# PARIS WATCH
## HONG KONG REPORT CARD
## 2020

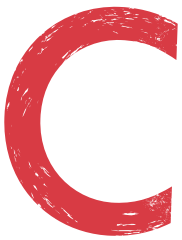
Student:

**Hong Kong**

Subject:

**Paris Climate Agreement - Mitigation and Adaptation**

Average Climate Score:

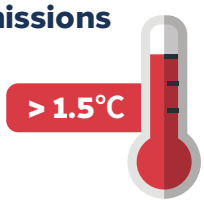
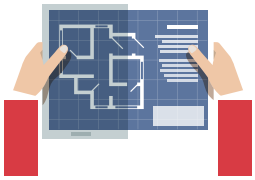
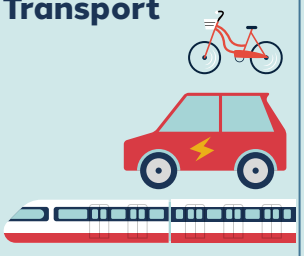


Vital time has been lost awaiting a long-term decarbonisation goal. The measures needed to achieve a low-carbon future have long been clear, but they require immediate action.

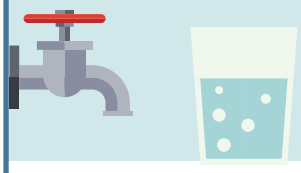
# Paris Climate Agreement Mitigation and Adaptation

PARIS WATCH

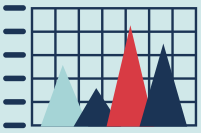
## Mitigation – Cutting Hong Kong's Carbon Emissions

| Subject | Comments | Mark |
|---|---|---|
| **Greenhouse Gas Emissions**   | **Is Hong Kong cutting greenhouse gas emissions fast enough to achieve the goals of the Paris Agreement?**<br>The ultimate emissions reduction target is important, but so is the trajectory of change as this determines how fast we use up the world's carbon budget between now and mid-century.<br>*Remarks:*<br>• *Hong Kong's current published climate action plans are not enough. The announcement that the government will strive to achieve carbon neutrality by 2050 is a critical move, but it is not yet backed by any roadmap, milestonesor action plan. Hong Kong remains behind many of its peer cities in this respect.* | C- |
| **Renewable Energy Generation**  | **Is Hong Kong transitioning to a low carbon economy by developing renewable energy supplies in the right way and at a suitable rate?**<br>Renewable generation of electricity lies at the heart of global efforts to reduce greenhouse gas emissions.<br>*Remarks:*<br>• *Disappointing. Hong Kong has yet to have an action plan to harness offshore wind potential or floating solar at scale despite earlier studies pointing to the potential from such initiatives.*<br>• *HK relies on fossil fuels without a solid plan to transition to renewable energy.*<br>• *The proliferation of small rooftop solar plants incentivised by the feed-in tariffschemehas demonstrated potential and public appetite for renewables. The capacity of scheme, however, is currently limited by design.* | D+ |
| **Energy Efficiency in Buildings**  | **Are plans and policies in place to enable high enough levels of energy efficiency in buildings to meet climate targets?**<br>Buildings consume nearly 90% of Hong Kong's electricity usage.<br>*Remarks:*<br>• *Green buildings should be mandatory and the government should lead the research to enable this move. The Building Energy Efficiency Ordinance is nearly ten years old, covering only certain categories of building and certain aspects of building energy efficiency.*<br>• *The current Hong Kong BEAM green building certification scheme is abused and the evidence for positive impact is missing.*<br>• *A lifecycle approach to buildings that included embedded carbon from materials and emissions from the construction process would help more comprehensively control the emissions from Hong Kong's buildings is absent.* | C+ |
| **Low-emission Transport**  | **How is Hong Kong doing in ensuring a low-carbon future when it comes to transportation?**<br>Local transport is the second-biggest user of energy and emitter of greenhouse gasses in Hong Kong.<br>*Remarks:*<br>• *Electric bus and ferry schemes consist of long-term small-scale pilots; this is poor. There is no action plan to promote cycling or pedestrianisation or to reduce private car ownership. The electric charging infrastructure needs more work, along with attention to green hydrogen as a fuel of the future.*<br>• *The impending release of an EV Roadmap by the government in the first quarter of 2021 needs to contain sufficient targets to support the pledge to become carbon neutral before 2050.* | C- |
| **Waste Management and other Energy Use**  | **Are waste management and waste disposal initiatives keeping up with Hong Kong's plans for a low-carbon future?**<br>A third important area for energy efficiency concerns the way we dispose of waste, both in terms of reducing the waste we produce and treating our remaining waste.<br>*Remarks:*<br>• *Shelving of the Municipal Solid Waste Charging Scheme is a strategic, environmental and communications failure on the part of the administration.*<br>• *Any future scheme must take social impact and public perceptions into consideration.*<br>• *Upstream policies reducing the generation of waste such as packaging and circular economy ideas have yet to be addressed. This includes poor support to local recycling industries.* | C- |

