

Press Release

NEW! 8-Factsheet Survival Guide for HK to survive rising seas

A series of 8 factsheets that illustrate how Hong Kong can survive existential threats from rising seas by CWR

Hong Kong, 23rd August 2022 – CWR releases a new [8-Factsheet Survival Guide](#) to help Hong Kong navigate and survive rising seas, which pose multiple existential threats to the region. The HKSAR is behind other island financial hubs: New York and Singapore are using projected levels of rising seas for adaptation planning that are 4-6x HK's!

If HK gets it wrong, [up to 82% of the HKSAR's revenue streams](#) could be underwater. Plus, we could lose our [homes](#), and [critical infrastructure](#) to permanent submersion unless we take proactive action to effect transformative "low-regret" adaptation to rising seas. Also, many are not aware that much of HK's [basic needs are low-lying](#) – rising seas could threaten up to 80% of HK's water supply, almost 100% of electricity supply and 100% of oil bunkering; even [our food supplies](#) and [internet access could be disrupted](#) as data centres are vulnerable.

Sadly, the [poor will suffer more than the rich](#) from coastal threats. But even the rich, high up in the Peak may not be safe as the entire [HK Island could be stranded](#) by rising seas.

If this is not alarming enough, the persistent heatwaves, droughts, floods and wildfires around the world, as bad as they are now, will only get worse as we are failing to rein in emissions. With global inertia around climate change as the G7 introduce loopholes in their fossil fuel investment pledges, the HKSAR can no longer ignore the increasingly probability of a future with multi-metre sea level rise (SLR).

Reality will bite hard as the current policy path will likely deliver rapid SLR after around 2060, which is not that far away. Global scientific consensus, under the IPCC, warned policymakers last year that 2m to 5m of SLR "[cannot be ruled out](#)" by 2100 and 2150.

New York and Singapore have clearly thought these climate scenarios through and are planning adaptation for 2-3m of SLR by 2100. So must Hong Kong re-examine its exposure to coastal threats and be climate ready; after all let's not forget the HKSAR is [made up of 200+ islands](#).

"We can no longer stop seas from rising but we can defend our city from becoming the next Atlantis. [Over 43,000 more residential, commercial and industrial buildings will be submerged if we get sea level rise wrong when planning adaptation](#)" said Dr. CT Low, who heads the project to Re-IMAGINE HK as rising seas redraw HK's coastlines.

To protect our island-lifestyle, the HKSAR government must [select the right levels](#) to [futureproof its revenues](#), [protect homes](#) and [trade](#) from going underwater, and [secure basic needs](#) as well as [local connectivity routes](#) as they are all low-lying. CWR's factsheets show how vital it is for the HKSAR to "get it right".

"We've prepared this set of 8 factsheets so that Hong Kongers can "see" these risks for only then can we lean into them to see the opportunities" explained Dr. Low. *"Why can't the Northern Metropolis be a state-of-the art futureproof coastal hub that is not just vibrant but resilient to rising seas and searing heatwaves?"* Set to provide 1.6 million more new homes to HK, the Northern Metropolis could provide the perfect opportunity: *"it could be a grand pilot that showcases transformative adaptation for other coastal cities in the world"* Dr. Low enthused.

Indeed, such *"proactive climate adaptation"* action is a part of China's new National Climate Change Strategy 2035, which urges Southern China to focus on rising temperatures and ocean-related risks. Moreover, re-imagining a climate ready HK is according to CWR, [exactly in line with the four proposals espoused by President Xi](#) in his speech in HK during the 25th Anniversary.

Adapting to the wrong SLR levels could also bring down HK's financial sector. According to the HKMA, stress tests of physical risks across 27 banks revealed that around HK\$1trillion of mortgages/property loans are vulnerable to climate risks, mainly from flooding & typhoons. According to CWR, [impacts could be much worse](#) as these stress tests were conducted for a 2050 timeline which points to only around half a metre of SLR; imagine the losses at 2-3m, they could trigger systemic shocks across HK banks.

"Hong Kong's future as a global finance hub is tied to what its government does to protect and adapt the HKSAR for clearly material coastal threats" said Dharisha Mirando, CWR's Finance Engagement & Water Risk Valuation Lead. There are also adaptation inconsistencies across government departments in Hong Kong. *"While HK should aim its decarbonisation actions for a low emissions scenario, [it should not use a low-medium emissions scenario to plan adaptation especially when there's now a 50/50 chance we will breach 1.5°C by 2026.](#)"*

“Hong Kong must close existing gaps and bring its adaptation levels closer to those of other financial hubs to stay relevant, otherwise a credit rating downgrade could be on the cards. Finance must start collaborating and engaging with the government to ensure Hong Kong is resilient, for only then will the financial sector be resilient to chronic climate risks like sea level rise” urged Miranda.

Let there be no doubt – rising seas are pervasive threats and will impact every aspect of a HKer’s life. CWR hopes that its factsheets will help banks and corporates prepare for the run up to mandatory disclosure of material climate risks under the new ISSB standards as well as catalyse the HKSAR to drive transformative adaptation across HK.

