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ECOLOGICAL
FOOTPRINT

HK

2019

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醒啲 **RETHINK**

改變生活·變好世界
CHANGE THE WAY WE LIVE



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ECOLOGICAL FOOTPRINT 2019

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MESSAGE FROM THE DIRECTOR OF CONSERVATION

If everyone led the lifestyle of Hong Kongers, 4.2 Earths would be required to fulfil our resource needs, a significant increase from the 2016 figure of 3.9 Earths. Hong Kong's Ecological Footprint is the second worst per-capita in the Asia-Pacific region and tenth worst globally.

Half of the Hong Kong's Ecological Footprint comes from food (21%), clothing (15%), personal transportation (8%), and electricity (7%).

Since the 1970s, Hong Kong's economy has seen an average of 8.9% growth of GDP in real terms annually. Its Ecological Footprint recorded an annual 5% growth till the mid-90s. During the Asian Financial Crisis in 1997 and 1998, both GDP and Ecological Footprint dropped. As GDP dropped so did our strain on natural resources.

Consistent trends of GDP and Ecological Footprint were seen during the SARS outbreak in 2003 and the global financial crisis in 2007 and 2008. Since 2009, the economy started to recover, and the Ecological Footprint has worsened ever since. With the continual growth of our GDP, our Ecological Footprint may continue to increase if we adopt a business-as-usual approach.

A shift in our daily habits, coupled with support from business and government, can help to stem the runaway consumption that is impacting the habitats and natural resources we depend on. Our work in Hong Kong aims to minimize the gap between awareness and sustained action by incentivizing businesses and consumers towards sustainable consumption practices. This includes our work to transform Hong Kong to a shark fin free city, and back the increased availability of sustainable seafood.



David Olson
Director of Conservation

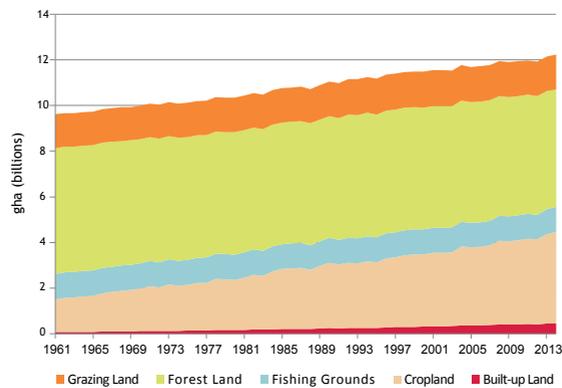
GLOBAL TREND

From 1961 to 2014 the total global biocapacity increased by 27%*. However, during that time, the global population grew from 3.1 billion to 7.3 billion, shrinking each person's available biocapacity from 3.1 gha to 1.7 gha (-46%). The global per capita Ecological Footprint, however, moved in the opposite direction, increasing from 2.3 gha to 2.8 gha (+24%).

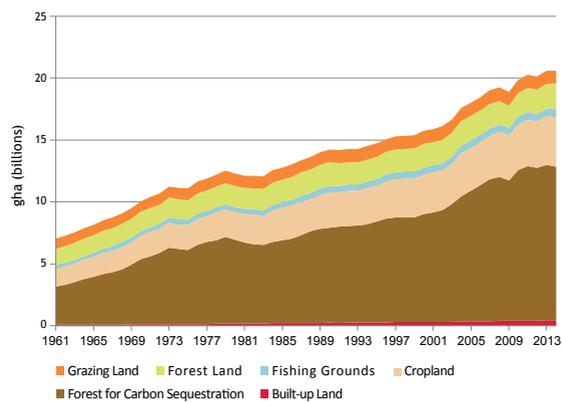
* Global Footprint Network provides benchmark Ecological Footprint results from 1961 up to 2014 (the year for the most recent available data).

Earth Overshoot Day marks the day we bust our ecological budget. In other words, the date when we have used up all the resources our planet can renew in an entire year. The global per capita Ecological Footprint (2.8 gha) exceeds the global biocapacity (1.7 gha), leaving a deficit. This is known as ecological overshoot.

