



Trees • COOLiving

樹立低碳生活

種出綠色未來

EMSD Summit, Imaginovate 2016
Lifestyle of Health & Sustainability

Professor Vivian Taam Wong

Chairman, Friends of the Earth (HK)

17 November 2016



Our Vision

A **H**ealthy and **S**ustainable environment for all

LOHAS = Lifestyles of Health and Sustainability



Our Mission

Focuses on protecting our local and regional environment

Offers equitable solutions to help create environmentally sustainable public policies, business practices and community lifestyles

Engages **government, business and community** to act responsibly



Climate Movement

1992
UNFCCC

2009
Copenhagen
Accord

2011
Durban
Platform

Phase 1
1991 - 1994

Phase 2
1995 - 2005

Phase 3
2005 - 2011

Phase 4
2011 - 2015

2015
COP21

1997
Kyoto
Protocol

2010
Cancún
Agreement

What Can We Do?

International

COP21 | Paris Agreement 2015

China

National determined contribution

Hong Kong

Sub-national contribution

Industries

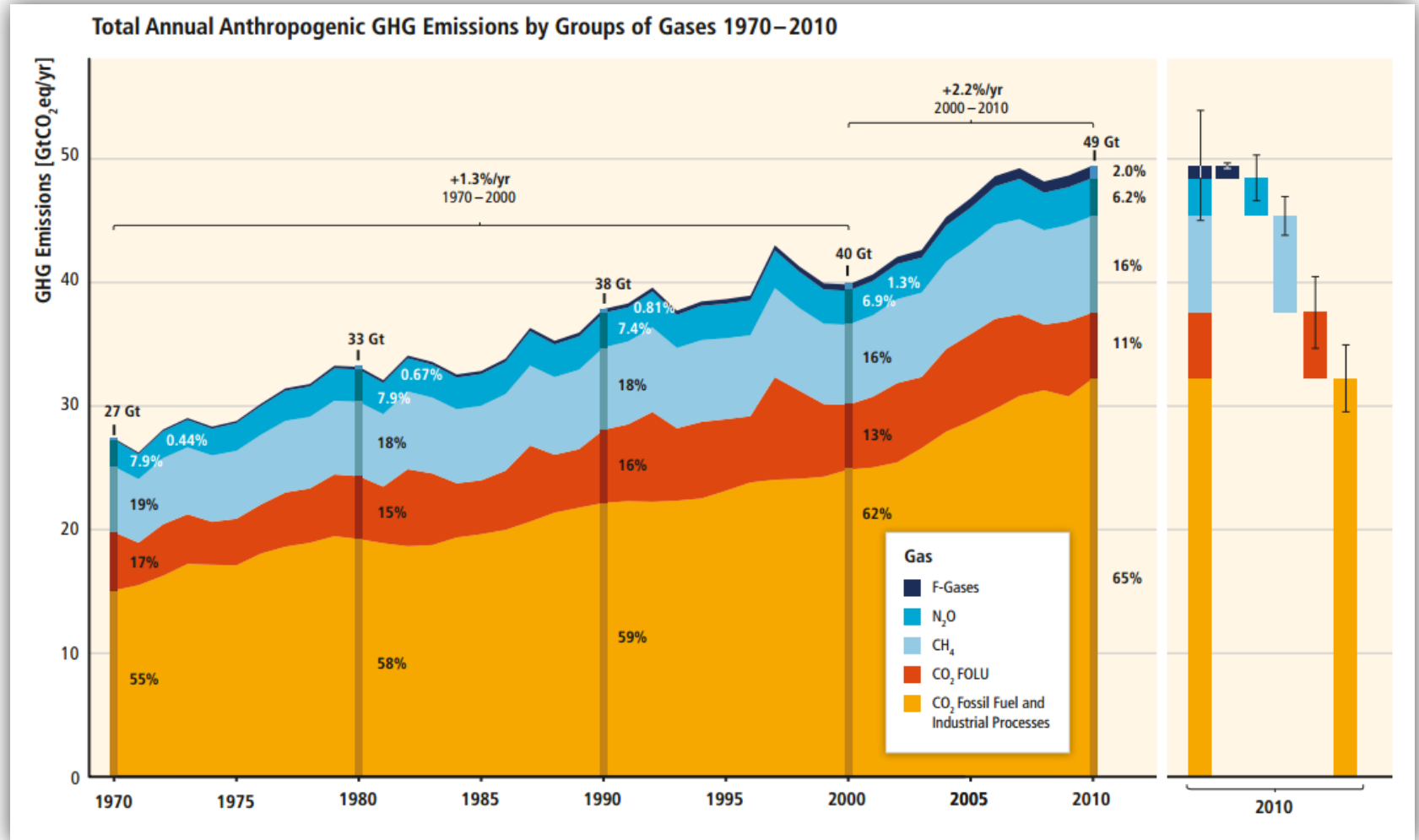
Individual

Civic Society

Green House Gas Emission



Rising Global Emissions

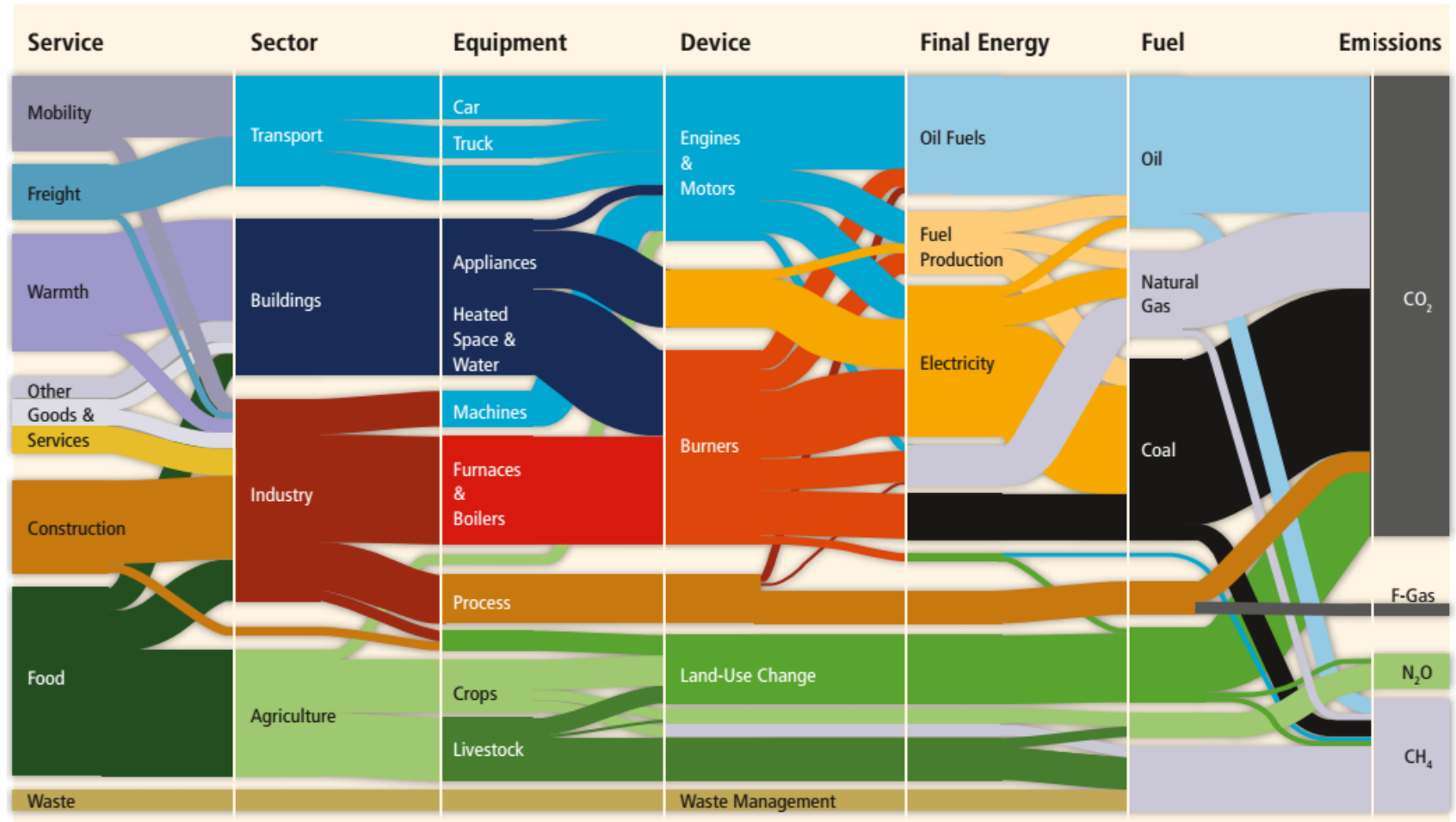


Sector-wise Energy Use

Energy Supply:	14.4 GtCO ₂ /year
Industry Production:	13 GtCO ₂ /year