“We must set up a coastal defence task force that not only straddles all departments but has teeth to make tough decisions – such as which areas should be protected, and which abandoned to rising seas” said Debra Tan, the Head of CWR. *“It will not be easy, but HK must be “courageous” and “pragmatic” as President Xi advised in his speech in July”*.

President Xi urged HK’s new administration to *“earnestly address people’s concerns and difficulties in daily life”*, including housing – one of the top issues that Hong Kong people care most about. *“What the people call for, we must strive to deliver”* he said. The average person needs to save 100% of their earnings for 21 years to buy a property; so ensuring our homes are safe from coastal threats must be a top priority. As CWR’s analysis shows a triple whammy hit for the poor from rising seas, the HKSAR government must proactively respond to deal with such climate injustice.

Harmony and stability are paramount, but climate impacts disrupt these; so adaptation must be the top priority of the new government. And because HK cannot be climate resilient without the rest of the Greater Bay Area (GBA), the SAR must work together with the GBA to safeguard both “harmony & stability” for the HKSAR. We must start to take existential threats like rising seas seriously as climate change waits for no one.

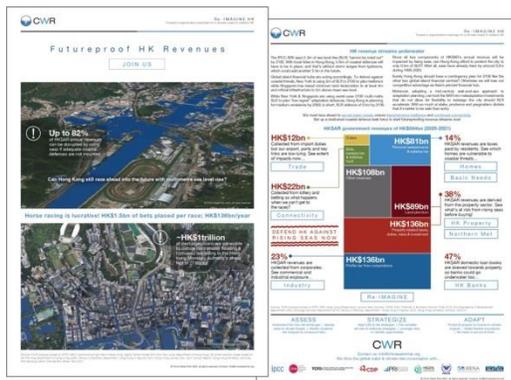
Climate change will redraw Hong Kong’s coastlines. It’s time HK actively responds – we must adapt to thrive. As CWR’s Tan said: *“This is a once-in-a-lifetime opportunity to Re-IMAGINE HK, we must grab it to build a city that is carbon positive, climate ready and resilient. But we must be mindful not to “Build Back Better”, but to “Build Forward Better” to cater for the deep uncertainties ahead from climate risks.”*

CWR urges Hong Kongers to innovate reach-for-the-sky financial, economic, engineering, tech, design, nature-based, policy as well as societal solutions to Re-IMAGINE HK. And because the youth will bear the brunt of climate impacts, re-imagining a futureproofed HK should be an inclusive exercise – the young and old, the poor and rich – together we can build a Hong Kong that still thrives in a vibrant GBA despite rising seas.

Invest wisely in the future ... start by arming yourself with knowledge from our 8-Factsheet Survival Guide for HK to survive rising seas – they are stuffed full of surprising as well as alarming facts that are essential for this changing climate.

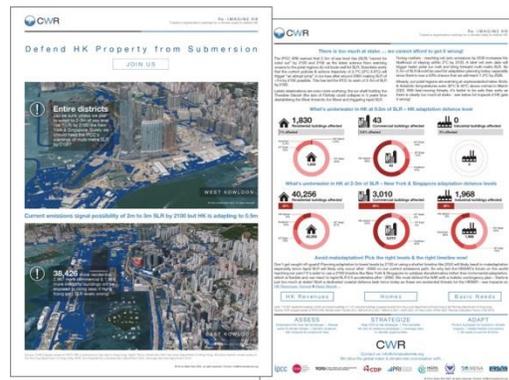
Access all 8-Factsheet Survival Guide for HK to survive rising seas [here](#); or access them individually below

Futureproof HK Revenues



- 3D maps of sea level rise impacts in Happy Valley & Sha Tin racecourses, major revenue generators for the HKSAR
- 101 on the latest science and levels NYC & Singapore are adapting to compared to the HKSAR
- Breakdown of the 82% of HKSAR government revenues vulnerable to coastal threats

Defend HK Property From Submersion



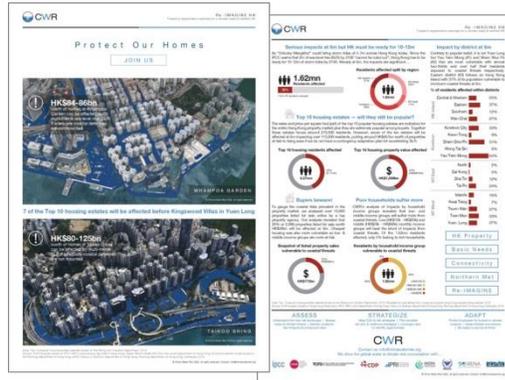
- 3D maps highlighting extensive sea level rise impacts to West & East Kowloon districts
- Analysis of residential, commercial and industrial buildings affected at HK’s vs. NYC/Singapore’s adaptation levels
- Overview of maladaptation + better timeline & scenario planning to defend HK property from submersion

