

# Climate Action in Hong Kong: The World's First Climate Change Museum

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Blessed with a fine natural harbor and a hardworking, entrepreneurial population, Hong Kong is one of Asia's most impressive success stories. However, its relentless drive for economic prosperity during the second half of the 20th century came at a high price to its environment. While, by the 1970s, environmental degradation had already become a concern in some parts of the world, Hong Kong only began to become environmentally conscious two or three decades ago.

By the beginning of the 21st century, the negative effects of its economic development – large-scale pollution, a cramped and unhealthy urban cityscape, the despoliation of the territory's magnificent natural environment – had become too noticeable to be ignored any longer.<sup>1</sup> Attitudes had also changed due to growing popular awareness of the threat posed by global warming. Calls for a sustainable approach were first made by NGOs and local activists, such as Greenpeace Hong Kong and WWF Hong Kong. These calls struck a chord locally, and were soon backed by the territory's government. There is now a growing consensus in Hong Kong that we need to act, and to act now, to combat global warming and to be responsible stewards of our environment. Earlier this year, in response to Fridays for Future, two student protests were organized, and around a thousand students and their parents joined in. Their slogan "Seas are rising, so are we" reverberated. Success in the battle ahead is all but certain and will, to a large extent, depend on winning public support for the changes we will have to make to our lifestyles. Here, public education has a crucial contribution to make.

## The inception of the Jockey Club Museum of Climate Change

The Chinese University of Hong Kong (CUHK) has been making vigorous efforts to mitigate the effects of climate change. It is committed to building a sustainable future for Hong Kong through education, research and community outreach and services, and its promotion of environmental sustainability makes an important contribution to the realization of its vision. A little under two decades ago, CUHK was the first local university to conduct an environmental audit, and since 2010 has been implementing various policies on campus to promote the ideal of sustainability. It also boasts the world's first climate change museum. The idea of a museum was first mooted in 2010, when Dr. Rebecca Lee, a local explorer who set up the Polar Foundation in 1997, sought a location to house a collection accumulated during her many years of fieldwork in the Arctic, Antarctic and around Mount Everest. This proposal was enthusiastically adopted by CUHK. In December 2013, with the support of a generous donation from the Hong Kong Jockey Club Charities Trust, the Jockey Club Museum of Climate Change (MoCC) was established on CUHK's campus. The museum's mission is to educate the public about the potential impacts of the global climate crisis and to promote climate action.

In addition to delivering the message that climate change has profound environmental and social consequences for the human race, the MoCC is a vocal advocate of social and sustainable development as well as of climate action. The exhibition is therefore laid out in such a way that it first shows the alarming

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Inside the Jockey Club Museum of Climate Change

Photo: Jockey Club Museum of Climate Change

impact climate change has on the remote polar regions, which are particularly vulnerable to global warming, and then guides visitors back to their own communities, where they learn how climate change will affect them, what scientific solutions are available, and how both communities and individuals can take action to combat climate change.

To guide visitors on this fascinating educational journey, the MoCC adopts a positive stance in its public education work. Its exhibitions showcase innovative research on the environment, energy and sustainability conducted by CUHK's researchers, and they also publicize the Jockey Club Charities Trust's initiatives, such as responsible consumption and production. Dr. Rebecca Lee's collection is on permanent display in the museum, expounding the many layers of climate change evidence.

## The MoCC's strategy to tackle climate change in Hong Kong

The MoCC wants to enhance knowledge, attitudes and behavior in relation to climate change within and beyond Hong Kong. Regardless of age, religion and ethnicity, it is each global citizen's responsibility to take action to combat climate change. In order to raise public awareness of this global challenge and to encourage individuals to enlist in this common struggle, the MoCC considers the ability, background, education level and interests of

its audiences when designing its exhibitions, seminars and workshops. Because it appreciates the importance of educating the next generation, it places great emphasis on promoting the topic of climate change in schools. So far, the response has been promising. The MoCC has served more than 765,000 visitors and event participants since its establishment, and six out of every ten visitors are students.

The MoCC strives to present every exhibition professionally and to make it attractive by incorporating the latest developments in climate change and sustainability research, introducing new components and technologies that generate and maintain public interest and support, and by integrating art into its science communication. The MoCC tracks its performance and listens to the audiences through an ongoing impact survey. Audience feedback has invariably been positive.<sup>2</sup> Visitors have come away with a greater knowledge of climate change and climate action, while those who have taken part in seminars and workshops have had an enjoyable experience and also learned how they, as individuals, can help to make a difference.

## Promoting sustainability

In 2017, the Jockey Club Charities Trust pledged its support for the three-year 'JC-CUHK Climate Action' program. As part of the program, the MoCC is undertaking a range of environmental education activities, including large-scale annual carnivals, as well as eco

tours, visits and workshops to disseminate climate change and sustainability messages to a broad audience. It also strives to recruit young leaders to the cause of sustainability by training museum ambassadors, building a platform for networking and information exchange, and organizing programs for university and secondary school students, so as to promote public awareness of the need for climate action and sustainable development.