Agriculture:	10-12 GtCO ₂ /year
Buildings:	8.8 GtCO ₂ /year
Transport:	6.7 GtCO ₂ /year



Sector-wise GHG Emissions



Country-wise Targets



60-65% below 2005 carbon intensity by 2030

Peak carbon emissions by 2030

Supply 20% of energy with non-fossil fuels by 2030

Increase forest stock to 4.5 billion m³ by 2030



26-28% below 2005 GHG emissions by 2025



40% below 1990 GHG emissions by 2030

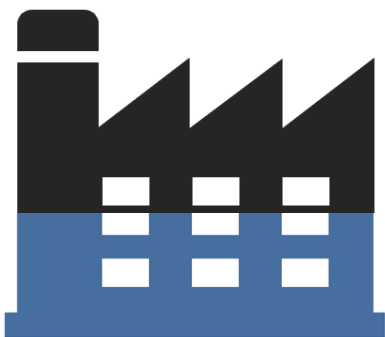


30% below 2005 GHG emissions by 2030



26-28% below 2005 GHG emissions by 2030

Hong Kong's Target



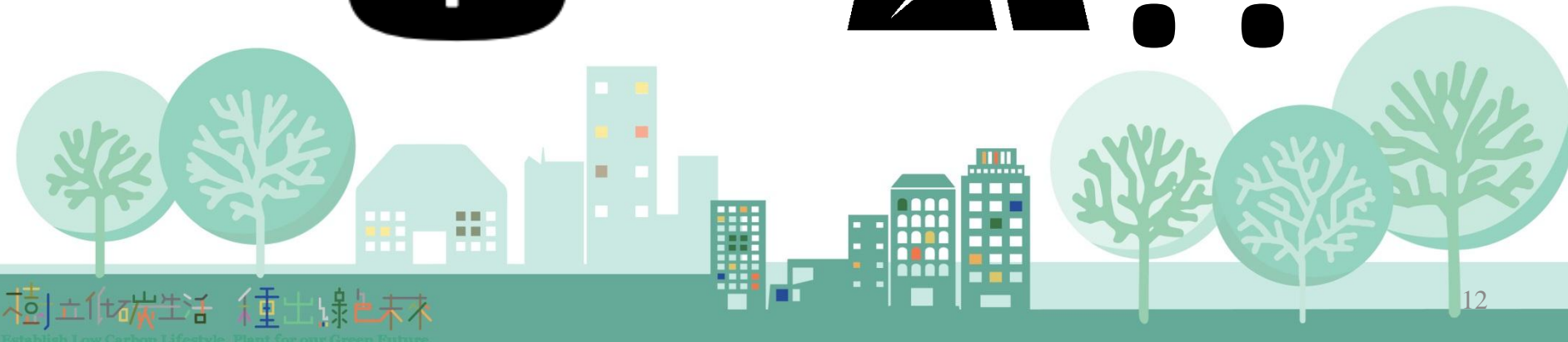
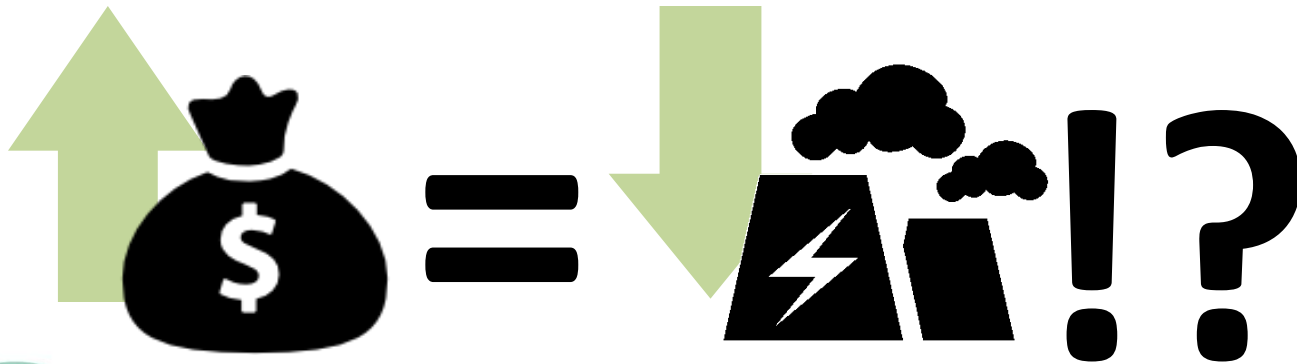
Reduce Carbon Intensity
50-60% of 2005 level
by 2020



Reduce Energy Intensity
40% from 2005 level
by 2025

Absolute vs. Intensity

Absolute = Actual emission of CO₂ or CO₂-eq
Intensity = Measures against unit of GDP



Renewable Energy Targets

Hong Kong

No targets, only guidelines

New York

30% renewable energy by 2030

Vancouver

100% renewable energy by 2050

China

15% non-fossil fuels by 2020

European Union

27% renewable energy by 2030

Smart City Wien

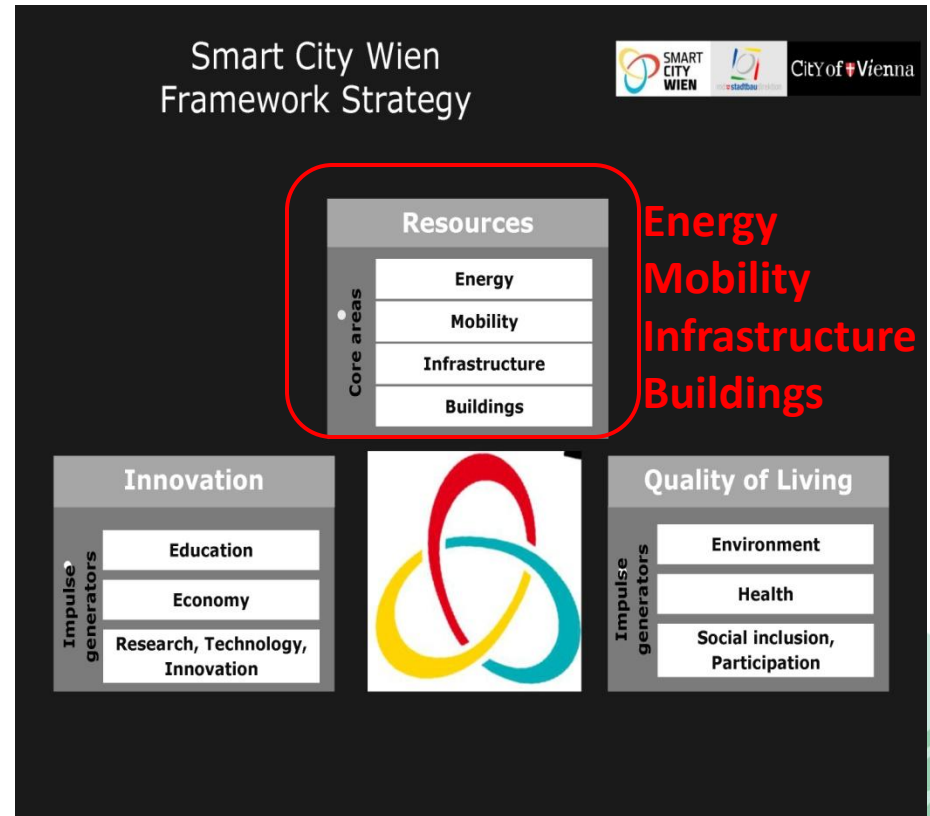
Moves Vienna towards post-carbon future ...