## Adaptation – Building a Safe and Sustainable Future for Hong Kong

| Subject | Comments | Mark |
|---|---|---|
| **Protecting Health**<br>• Hot weather<br>• New diseases<br>  | **Are we on top of the problem of new and more widespread diseases resulting from higher average temperatures?**<br>**Are the right policies and health systems in place to protect people vulnerable to higher average temperatures?**<br>*Remarks:*<br>• *Risk assessment and rapid response policy for vulnerable people exposed to heatwaves and diseases is needed. Four separate waves of COVID-19 infection in the city indicate the importance of such pre-emptive plans.*<br>• *With the worsening housing problem in Hong Kong, there is no government policy to protect the health of residents living in substandard flats when the temperature increases. The recent lockdown in Yaumatei and Jordan related to COVID-19 stands as a warning of potential problems from heatwaves and heat-related infections.* | D+ |
| **Safe and Secure Water Supply**<br>  | **Is water security an issue in Hong Kong and are we doing enough to prepare for it?**<br>Disruption and safety of water supply is seen as one of the challenges posed by climate change.<br>*Remarks:*<br>• *Over-reliance on cross-border supplies is combined with a lack of concern about water scarcity. A long-horizon assessment of scarcity would include a view of the potential for problems in the stability of supplies from across the border in the face of both droughts and floods. Studies on ways to expand and secure a minimum volume of local waterand diversity of supply – including the potential for desalination plants – are also needed.* | B- |
| **Reducing Fire Risk**<br>  | **Are larger wildfires a risk for Hong Kong and are we adequately prepared?**<br>*Remarks:*<br>• *Measures have been satisfactory for responding to (but not preventing) isolated hillfires. We need research and policy options on risk and response to larger-scale fires such as those witnessed in other parts of the world.* | B |
| **Floods & Landslips**<br>  | **Is Hong Kong ready for the impact of heavier rainfall?**<br>Extreme weather brings periods of heavier rainfall raising the risks of floods and landslips.<br>*Remarks:*<br>• *Good systems exist for landslip prevention under present conditions. We also see improving drainage systems. Nevertheless, as with all adaptation risks, the city needs to regularly review preventive and responsive measures as climate extremes get worse.* | C+ |
| **Typhoons & Sea Level Rise**<br>  | **Are there adequate policies and plans in place to protect Hong Kong from super typhoons, heavier rainfall and rising seas, particularly whey they occur in combination?**<br>*Remarks:*<br>• *We see no overall plan for coastal defence infrastructure. This compares to Singapore government's statements that US$72 billion may need to be spent to protect against sea level rise in the decades ahead.*<br>• *Work is needed on low impact development and rules on coastal construction.* | D+ |
| **Natural Coastlines and Biodiversity**<br>  | **How is Hong Kong doing in protecting nature for all?**<br>Protecting biodiversity and ecosystems is not only an end in itself, but also a good indicator of the social and psychological health of a community. Good policies on biodiversity also indicate that a territory is showing responsibility and playing its part to protect the common good of earth as a whole.<br>**Is Hong Kong acting to stamp out trade in endangered species?**<br>In addition to protecting our indigenous flora and fauna, protection of diversity includes reducing the risk to life forms through the illegal consumption and trade in endangered species.<br>*Remarks:*<br>• *Investment priority for large-scale reclamation schemes raise questions about the priority given to either marine biodiversity or preparation for rising sea levels.*<br>• *Conserving Hong Kong's country parks stands as a positiveexample that can be extended to biodiversity protection and nature-based coastal protection more generally.*<br>• *News reports indicate Hong Kong still has a leaky system for prevention of trade in endangered species despite strong efforts in this area.* | C |

