

# **7<sup>th</sup> Seminar on Best Practices for Urban Tree Management**

**The Challenges of Urban Forestry in Hong Kong**



**Hong Kong is  
a densely populated and compact city**





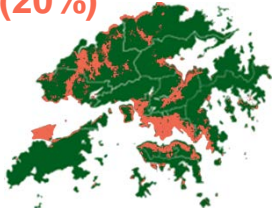











Photo: DEVB GLTMS





Photo: DEVB GLTMS

# HK Statistics

Hong Kong	Paris	New York	London
<b>Land Mass</b> <b>220.8 km<sup>2</sup></b> (1,104 km <sup>2</sup> ) <b>(20%)</b> 	<b>104.4 km<sup>2</sup></b> 	<b>789 km<sup>2</sup></b> 	<b>1,572 km<sup>2</sup></b> 
<b>Population</b> <b>7.188 M (2013)</b> 	<b>2.244 M (2010)</b> 	<b>8.490 M (2014)</b> 	<b>8.630 M (2015)</b> 
<b>No. of Urban Trees</b> <b>2,000,000 urban trees</b> 	<b>478,000 trees</b> 	<b>592,130 trees</b> 	<b>155,500 trees</b> 





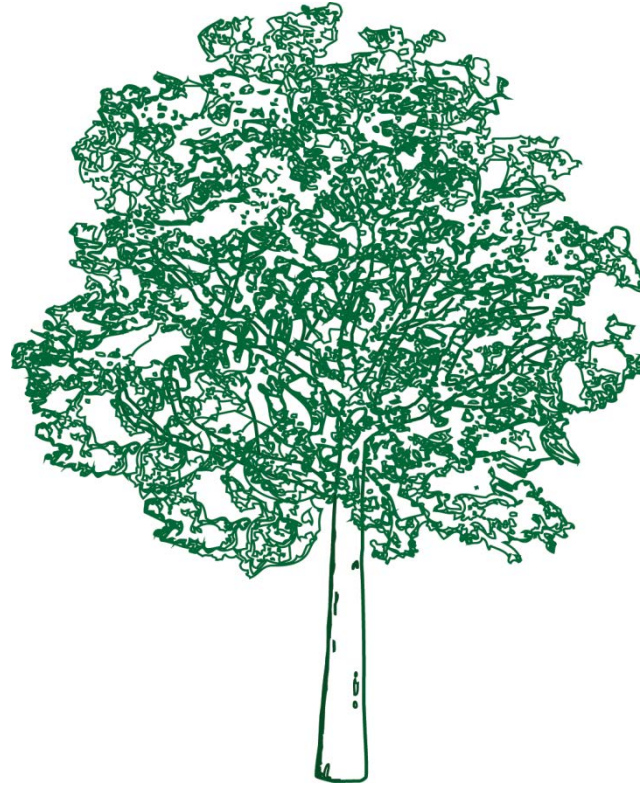


Photos: DEVB TMO

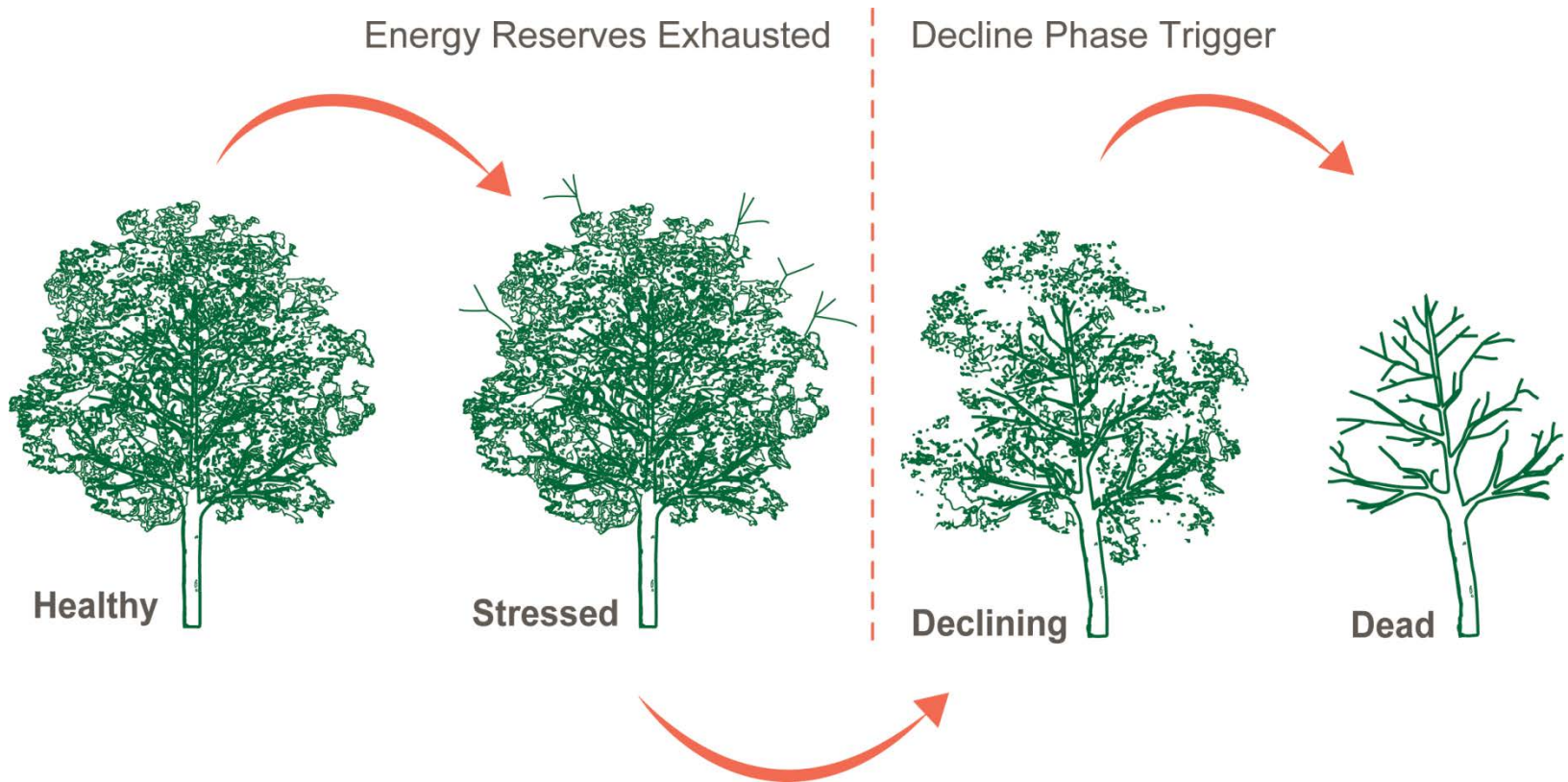


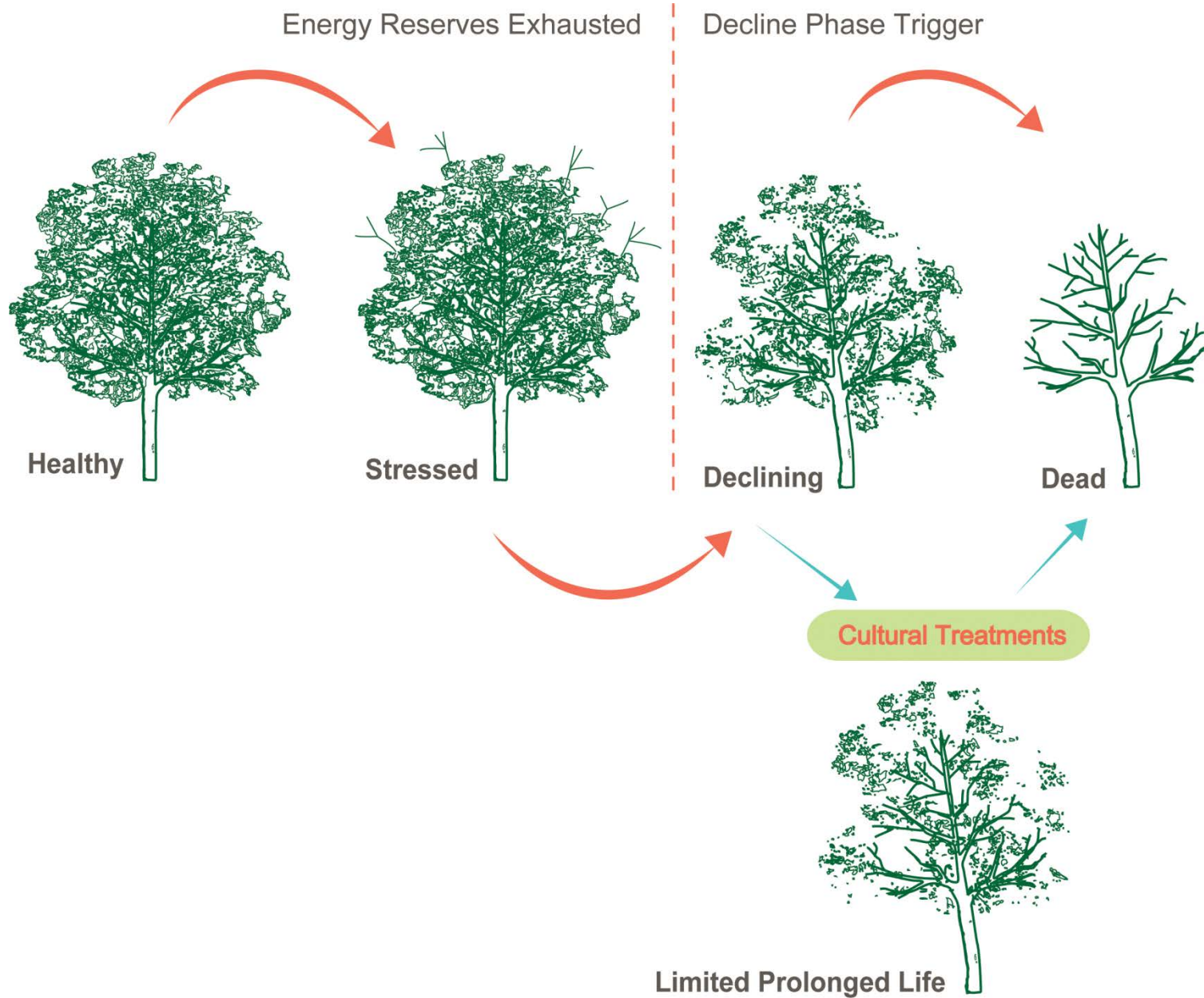
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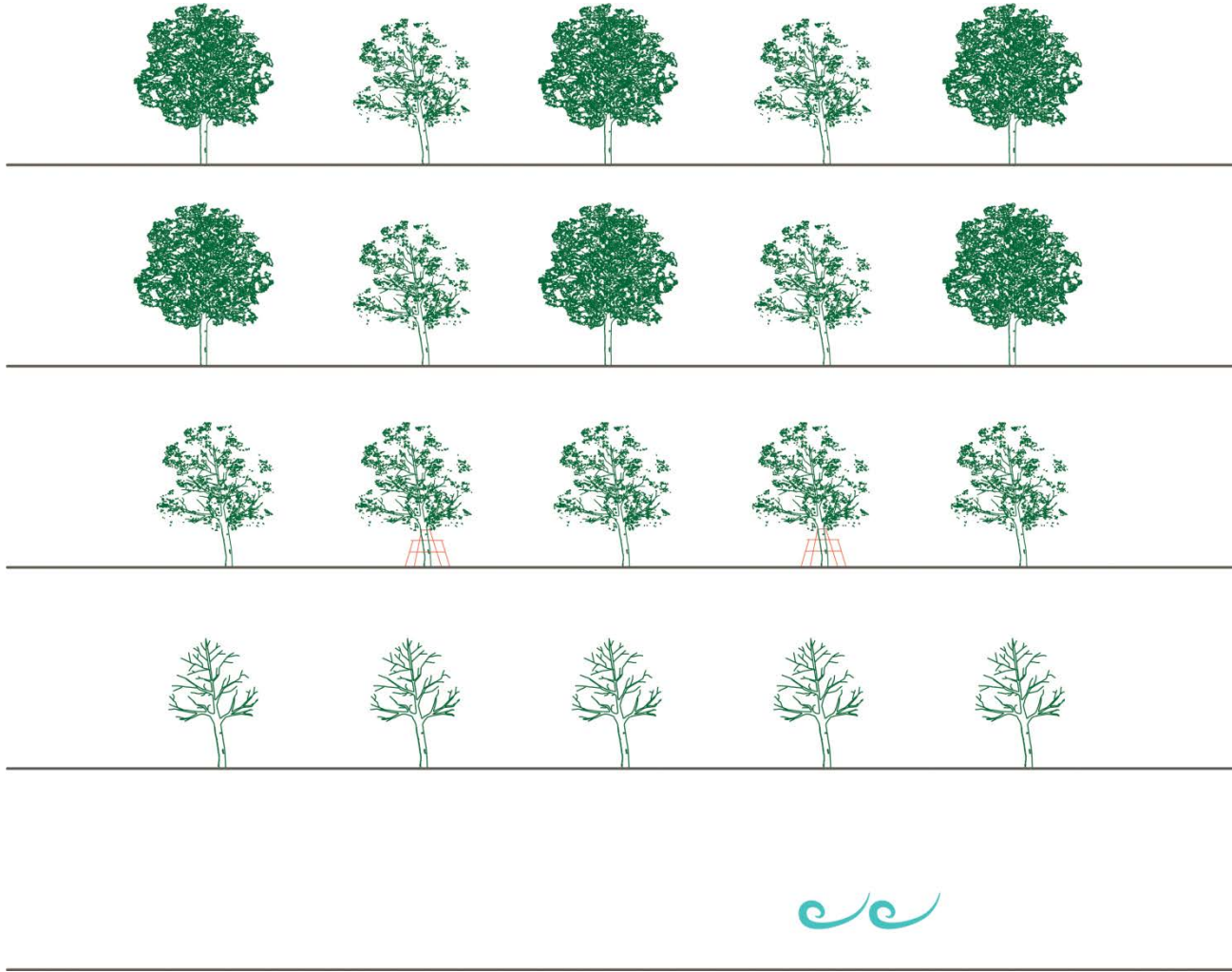