WORLD BIOCAPACITY BY LAND TYPE



WORLD ECOLOGICAL FOOTPRINT BY LAND TYPE



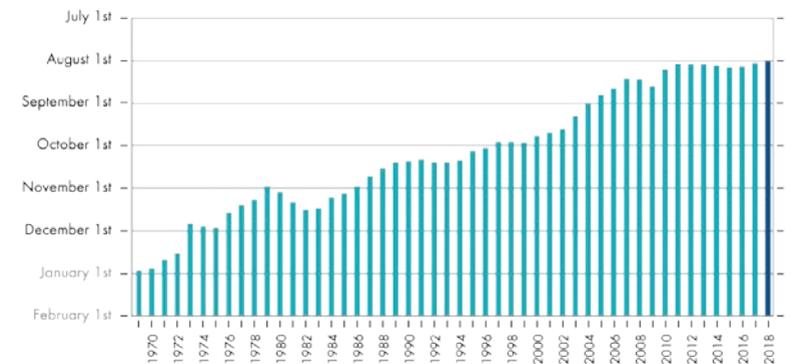
EARTH OVERSHOOT DAY 1969-2018



1 Earth



1.7 Earths



Source: Global Footprint Network National Footprint Accounts 2018



HONG KONG TREND

Hong Kong's per capita Ecological Footprint grew from 1.8 gha in 1961 to 7 gha in 2014, which is 2.5 times the world average. Due to a lack of productive land, Hong Kong has a limited biocapacity (0.09 gha and 0.03 gha per person in 1961 and 2014, respectively) and is dependent on external biocapacity, in other words, imported natural resources. In total, about 90% of the seafood products we consume are imported from more than 170 countries and territories.

Hong Kong's per capita Ecological Footprint is the 10th worst in the world and is the 2nd worst in the Asia-Pacific region. Globally, humanity uses the equivalent of 1.7 Earths to provide the resources it needs. But if everyone led the lifestyle of Hong Kongers, 4.2 Earths would be required to sustain our consumption habits and absorb our waste. Hong Kong Overshoot Day arrived on 28 March.