With a target of 2050 and a baseline year of 1990, the city of Vienna has dedicated to achieving an ...

80% reduction of CO₂

and

50% of energy from renewable sources



Waste Reduction Target

Hong Kong

Reduce **40% of 2011** per-capita MSW by 2022

Taiwan

Reduce **70% of 1998** MSW by 2020

Singapore

Recycle 70% of waste by 2030

New York

Divert 75% of waste from landfills by 2030

Vancouver

Reduce 50% of 2008 waste going into landfill or incineration

GHG Reduction Opportunities

零碳零廢

食

Trees
Agriculture

Food
Apparel

Industry

衣

Waste
Circular
Economy

Building

Freight

Transport

住

行

LOHAS



LOHAS

Lifestyle

Of

Health

and

Sustainability





COOL Ambassadors 樂活十宜

“For individuals to pledge LOHAS”

1. Refuse · Reduce 源頭減廢
2. Recycle · Reuse 循環再用
3. Redesign · Repair 升級再造
4. Order Less · Waste Less 適食 · 惜食
5. Less Meat · More Green 多菜少肉
6. Power Smart 善用能源
7. Drive Less · More Mass Transit 綠色交通
8. Hike · Bike 行路踩單車
9. Urban Farming 都市農業
10. Fair Trade 本土 · 公平貿易

Trees · COOLiving – Climate Change Mitigation

To raise public support for planting and water source conservation in both Mainland and HK.



World Water Day

22 March 2015

Trees planting helps produce **food**, supply **air**, clean **water**, generate **jobs** and remember **loved ones**.



Dongjiang River Source Tree Planting – Other Initiatives



1. Dongjiang Forum
2. The Sons of Dongjiang Volunteer Programme
3. Water Challenge
4. Environmental Education Centre in Xunwu County
5. Eco-toilet and Biogas Pond
6. Environmental Education Project

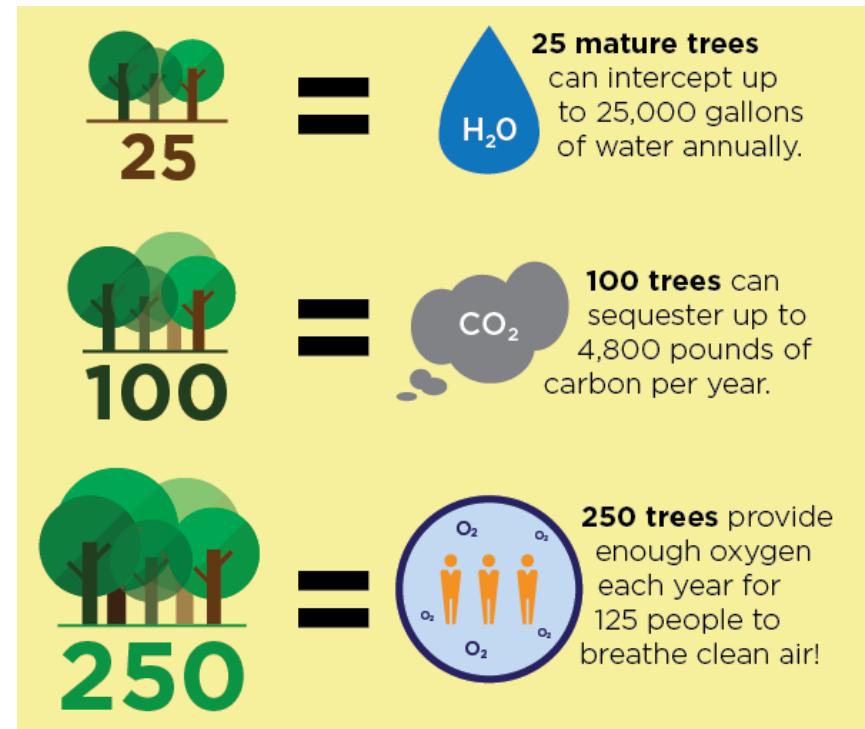


Agriculture, Trees



Health Benefits of Trees

1. Filter airborne pollutants. The rate of asthma fell by 25% for every extra 340 trees per square kilometer
2. Promote exercise, decrease BMI and diabetes
3. Decreases in tension, confusion, anger and depression
4. Recover from stress and lower blood pressure
5. Improve study performance
6. Decrease sick leave
7. Lowering heat



Planted 80,000 trees

Absorbs 500 tonnes of CO₂ annually



Review of Tree Planting Challenge (2005 – 2014)



(2005)



(2006)



(2007)



(2008)



(2009)



(2010)



(2011)



(2012)



(2013)



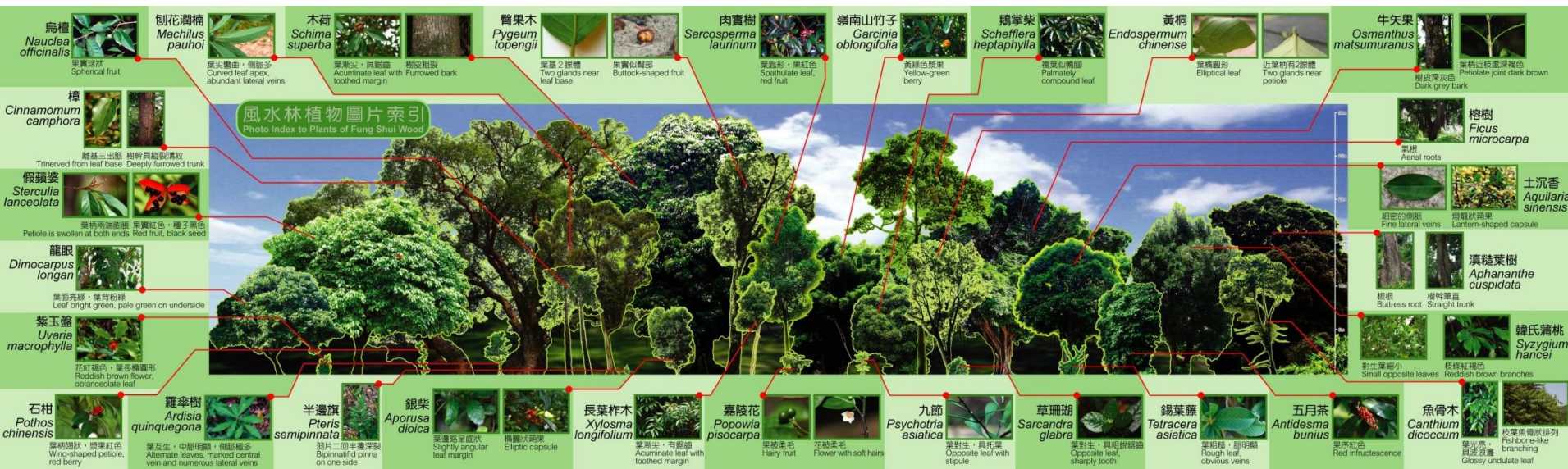
(2014)

More than **9,000 participants** in 10 years

What is Urban Forestry?

