonising, describe the decarbonisation actions and initiatives taken in working towards achieving the target.

Actions and initiatives may include new internal policies, upgrading or replacing facilities and equipment, training for staff, procurement decisions, etc.

[GRI Standards Disclosure 103-2; HKEx ESG Reporting Guide KPI A1.5, KPI A2.3]

Click or tap here to enter text.

6. If your company has set a target and has begun decarbonising, how much carbon has been reduced so far and is it on track with the target?

Provide the amount of carbon reduced in both absolute (the total amount of emissions reduced) and relative terms (the proportion reduced compared to the total carbon footprint of the reporting boundary described in section A question 5).

[GRI Standards Disclosure 305-5; HKEx ESG Reporting Guide KPI A1.5, KPI A2.3]

Click or tap here to enter text.

7. How has your company been advocating target setting and implementing low carbon practices?

One of the commitments of the BEC Low Carbon Charter is to "advocate setting decarbonisation targets and implementing low carbon practices to stakeholders".

Click or tap here to enter text.

D. Experience

1. If your company has set a target, what were the key factors for successfully setting targets?

Click or tap here to enter text.

2. If your company has set a target and has begun decarbonising, what were the key factors for successfully decarbonising and achieving targets?

Click or tap here to enter text.

3. Throughout the target setting and decarbonisation process, were there challenges encountered and how were they overcome?

Click or tap here to enter text.

4. What kind of support does your company need to set and achieve decarbonisation targets?

Click or tap here to enter text.

5. Has your company joined other decarbonisation pledges in addition to the BEC Low Carbon Charter?

If yes, describe the pledge(s) and when your company joined them.

Click or tap here to enter text.

E. Tell Your Story

1. Is there any information you would like to share publicly?

You can tell us here which specific responses above can be made public, or to provide us with specific information that can be made public. These may include messages you would like to share with other companies that are also endeavouring to set and achieve decarbonisation targets, quotes or stories from your company staff, etc.

Click or tap here to enter text.

F. Anything Else?

Click or tap here to enter text.

The Low Carbon Hong Kong Initiative

Low Carbon Hong Kong is an initiative of BEC which aims to support businesses develop strategies and targets aligned with the goals of the Paris Agreement. Since 2016, milestones under the initiative include the publication of the introductory report *Low Carbon Hong Kong: Supporting Business to Set Targets*, a series of workshops for different business sectors backed up by research, and engagement activities with C-Suite. All the early works culminated to the <u>BEC Low Carbon Charter</u>, launched in 2019, under which companies pledge to step up their decarbonisation endeavours and commit to set and achieve decarbonisation targets. Since the launch of the charter, BEC has hosted workshops and published two executive briefings *Setting Robust Decarbonisation Targets for Business* and *Achieving Significant Decarbonisation in the Property & Construction Sector* to support signatories of the charter, and businesses more generally, to set and achieve decarbonisation targets.

About BEC

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 low carbon economy.

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