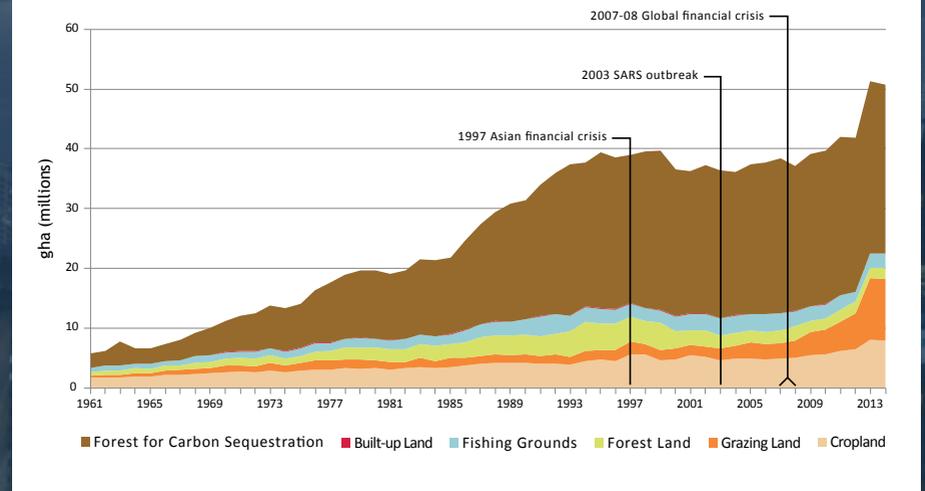
HONG KONG'S ECOLOGICAL FOOTPRINT



HONG KONG'S BIOCAPACITY

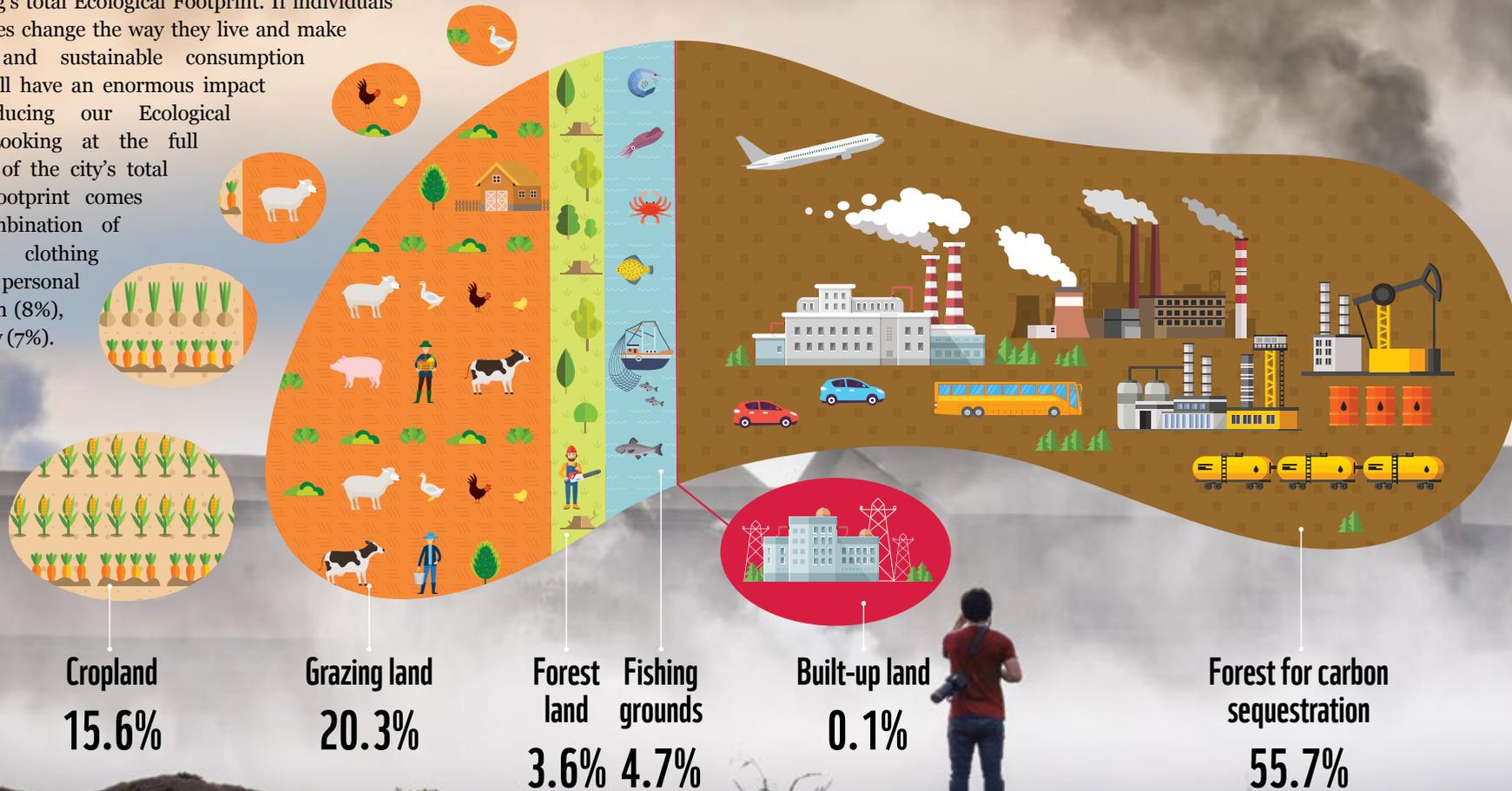


HONG KONG ECOLOGICAL FOOTPRINT



PRODUCTIVE LAND & SEA

Hong Kong's Ecological Footprint is influenced directly by households, including direct consumption by individuals and businesses and indirectly by gross fixed capital formation and government expenditure. Daily household consumption accounts for 78% of Hong Kong's total Ecological Footprint. If individuals and companies change the way they live and make responsible and sustainable consumption choices, it will have an enormous impact towards reducing our Ecological Footprint. Looking at the full picture, half of the city's total Ecological Footprint comes from a combination of food (21%), clothing (15%), personal transportation (8%), and electricity (7%).



Cropland: The area required to grow crop products, including livestock feed, fish meal, oil crops, and rubber.

Grazing land: Comprises all grasslands used to raise livestock for meat, dairy, hide, and wool products.

Forest land: The area of forest required to support the harvest of fuel wood, pulp, and timber products.

Fishing grounds: The area of marine and inland waters used to harvest fish and other seafood products.

Built-up land: Land covered by infrastructure, such as transportation, housing, and industrial structures.

Forest for carbon sequestration: The land required to sequester the anthropogenic emissions of CO₂ not absorbed by oceans.