Urban forestry provides the **strategic framework** for sustainable **long-term management** of our urban vegetation in a **holistic manner**.

- It utilises the asset life-cycles of trees to **regulate**, **regenerate** and **replenish** urban tree stock;
- Maximise vegetation diversity;
- Improve **ecological health** within our urban forestry assets;
- Foster a deeper understanding on **the life-cycle** of urban trees and vegetation toward a more sustainable and resilient future.



What is Place Ecology?

We Make Our Own Place

Through the creation and ongoing collaboration across the public, private and community sectors, we collectively **inspire** and **imagine** public spaces as the heart of our **communities**.

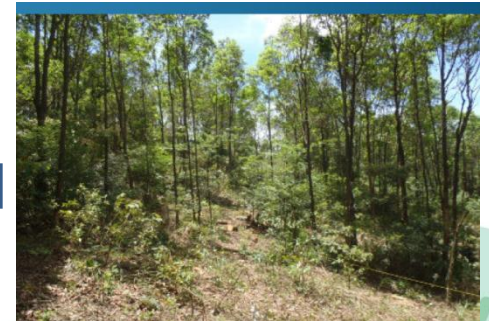
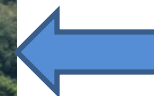
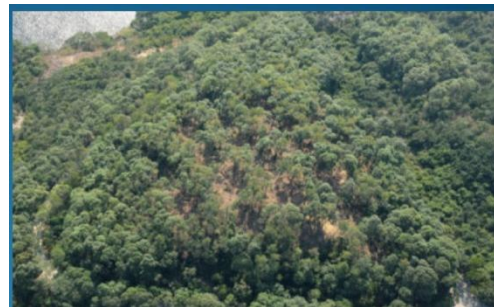
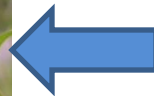
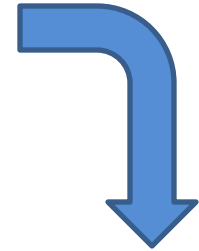
“Ecology”

Through a holistic integration of social, technical, environmental, economic and design values, how we **connect** and **identify ourselves within our places** drive the reinvention and design innovation from feasibility to end-use implementation of our cities.



Plantation Enrichment Project (PEP) – Change in Afforestation Strategy

PAST : From quick establishment of vegetation using a few exotic tree types



FUTURE: To increase bio-diversity & ecological value with native tree species

PEP In Action – From 2009

郊野公園植林優化計劃

本署現正進行郊野公園植林優化計劃，目的是引入更多本土樹木品種，藉此提高植林區的生態價值和生物多樣性，並為本地野生動物提供更適合的棲所與食物。一些外地品種樹木、生長過密、老弱及枯死的樹木會被移除，以優化郊野公園植林區。



Country Park Plantation Enrichment Project

The country park plantation enrichment project in this area is to introduce more native tree species with an aim to enhancing ecological value and biodiversity of the plantations and providing more suitable shelters and food for local wildlife. Some of exotic, densely-grown, unhealthy and dead trees will therefore be removed for the enrichment of country park plantations.



漁農自然護理署
Agriculture, Fisheries and
Conservation Department

Agriculture, Husbandry

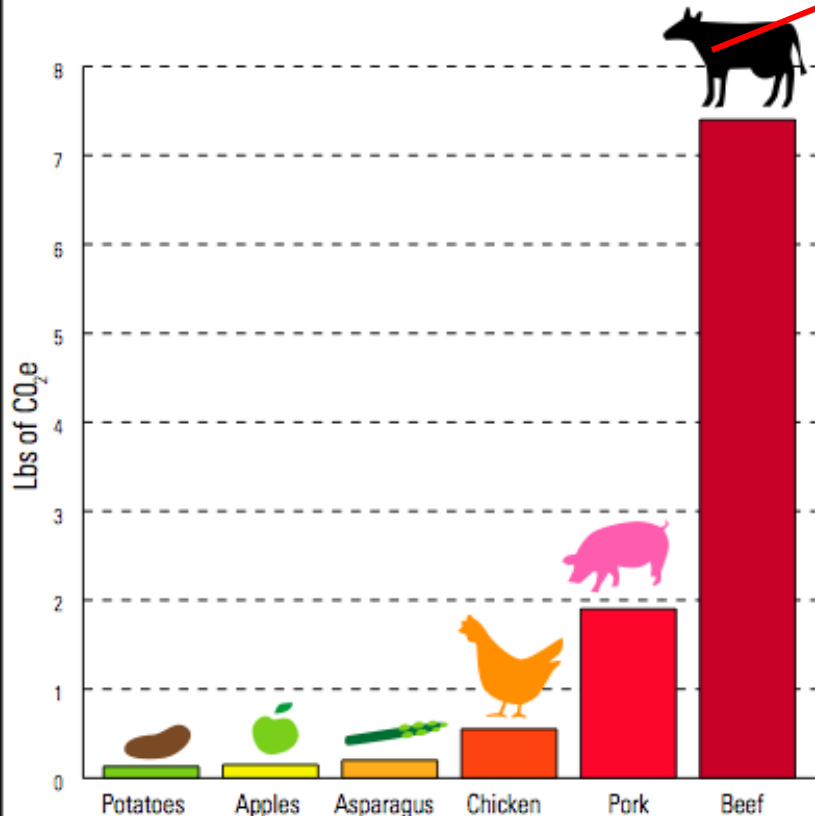


Less Meat • More Green

多菜 • 少肉

Global Warming Pollution Released by Producing Your Favorite Foods

(CO₂ equivalent per half pound of food)



Graphic adapted from N. Fiala, "The Greenhouse Hamburger: How Our Diet Matters More Than Our Cars," *Scientific American*, February 2009.



121,8 m² arable land
1500 litres water
7 litres petrol

This is equivalent to :

160 kg potatoes

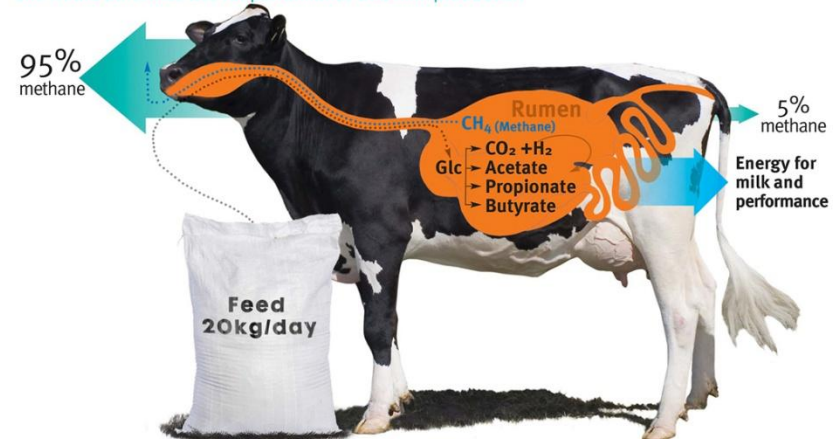
1 year's daily shower

Cows emit 80 times the greenhouse gases for the equivalent of 1kg of wheat.