Shore Up Trade Resilience



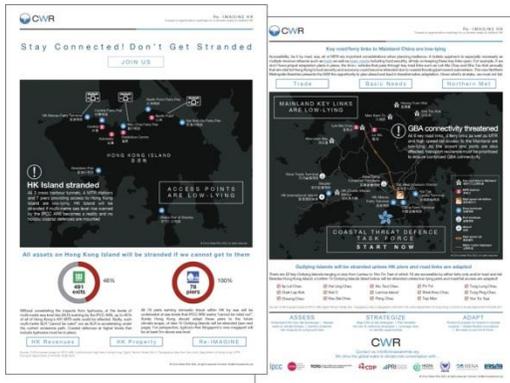
- Impact maps highlighting how HK's global trade hub status is at risk due to potential ports & airport submergence
- HK port & airport rankings in APAC and trade statistics highlighting cargo volumes at risk to rising seas
- Analysis of HK trade statistics vs HK GDP indicating material exposure to coastal threats

Protect Our Homes



- 3D impact maps + value-at-risk stats for Whampoa Garden & Taikoo Shing, two "Top 10" HK housing estates
- Regional & district-level analysis of HK residents affected by coastal threats; income analysis show poor suffer more
- Top 10 housing estate residents & value affected + snapshot of listed property sales vulnerable to rising seas

Stay Connected! Don't Get Stranded



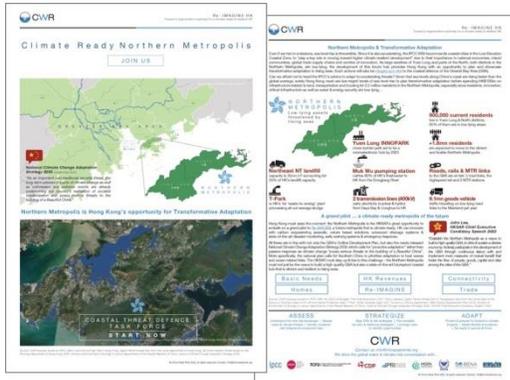
- Map showing how HK Island could be stranded as access points are low-lying from MTR, ferry to tunnel entrances
- Wider analysis of vulnerability of all of HK's 491 MTR exits, 78 ferry piers & Outlying Islands to coastal threats
- Map showing vulnerability of key links to the Greater Bay Area; all vital for trade & food security

Secure Basic Needs



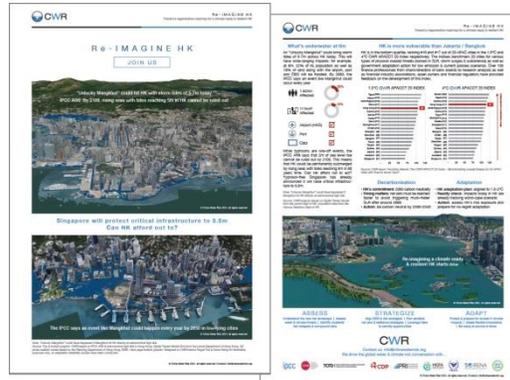
- At-a-glance % exposure to sea level rise – HK's water, powergen, bunkering, food storage, data centres & sewage
- Overview of HK's reliance on Mainland China: trade values & import of food/fuel/water exposed to coastal threats
- Highlights opportunity & necessity to collaborate with the Greater Bay Area for long term resilience of the HKSAR

Climate Ready Northern Metropolis



- 3D & 2D maps highlighting the risks facing the Northern Metropolis and the urgent need for adaptation
- At-a-glance stats of low-lying assets & residents in the Northern Metropolis threatened by rising seas
- Highlights opportunity for Northern Metropolis to be HK's pilot for transformative adaptation in the Greater Bay Area

Re-IMAGINE HK



- 3D maps showcasing sea level rise impacts in Central & Kowloon, plus re-imagining a "safe HK"
- "Unlucky Mangkhut" impact analysis as 70% of commercial activity & 27% of population are in low-lying reclaimed land
- Overview of HK's low ranking in the CWR APACCT 20 Index; HK ranks lower than Jakarta & Bangkok

Media

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About CWR

CWR (China Water Risk) is a non-profit think tank that aims to create a world where water and climate risks are embedded in business & finance. Since its launch in 2011, it has worked from its Hong Kong base to engage with global business and investment communities in understanding and managing various types of water risks in China and across Asia. CWR's collaborative reports with financial institutions, IGOs, scientists as well as government related bodies have been considered ground-breaking and instrumental in understanding Asia's water challenges. They are widely cited by the media, academia, IGOs and finance as well as the IPCC. CWR also works with corporates and the financial sector to help them assess, strategize and adapt to water-related climate risks. Together, we can make better decision-making today for a water secure tomorrow. Join the conversation at www.chinawaterrisk.org

ASSESS

Understand the new risk landscape | Assess water & climate threats | Identify clustered risk hotspots & compound risks

STRATEGIZE

Align ESG & risk strategies | Plan sensible net zero & resilience strategies | Leverage risks to identify opportunities

ADAPT

Protect & prepare for locked-in climate impacts | Ideate flexible innovations | Be ready to survive & thrive

CWR

Contact us: info@chinawaterrisk.org

We drive the global water & climate risk conversation with...



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