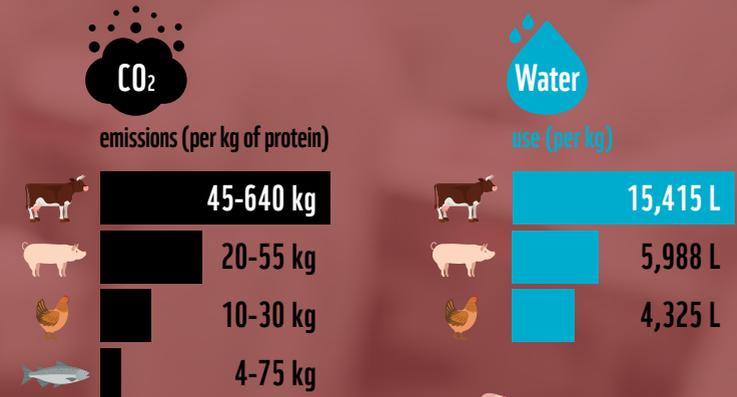
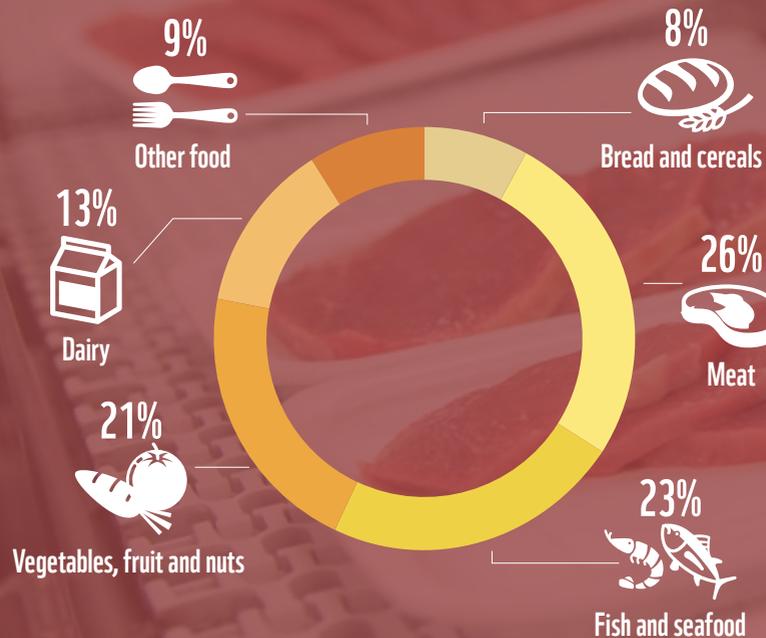
FOOD 21%

Food accounts for 21% (1.47 gha) of Hong Kong's total Ecological Footprint. The top contribution in this category comes from meat at 26%, while fish and seafood have the second highest Ecological Footprint at 23%.

If unsustainably managed, food production can have a massive impact on the environment. This is especially true for meat due to the high amount of natural resources, such as energy and freshwater, required for its production.

The adoption of a flexitarian diet, which consists mostly of plant-based foods while allowing meat in moderation, significantly reduces greenhouse gas emissions. Food waste is an important issue. In 2017, a total of 3,662 tonnes of food was disposed accounting for 34% of the total municipal solid waste in Hong Kong.

It's time to change the way we live, eat more plants, eat less meat, and avoid food waste.



CLOTHING 15%

Clothing accounts for 15% (1.02 gha) of Hong Kong's total Ecological Footprint. In this category, the forest area used to sequesterate CO₂ accounts for 45% (0.46 gha), grazing land for 28% (0.29 gha), and cropland for 23% (0.24 gha).