Methane Reduction Project

- how to reduce methane emission by a minimum of 25%

A cow emits 500 of methane per day, which is equivalent to 10% of the energy she would otherwise use for performance and milk production



Less Meat · More Green

多菜 · 少肉

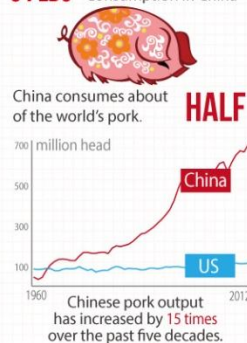
THE PORK INDUSTRY IN CHINA



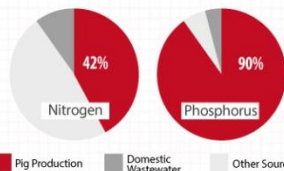
65% of the meat consumed by China is pork.
81 LBS Per Capita Annual Pork Consumption in China

The average pig in China produces 5.3 kg of waste each day, which contains nutrients, heavy metals, and pharmaceutical residues.

Wilson Center
CHINA ENVIRONMENT FORUM
@wilsoncef



Pig production accounts for an estimated **42% of nitrogen** and **90% of phosphorus** flows into the South China Sea.*



High hog population density in China has tightened supplies of feed and damaged the environment.

China: 94 pigs
US: 20 pigs
per 100 acres of cropland

- Eutrophication of surface water damages wetlands and fragile coastal ecosystems
- Leaching nitrates and pathogens contaminate soil and water
- Excess nutrients and heavy metals damage soil fertility and shrink arable land
- Ammonia, methane, and other gases cause pollution and contribute to greenhouse effect
- Diseased pigs are not always disposed of properly – 16,000 carcasses were found in the Huangpu River in 2013

Livestock farm waste is about **3 TIMES** the amount emitted from industries.

1.29 BILLION metric tons of waste is produced by the Chinese pork industry per year.

Source: USDA ERS, FAO. Special Thanks to Fred Gale. Designed by Siqui Han 02/27/2014 © CEF

Interesting Facts :

- China consumes about 50% of the world's pig
- Breeding density in **China** :
94 pig / 100 acres
- Breeding density in **US** :
20 pigs /100 acres
- 1.29 billion metric tons of waste is produced by the Chinese pork industry each year

Less Meat · More Green

多菜 · 少肉

IMPROVE YOUR HEALTH

Lowers
20% heart
disease risk

Your risk of death related to cancers, heart problems, and obesity is reduced by:

A vegetarian diet lowers your risk of heart disease by
20%

50% in men
30% in women

The average cholesterol levels in:



Vegetarians tend to live eight years longer

Live 8 years longer



THE BENEFITS OF VEGETARIANISM

Becoming vegetarian is not only beneficial to your health, but also our planet.
Vegan, lacto-ovo, pescatarian.
Take your pick.

VEGAN

a vegan diet means consuming no meat or animal byproducts like eggs or dairy

LACTO-OVO

lacto-ovo vegetarians don't eat meat but do consume animal byproducts

PESCATARIAN

pescatarians still do not eat meat but occasionally consume fish

A meatless diet means being three times less likely to get Alzheimer's

Producing a little more than two pounds of beef causes more green house emissions than driving a car or three hours and more energy than leaving all your house lights on the same amount of time

HELP SAVE OUR PLANET

You save more water by not eating a pound of beef than by not showering for six months

Water saving

At least 50% of Greenhouse gas emissions worldwide can be attributed to livestock and their byproducts

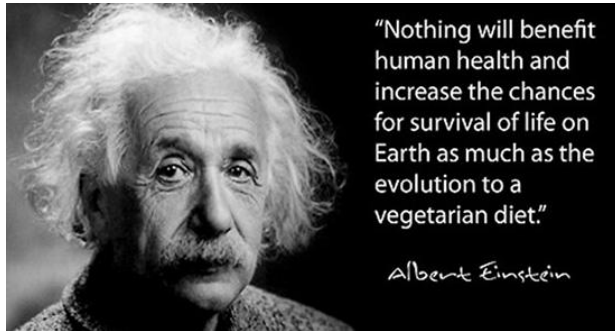
Reduce GHGs

It takes 16 pounds of wheat to produce one pound meat

which instead could be used to feed 10 people a day

Less Meat · More Green

多菜 · 少肉



"If slaughterhouses had glass walls everyone would be vegetarian."

~ Paul McCartney



VEGE EVERY MEAL · U & THE EARTH HEAL
早午晚食綠 天地人織福



1 October 2015



Agriculture, Waste



Order Less • Waste Less

「適食 • 惜食」

We're overweight

- Obesity has nearly doubled since 1980, with a staggering 30 per cent of us now overweight or obese.

We're starving

- Malnutrition and hunger haunt one in nine of us. It's the reason nearly half of all children under five die prematurely.

We're wasteful

- We waste enough food every year to feed the world's hungry four times over. Rich countries' food waste is approximately equivalent to all food produced in Africa.

We're polluting ourselves

- One third of the greenhouse gas emissions that drive climate change are from agriculture production. The livestock industry alone accounts for almost 15 per cent of all human-caused emissions.

...and we're running out of solutions !!!

Order Less · Waste Less

「適食 · 惜食」

1 in 8 people go to bed hungry each night ...



Order Less • Waste Less

「適食 • 惜食」

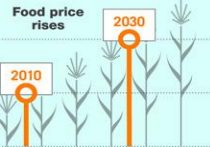
80% of the world's hungry are directly involved in food production

WHAT'S WRONG WITH OUR FOOD SYSTEM?

Every night **1 in 7 people go to bed hungry**—that's almost 1 billion people worldwide. People are hungry not because there isn't enough food produced but because our food system is broken. In fact, **80% of the world's hungry are directly involved in food production**. We can address this hunger if we support small-scale food producers, tackle climate change and reduce food waste.

CLIMATE CHANGE & FOOD PRICES

The average **price of staple foods could more than double by 2030**—with more than half of that increase due to changes in average temperatures and rainfall patterns.



HIGH TEMPERATURES

In July 2010, temperatures exceeded 40°C (104°F) in Russia, destroying millions of acres of wheat. Wheat **production plunged 30%** and the **price internationally increased by 85%**.



DROUGHT

In 2010, a drought in Ukraine caused wheat **production to plummet 20%** compared to the year before.



MONSOON

Heavy rainfall and multiple typhoons hit Southeast Asia in 2011, severely affecting 6% of the region's total rice area and **driving prices up by 30%** in some areas.



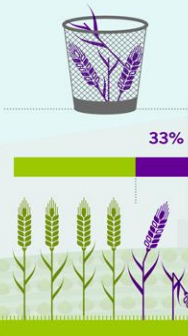
WASTE

In both industrialized and developing countries, unacceptable quantities of food are wasted but for entirely different reasons.

HARVEST WASTE

Currently, developing countries waste **nearly one third of food supply**. With better access to adequate storage, refrigeration and transportation this could be reduced.

DEVELOPING WORLD



CONSUMER WASTE

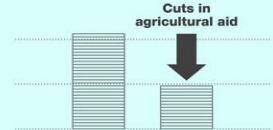
In industrialized countries we, as consumers and retailers, throw away **about one third of all food** that is produced.

INDUSTRIALIZED WORLD



HUNGER

There have been **cuts of more than 50% in government aid** to small-scale producers, even though the majority of the world's hungry are involved in food production.



1 IN 7 ON THE PLANET GO HUNGRY

60% OF THE HUNGRY ARE WOMEN

By providing women with equal access to farming resources such as **tools, seeds and transport**



100-150 MILLION COULD HAVE ENOUGH TO EAT

CHANGE CAN HAPPEN

By investing in small-scale farmers, Brazil reduced the number of people living in poverty by 20 million between 2003-9. We can tackle extreme hunger by helping small-scale producers grow more food more sustainably.