Photos: DEVB TMO



# Different Life Stages to Senescence Life-Stage



# Before and After



Photo: DEVB



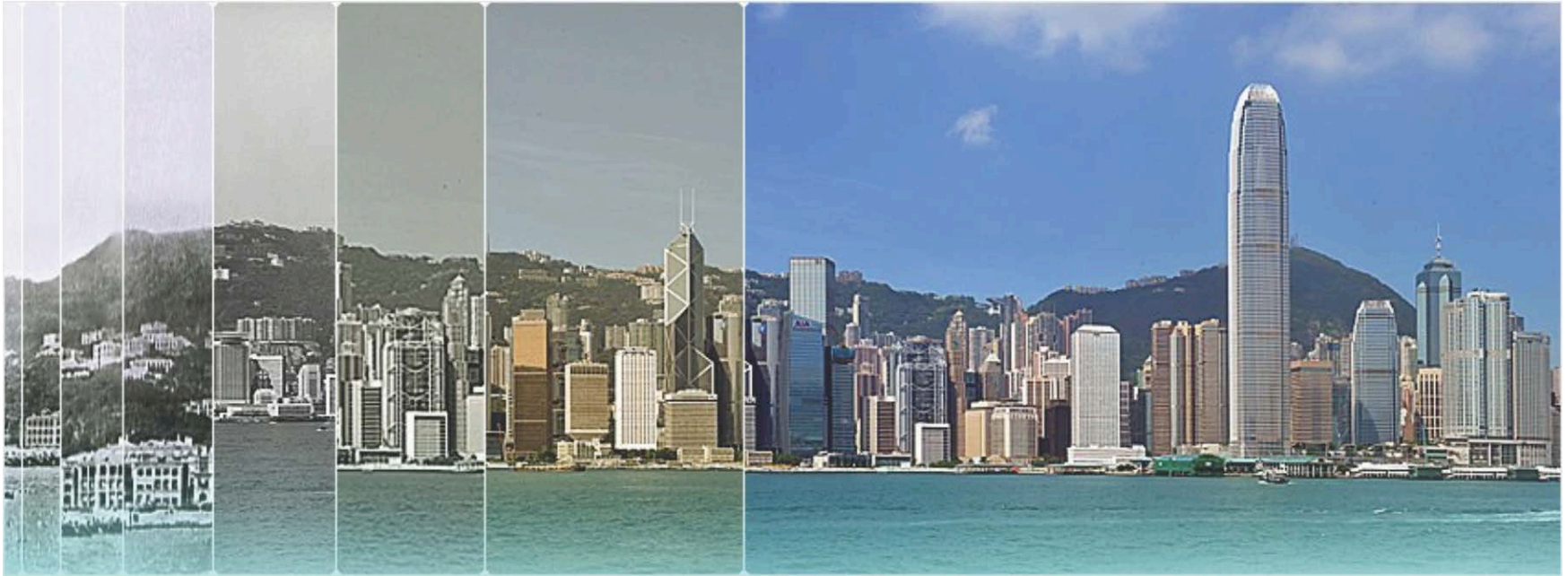


Photo: DEVB





Photo: DEVB GLTMS



Photos: DEVB





# TMO

## Risk Management

### TREE

How old am I?  
Am I situated at the right location?

### TREE CROWN

Am I too heavy?  
Am I free of pest and disease?  
Am I getting enough sunshine?  
Am I having enough space to grow?  
Am I getting enough water?  
Am I excessively spreading wind-borne pollen?  
Am I dropping fruits?

### CLEARANCE

Would I impact the double-decker buses?  
Am I blocking the pedestrian?

### TREE PIT

Am I too small to accommodate the correct root ball size?  
Am I having the right soil?  
Are there any underground utilities?  
Is the paving permeable to water?

### ROOT ZONE

Am I protected?  
Am I infected?  
Do I get enough space to grow?  
Do I have enough oxygen?  
Is the soil too compact for me?

### BUILDING

Do you know my age?  
Who do I ask for permission for fixing tree guy on walls?  