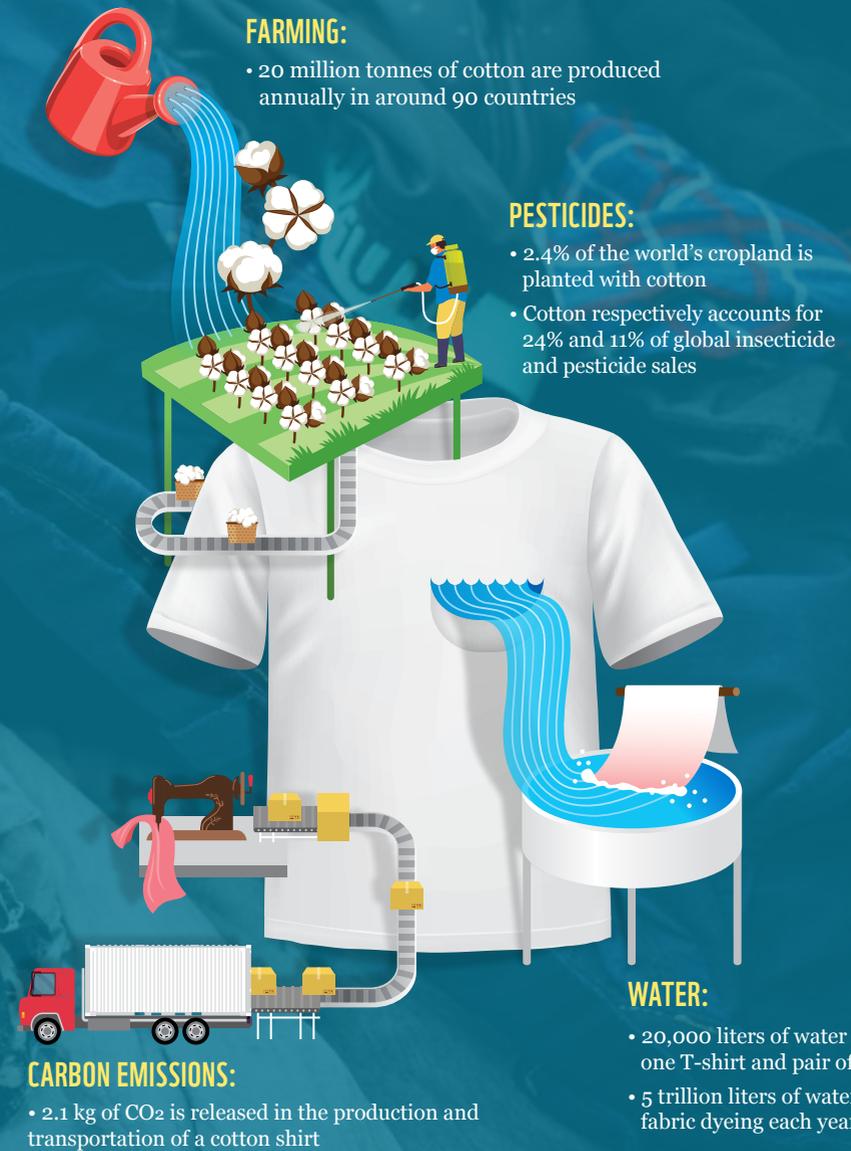
The environmental cost behind apparel production should be addressed along the entire production chain, from raw material production to "last mile" transportation. The use of natural resources includes freshwater and natural fibers such as cotton, wool and hemp. Making these fibers requires the use of productive land which increases our Ecological Footprint.

Reducing our clothing consumption is one way to solve the immediate need of safeguarding renewable natural resources. Think twice before you buy, and when there is a need to make a purchase, choose second-hand or clothes that are made with more environmental-friendly materials such as a mix of recycled fibres with organic cotton.

Support a circular economy with textile upcycling as part of your lifestyle, sending your discarded clothing to be made into new pieces rather than being sent to landfill.



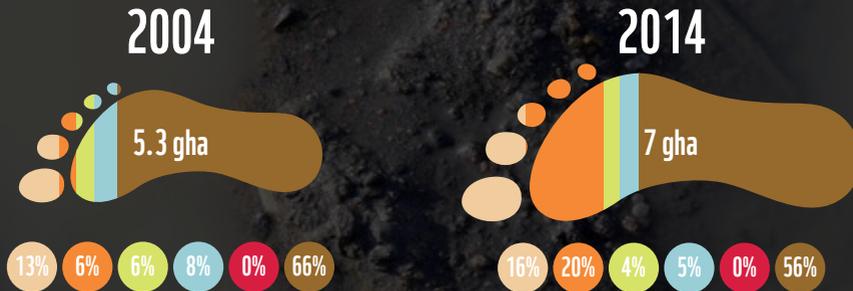
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CASE STUDIES