Order Less • Waste Less

「適食 • 惜食」

In Hong Kong ...



Food Waste 1 / 3

of solid waste
sent to landfills
in Hong Kong
is food.

3,500 tonnes

of food waste are
sent to landfills
every single day



Poverty 1 in 5

children are
living in poverty
in Hong Kong.

1.15m (17.1%)

people are living
under poverty line



Environment 2018

The remaining
capacities of
three landfills will
be exhausted.

25 times

more potent the
methane produced by
rotted food is than CO₂
as greenhouse gas

Order Less · Waste Less

「適食 · 惜食」

齊來加入
惜食兵團!
Join the Cherish Food Corps



響應10月16日「世界糧食日」
惜飲惜食 食物不浪費
Echo World Food Day on 16 October
Waste No Food

分享「珍惜食物」訊息，提倡食物不浪費！
一系列「惜飲惜食」活動等緊你！
歡迎瀏覽 www.foe.org.hk/foodwaste
Waste No Food! Love the Earth!
Please visit www.foe.org.hk/foodwaste
for more "Waste No Food" activities.



惜飲惜食
WASTE NO FOOD



「惜飲惜食有福氣」
宴席輕量計劃
"ORDER LESS WASTE LESS, MORE BLESSINGS"
LIGHT BANQUETS CAMPAIGN



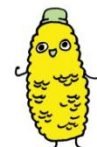
惜食動畫

Animations by
Cherish Food
Family



第一冊
智能手機及
平板電腦
Android版

網上電子書



第二冊
智能手機及
平板電腦
Android版

網上電子書

救食平台
食物回收捐助聯盟
Food Donation Alliance
得食 · 惜食 · 救食



Industry Waste, Apparel



Refuse · Reduce

源頭減廢

香港垃圾有幾多？

- ① 平均每人每日製造垃圾量[#]：2.67公斤 (2010年)
- ② 一年垃圾棄置量[#]：330萬公噸 (2010年)
- ③ 每噸垃圾處理成本[#]：380元
- ④ 家居廢物*：每日平均5,973公噸
- ⑤ 商業廢物*：每日平均2,360公噸
- ⑥ 都市固體廢物 (家居廢物 + 商業廢物 + 工業廢物)*：8,996公噸
- ⑦ 最多家居廢物區域*：元朗 (每日平均547公噸)、油尖旺 (每日平均502公噸)、觀塘 (每日平均465公噸)
- ⑧ 固體廢物最多成分*：食物渣滓 (2,528公噸)、紙料廢物包括飲品包裝盒 (tetrapak夾層包裝) 及紙巾等 (549公噸)、膠袋 (528公噸)
- ⑨ 每年都市固體廢物處理開支[#]：12.2億元

資料來源：*香港固體廢物監察報告 (2011年的統計數字)、
[#]地球之友

This is approximately how much each of us throw away everyday!



Refuse · Reduce 源頭減廢

Waste. NO Way @ Trees · COOLiving
BYOB³ @ Trees · COOLiving
R¹⁰ @ Trees · COOLiving

R10 = refuse, reduce, reuse, redesign, repair, rehome, recycle, resources, restore, redistribute after reuse



Recycling · Reuse

循環再用



In 2010, 99% wastes (360Mn tones) were exported.



Redesign · Repair

升級再造



Sustainable Fashion

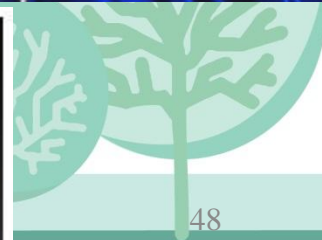
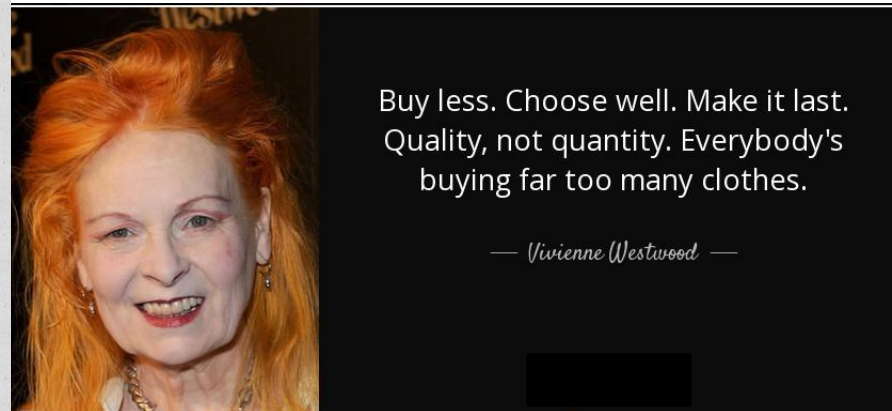
- Fashion is a complicated business involving long and varied supply chains of production, raw material, textile manufacture, clothing construction, shipping, retail, use and ultimately disposal of the garment. It is the **second largest polluter** and the carbon footprint is tremendous.

**DON'T BUY
THIS JACKET**



COMMON THREADS INITIATIVE
Together we can reduce our environmental footprint.

TAKE THE PLEDGE



Building



New York City's Roadmap

80 x 50

#ONENYC



Strong, Sustainable, Resilient and Equitable City

Clean, Resilient & Affordable Energy System #ONENYC



New York's Clean Energy Standard ensures
**50% of New York's electricity will
come from renewable sources by 2030.**



New York's Clean Energy Fund is mobilizing
private capital, jump starting innovation, and
helping eliminate market barriers to **make
clean energy scalable and affordable
for all New Yorkers.**



地球之友
friends
of the earth



Power Smart

善用能源

香港地積與用電的世界排名

(與全球200多個國家及地區相比)

總用電量
世界排名
(2010年)

50th



土地面積
世界排名

183th

香港地方雖小，但食電驚人，誰說環保與你無關？

Power Smart

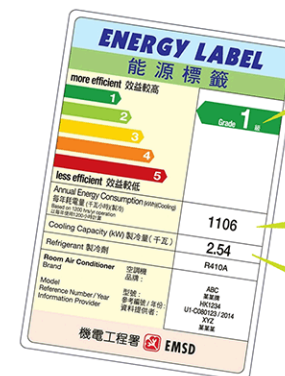
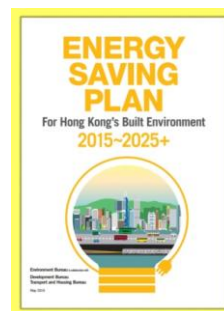
善用能源

Government initiatives ...



卓越節能
Energywi\$e

香港環保卓越計劃
Hong Kong Awards for Environmental Excellence



Grade 1 products are most efficient (green) and Grade 5 products are least efficient (red).

Annual electricity consumption. Use this number to estimate how much money you could save by choosing different models.

Cooling capacity of the model at full load.



機電工程署
EMSD

ENG

繁體

简体

《建築物能源效益條例》 The Buildings Energy Efficiency Ordinance



空調裝置
Air-conditioning installation



電力裝置
Electrical installation



升降機及自動梯裝置
Lift & escalator installation



照明裝置
Lighting installation



Energy Audit Form
能源審核表格



節能約章 Energy Saving Charter

為應對氣候變化，提倡「全民節能」，我們支持政府的「節能約章 2016」。

我們承諾

- (1) 在2016年夏季6月至9月期間，將室內平均溫度維持在攝氏24至26度之間；
- (2) 在2016年6月至2017年5月期間，關掉不使用的電器；及
- (3) 在2016年6月至2017年5月期間，採購具能源效益的產品。

To encourage community-wide participation in saving energy, we support the Government's Energy Saving Charter 2016.