## Sustainability Hub and Action Monitor

MoCC's exhibitions and programs also aim to take full advantage of the resources of modern technology. Most people profess some concern for the environment, however our good intentions do not always make us change our behavior. There is therefore a niche for a well-curated resource hub with an online collection of tools and resources to dramatize the serious issues at stake and persuade people to 'go green.' The Sustainability Hub has been created to offer expert tips, and a wide range of educational materials are being constantly updated to inspire individuals to take action, change their behavior and adopt a more eco-friendly lifestyle. The Sustainability Hub is complemented by the 'Action Monitor,' an online tool that encourages individuals to set their own green targets through a checklist that covers a range

of activities from carbon reduction to resource conservation and sustainable living (e.g. eating less meat and more vegetables, saying no to shark fin soup, etc.), and to monitor their own progress towards them. Accomplishments are recognized through an e-badge scheme, which motivates commitment and guides development in terms of environmental stewardship.

## Mobile Jockey Club MoCC

The 'Mobile Jockey Club MoCC' was launched in December 2017 to provide a multimedia-enhanced, interactive exhibition series designed to disseminate climate change and sustainability messages and educate the public about the impact of climate change in an enjoyable way. This mobile mini-museum uses portable modular structures that can be set up in a few hours, allowing MoCC exhibits to be taken to schools, community centers and other public spaces. This outreach approach has greatly extended the scope and reach of the museum's public engagement. To date, the mobile museum has presented two important exhibitions: 'Polar Vision' and 'Climate Change and Me.' 'Polar Vision' allows its audience to visualize climate change from a polar perspective. 'Climate Change and Me' reveals how human activities are closely related to climate change and promotes important green concepts, such as clean energy, a low-carbon lifestyle and sustainable development.



Sustainability Hub Homepage

## Waste Reduction Project

The MoCC is educating Hong Kong's coming generations about the importance of waste reduction. Waste is a serious problem in Hong Kong. Around 7.5 million tons of waste are generated every year in Hong Kong, of which over 70% end up in landfills. This approach is ultimately unsustainable. Waste reduction plays a crucial part in environmental protection, and it is easy to show that all of us can make important individual contributions. The MoCC's Waste Reduction Project is aimed at students in Hong Kong's secondary schools. It seeks to increase awareness among young people about the waste issue and the need for environmentally sustainable waste management. The MoCC invites schools to join this project, and participating schools are challenged to

such as fabric and wood. The workshops also offer the opportunity to encourage participants to help combat climate change by embracing low-carbon local traveling and avoiding, where possible, high-carbon air travel. Eco tours are an extended module of the museum visit.

## The Drama of Climate Change and a Low-Carbon Future

With public sector support from the local Environment Conservation Fund, the MoCC is running a two-year engagement project, 'The Drama of Climate Change and a Low-Carbon Future,' underpinned by a 'Theatre in Education' approach and experiential learning. The aim of the project is to encourage Hong Kongers, especially our young people, to embrace the impor-



Waste Reduction Project

Photo: Jockey Club Museum of Climate Change

examine their waste generation, identify ways of achieving zero waste, take action to reduce waste, and, most importantly, encourage students to spread the message of 'waste less, save more' to their families and friends.

tance of making green choices and taking green action to ensure a low-carbon future.

## Public engagement

Besides offering in-house guided tours of the museum, the MoCC also organizes activities such as workshops and eco tours. All of these have the same goal – to spread the message that anyone, at any time, can help to create a more sustainable environment. Most of the workshops promote zero waste. Participants can experience upcycling of various materials

## Summary

The MoCC constantly updates its exhibitions in order to provide comprehensive information about climate change, covering social, environmental, and scientific perspectives in local and global dimensions. A new exhibition presenting scientific methods used to investigate Earth's climate history, will be launched in late 2019 / early 2020.

The MoCC has been actively building partnerships with local green groups, government and international institutions for exhibitions

and environmental education programs and activities. It is linked with the global community through the United Nations' Sustainable Development Solutions Network (SDSN), which aims to make universities, research facilities, civil society organizations, businesses and other knowledge centers focus on practical problem solving for sustainable development. The MoCC currently serves as the secretariat for the Hong Kong Chapter of the SDSN and makes use of its unique status as a university museum to promote the UN's 17 Sustainable Development Goals (SDGs).

Finally, the MoCC believes that international cooperation, that is the Paris Agreement, is crucial in tackling climate change, yet that individual climate action is equally important. We all, regardless of our ages and walks of life, have the power to make green choices. Each and every individual action counts and will be a building block towards combating climate change. Act now for ourselves and for our children! ■■■

<sup>1</sup> According to the Hong Kong Observatory, between 1885 and 2018 the average temperature of Hong Kong has been rising at 0.13°C per decade. The temperature rise appears to have accelerated in the latter half of the 20th century, reaching 0.17°C per decade during 1989–2018. The average temperature rise has been accompanied by an increase in the number of hot nights (days with a minimum temperature of 28°C or above) and very hot days (days with a maximum temperature of 33°C or above), and a decrease in the number of cold days (days with a minimum temperature of 12°C or below). Extreme precipitation events have also become more frequent. Over the past few decades, several new hourly rainfall records were set at the Hong Kong Observatory, while previously a new record had only been set every few decades.

<sup>2</sup> MoCC regularly conducts impact surveys, mainly in the form of questionnaires and personal interviews. Over 90% of respondents state that they have become more aware of climate issues, and are willing to make, or actually have made changes in their behaviors.