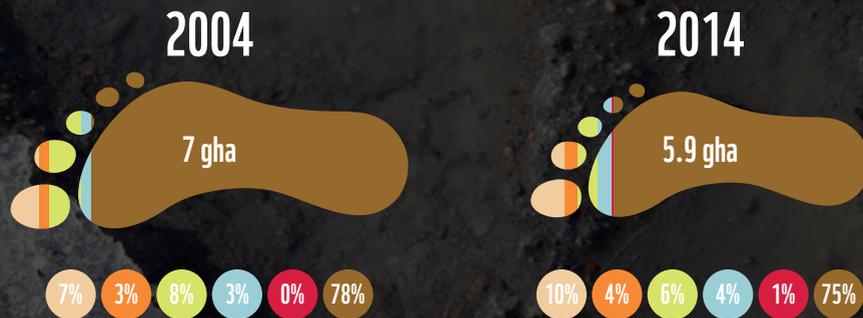
There is only one planet with limited productive land to generate resources and services for all 7.7 billion people. As such, it is imperative governments consider how to achieve a balance between biocapacity and Ecological Footprint.

HONG KONG



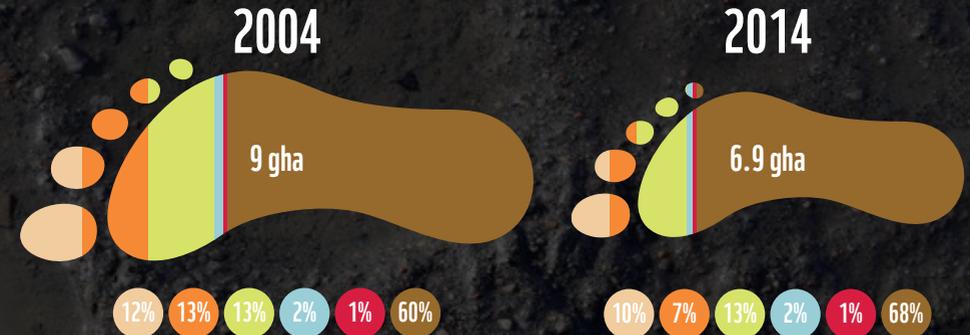
An average Hong Konger needed 7 gha in 2014, a 33% increase in the decade since 2004. Both the GDP and per capita Ecological Footprint increased by 68% and 33% in the same period. Over the same period, an average citizen's demand on grazing area and cropland had increased the most by 358% and 55% respectively.

SINGAPORE



An average Singaporean needed 5.9 gha in 2014, a 16% drop in the decade since 2004. Singapore experienced a rapid GDP growth by 67% in the same period. An average Singaporean's demand on forest area for products and for carbon sequestration dropped by 38% and 19%, respectively.

AUSTRALIA



An average Australian needed 6.9 gha in 2014, a 24% drop in the decade since 2004. There was an upturn in GDP by 49% in the same period. An average Australian's Ecological Footprint for all six land types decreased, most significantly for grazing area and cropland, at 60% and 35%, respectively.

To achieve a decrease in our Ecological Footprint, Hong Kong needs to seriously address overconsumption, improve energy efficiency, increase its use of renewables, support green buildings, and switch to LED lighting.



Cropland



Grazing land



Forest land



Fishing grounds



Built-up land



Forest for carbon sequestration



CHANGE THE WAY WE LIVE

Nature provides humankind and other species with vital resources and ecological services. The rate of humanity's demand on the renewable natural resources is faster than it can be replenished and our Earth is at stake of running out. Hong Kong is a consumption-driven city and we rely heavily on the resources imported from other parts of the world. For Hong Kong to become a more sustainable city and to tackle overconsumption problems, we need new policies, innovation, and for people to rethink and reduce their personal consumption. To achieve a decrease in our Ecological Footprint, Hong Kong needs to seriously address overconsumption, improve energy efficiency, increase its use of renewables, support green buildings, and switch to LED lighting. It is time for everyone – policy makers, finance, businesses and individuals – to take sustainability into consideration to make informed decisions on financial investment and in business operations.



HK'S ECOLOGICAL FOOTPRINT

2nd worst

Hong Kong's Ecological Footprint is the second worst per-capita in Asia and tenth worst globally

4.2 Earths

If everyone led the lifestyle of Hong Kongers, 4.2 Earths would be required to fulfil our resource needs



Food & clothing

Food and clothing account for 21% and 15% of our total Ecological Footprint, respectively

28 March 2019

The date we would use up the annual supply of natural resources if everyone on Earth lived like Hong Kongers



Working to sustain the natural world for people and wildlife
為人類及野生生物延續大自然

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