We pledge

- (a) to maintain average indoor air temperature between 24 – 26 °C during the summer months of June to September in 2016;
- (b) to switch off electrical appliances when not in use from June 2016 to May 2017; and
- (c) to procure energy efficient appliances from June 2016 to May 2017.



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學





Transport

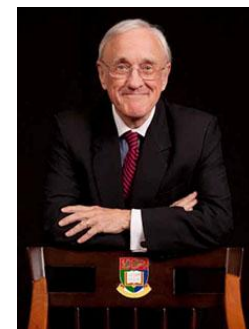


Drive Less · More Mass Transit

綠色交通

Hedley Environmental Index

Uses data on air pollutants and public health statistics to estimate the *daily burden of doctor visits, hospital admissions and deaths*, and the associated *monetary value* on the Hong Kong community.



Measuring Hong Kong's air pollution costs

The Hedley Environmental Index monitors and publishes in real-time the economic costs of Hong Kong's air pollution in terms of public health impacts and their monetary value. The public health impacts include premature deaths, hospital bed-days and doctor visits.

Avoidable health impacts

2 preventable deaths
79 hospital bed days
3,862 doctor visits
from midnight to 10:00 today.

Air quality warning meter

Risk from air pollutants

13 Feb 2012, undefined:26



according to World Health Organization Guidelines

Current air quality

Average hourly concentration (microgram/m³) of PM_{2.5} PM₁₀ NO₂ SO₂ O₃

13 Feb 2012, undefined:26



Avoidable harm to the Hong Kong community

Premature Deaths



Jan
272
DEATHS
last month

Hospital Bed-days

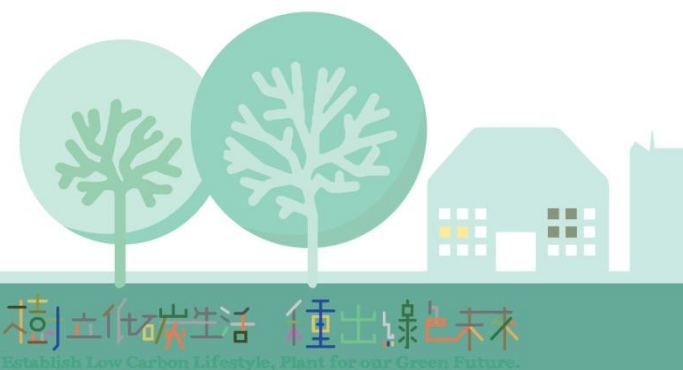


Jan
13,220
BED-DAYS
last month

Doctor Visits



Jan
630,598
VISITS
last month



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綠色交通

Green Transportation Hierarchy

most green



Walk



Cycle



Public Transport



Taxi



Car Share



Private Car



least green

- Hong Kong's roads are most heavily used with **300 vehicles/km** of road
- **Nitrogen Oxides** is the major pollutant
- Long-term NO₂ exposure may **decrease lung function** and **increase respiratory symptoms**

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Benefits of Green Transport



Drive Less • More Mass Transit

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2012 Data from CAN

Table 1: A comparison of air quality standards for China, Hong Kong and the WHO

		Hong Kong's existing AQOs	Hong Kong's proposed AQOs	China's proposed air quality standards (2016)		World Health Organization's Air Quality Guidelines
				Grade 1	Grade 2	
Sulphur dioxide (SO ₂)	24-hour average	350 (1)	125 (3)	50 (0)	150 (0)	20 (0)
Respirable suspended particles (RSP); particulate matter (PM ₁₀)	24-hour average	180 (1)	100 (9)	50 (0)	150 (0)	50 (3)
	Yearly average	55 (n/a)	50 (n/a)	40 (0)	70 (0)	20 (n/a)
Fine suspended particles (FSP); Fine particulate matter (PM _{2.5})	24-hour average	-	75	35 (0)	75 (0)	25
	Yearly average	-	35	15 (0)	35 (0)	10
Nitrogen dioxide (NO ₂)	Hourly average	300 (3)	200 (18)	200 (0)	200 (0)	200 (0)
Ozone (O ₃)	8-hour average	-	160 (9)	100 (0)	160 (0)	100 (0)

Note: The figure in brackets represents the number of exceedances allowed.