## Systems – Enabling Institutions, Knowledge and Finance

| Subject | Comments | Mark |
|---|---|---|
| **Governance**  | **Has Hong Kong established the right leadership with the power to drive climate action?**<br>Essential to the achievement of any climate planswill be effective governance. This includes competent climate leadership with the right level of authority and the mandate to drive change, backed up with support from the very top, along with effective institutions and adequate funding<br>*Remarks:*<br>• *The system led by the Chief Executive is not functioning.*<br>• *There is no clear leadership to drive the interrelated areas related to climate change: adaptation, mitigation, resilience and finance.* | D+ |
| **Finance**  | **As a global financial centre, is Hong Kong positioning itself to play an adequate role in financing climate action, both locally and internationally?**<br>The Paris Climate Agreement highlights the importance of financing to achieve the climate goals.<br>*Remarks:*<br>• *The Cross-agency Working Group on Green and Sustainable Finance has been set up and a strategic plan is in place. Financial regulators are preparing to strengthen climate related risk reporting. Hong Kong, however, is a regional laggard in market-based mechanisms such as emissions trading systems, carbon taxes or renewable portfolio standards.* | C |
| **Technology**  | **Is Hong Kong playing its part developing and applying the technology and science for renewable energy, energy efficiency and carbon removal?**<br>*Remarks:*<br>• *Green technology research is of a lower priority to tech initiatives on financial technology, robotics and even gaming. Environmental research efforts in universities are fragmented, and these have not translated into marketable solutions. Commercial research is almost non-existent.*<br>• *It is too early to see if the Green Technology Fund and the New Energy Transport Fund have produced results that contribute effectively to climate action* | C- |
| **MRV – Monitoring, Reporting and Verification**  | **Is Hong Kong producing and distributing the information and analysis necessary for driving and further developing our climate action policies?**<br>Measuring the impact of climate change, measuring the effectiveness of mitigation and adaptation initiatives and reporting these measurements in a transparent and accountable way is an essential part of effective climate action.<br>*Remarks:*<br>• *Statistics on emissions, weather patterns and pollution levels are generally available. Climate change information, however, is not integrated in other areas of planning and design such urban development and health services.*<br>• *The Hong Kong Observatory is under the Commerce and Economic Bureau, and it is important to ensure that the implications of scientific data stand apart from shorter-term economic policy influence.* | C |

# Head Teacher's Summary

The city's recently-stated ambition to achieve net-zero emissions before 2050 needs to underpin all climate mitigation action from this moment forward. There is no time to waste in producing a comprehensive, costed action plan containing regular milestones and setting out responsibilities both within the government and beyond into the business and finance sectors.

The setting out of a more ambitious climate action plan for the city is seriously overdue, and Hong Kong has taken far too little action in the intervening period despite having identified undeniable areas for urgent action on energy and efficiency. This delay may come back to haunt us.

Essential for inclusion in any climate action plan must also be measures to adapt to the changing climate to keep the people of the city safe and healthy and to build resilience to shocks in our society and our economy.

2021 is likely to be the year in which our Report Card will be able to assess if the city is working hard enough to set suitable plans to meet the challenge of climate change or if it will fail.

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The scores in the report result from averaged marks provided by a panel of experts comprising*:

- Ir. Albert Lai -- CEO, Carbon Care Asia Ltd; Founding Chair of The Professional Commons and HK People's Council for Sustainable Development
- Prof. Dennis Leung -- Head, Department of Mechanical Engineering, University of Hong Kong; Board Member, HK Institution of Science
- Prof. Michael Leung – Professor, School of Energy and Environment; Director, Ability R&D Energy Research Centre, City University of Hong Kong
- Mr. Ringo Mak – Co-founder, 350HK
- Prof. Ng Mee Kam -- Vice Chair, Department of Geography and Resource Management; Director, Urban Studies Programme; Associate Director, Institute of Future Studies, Chinese University of Hong Kong
- Prof. Shelley Zhou -- Adjunct Associate Professor, Department of Civil and Environmental Engineering, Hong Kong University of Science and Technology

*in alphabetical order of panelists' surname*