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铜锣湾 AQI: 铜锣湾實時空氣質量指數 (AQI)。

115

輕度污染

更新时间 星期三18:00

溫度: 27°C

PM 2.5 Standard

AQI = 35

WHO = 10

當前過去48小時內數據

最小最大

PM2.5 AQI 115

PM10 AQI 54

O3 AQI 19

NO2 AQI 38

SO2 AQI 3

CO AQI 4

UVI 0

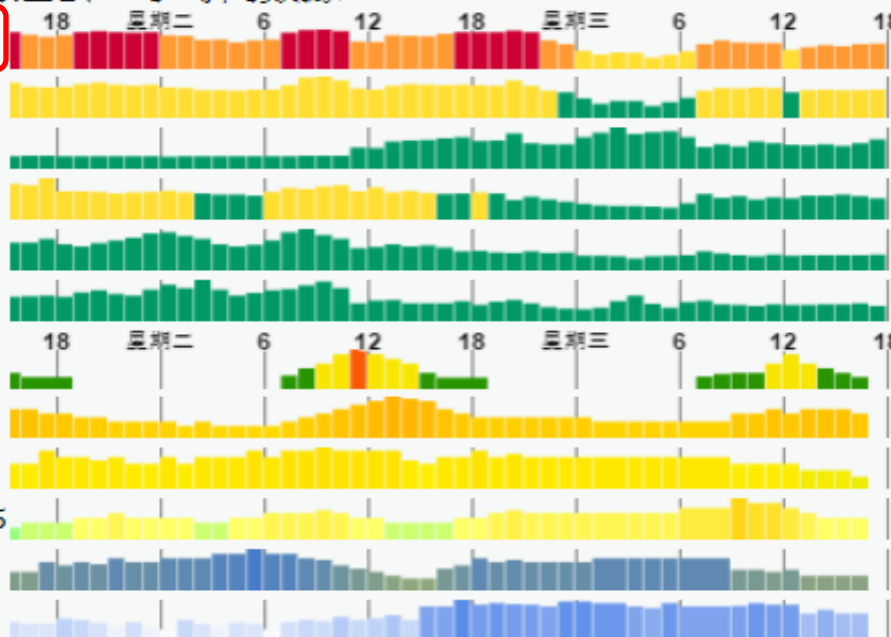
溫度 27

露點 18

气压 1015

濕度 58

風速 5



70 161

30 73

1 32

14 71

2 12

3 11

0 6

24 31

18 23

1014 1019

55 89

0 8

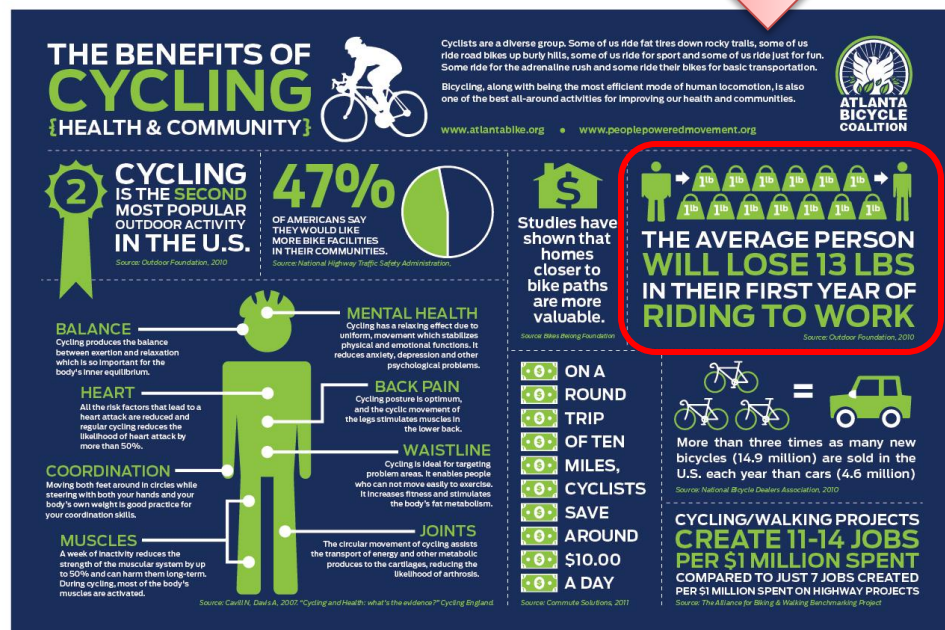
Hike · Bike

行路 · 踩單車

Benefits of walking & cycling ..

1. No carbon footprint
2. Weight loss
3. Improve cardio-respiratory functions
4. Strengthen muscles & bones
5. Improve mood & sleep
6. Slow mental decline

Lose 13 Lbs!!!

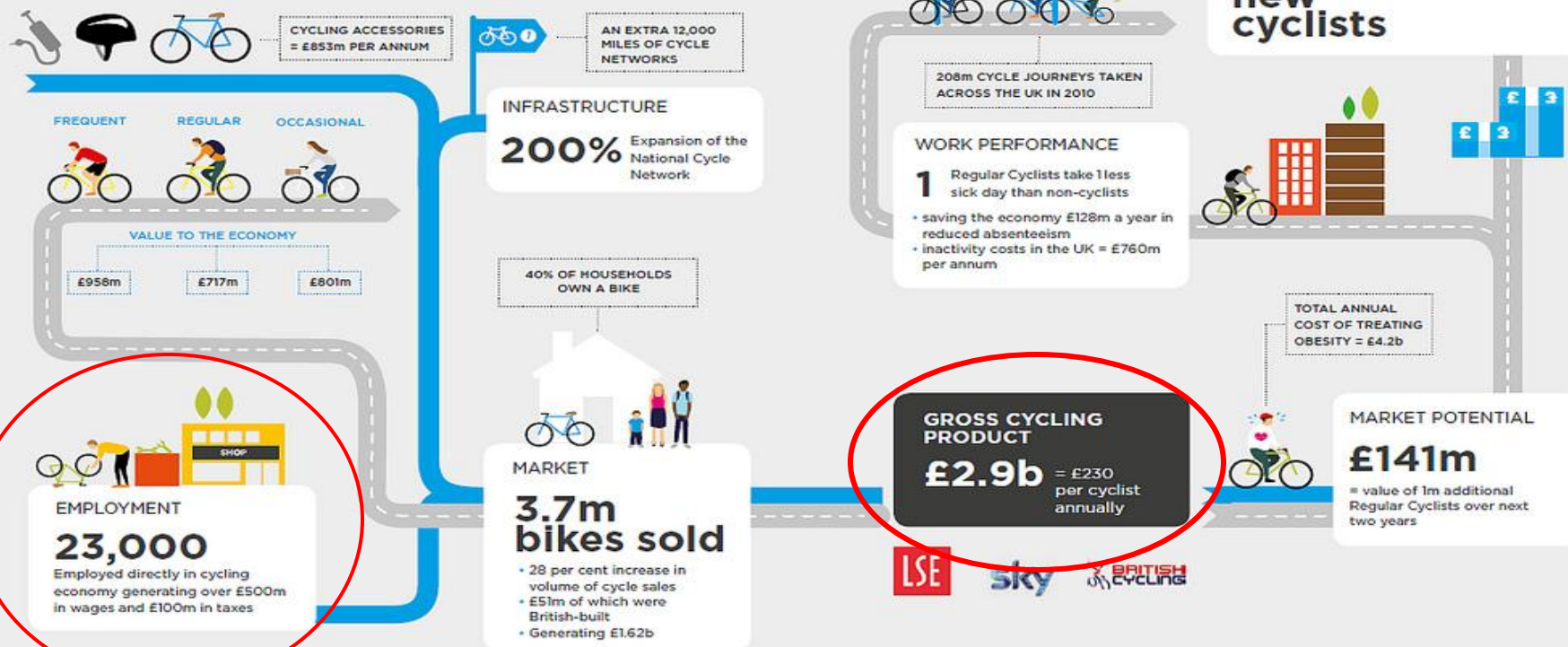


Hike · Bike

行路踩單車

Cycling can boost economy ...

THE BRITISH CYCLING ECONOMY



Urban Farming



Urban Farming

都市農業

What is Urban Farming?

- The practice of cultivating, processing, and distributing food in or around a village, town, or city



Interesting Facts :

- ✓ Vegetables have a short production cycle; some can be harvested within 60 days of planting
- ✓ An area of just one square metre can provide 20 kg of food a year



Urban Farming

都市農業

資料A 香港蔬菜自給率及各地比較



Importance of urban farming :

1. Food security
2. Food safety
3. Ecological sustainability
4. Carbon footprint
5. Holistic sustenance for city dwellers

年份	農地總計 (公頃)	荒置農地 (公頃)	荒置率 (%)
1960	14,067	746	5
1970	13,361	2,285	17
1980	9,970	4,237	42
1990	8,420	4,319	51
2000	6,960	4,250	61
2013	4,523	3,794	84

Urban Farming - Lufa Farms

都市農業

- Founded in 2010, it is the world's first **commercial** rooftop greenhouse
- Located right on the island of Montreal in Ahuntsic-Cartierville
- 31,000 square foot
- Produces 40 varieties of vegetables, all grown sustainably without synthetic pesticides and by using recycling rainwater and optimizing energy use
- **Feeds 3,000 people year-round**



Buy Local • Fair Trade

本土. 公平貿易

Why buy Local?

1. Reduce environmental impact
2. Better food safety
3. Strengthen local economy => Local food = Local \$
4. Support community groups
5. Create jobs

What is Fair Trade?

1. Child Labor
2. Gender Equality
3. Product Pricing
4. Working Environment
5. Environmental Impact

What are Food Miles ?

=> The distance food travels from where it is grown to where it is ultimately purchased or consumed by the end user.

The smaller the better.



Trees • COOLiving

樹立低碳生活

種出綠色未來



SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD



Our Vision

A **H**ealthy and **S**ustainable environment for all

LOHAS = Lifestyles of Health and Sustainability



LOHAS

Lifestyle

Of

Health

and

Sustainability



GHG Reduction Opportunities

零碳零廢

食

Trees
Agriculture

Food
Apparel

Industry

衣

Waste
Circular
Economy

Building

Freight

Transport

住

行



COOL Ambassadors 10 DOs

“For individuals to pledge LOHAS”

1. Refuse · Reduce 源頭減廢
2. Recycle · Reuse 循環再用
3. Redesign · Repair 升級再造
4. Order Less · Waste Less 適食 · 惜食
5. Less Meat · More Green 多菜少肉
6. Power Smart 善用能源
7. Drive Less · More Mass Transit 綠色交通
8. Hike · Bike 行路踩單車
9. Urban Farming 都市農業
10. Fair Trade 本土 · 公平貿易



TREES • COOLIVING

樹立低碳生活 種出綠色未來

Come join us as COOL Ambassador!



<http://www.coolambassador.org/>