Am I structurally appropriate to support the tree?  
Do my air vents impact the tree canopy?

### SPACE

Do you think I am getting too close to the building?  
Would any advertising signs obstruct my growth?

### TRUNK

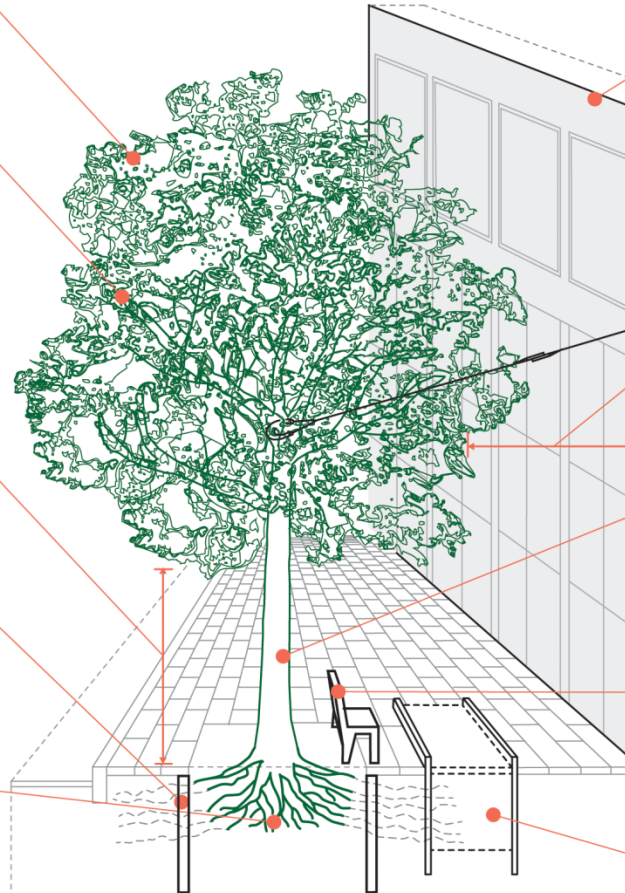
Am I protected?  
Am I straight enough?  
Am I structural enough?  
Can I withstand the strong wind?  
I am not a hanger, don't hang things on me!

### URBAN FURNITURE

Am I too close to the tree?  
Am I affecting the flow of surface water?

### EXCAVATION TRENCH

Am I impacting the roots?



Graphics not to scale





# GLTMS

## RIGHT TREE FOR THE RIGHT PLACE

Proximity to building/ structure

Understand the tree current conditions

Structural trunk

Proper soil

Away from excavation trench

Space for crown

Design objectives

Traffic sightline

Appropriate life cycle

Ecological value

Protected roots

Spatial tree pit

Photo: CEDD

## RIGHT PLACE AND THE RIGHT TREE

Contemplative resting place

Sense of intimacy

Vitality

Creative expression

Eating place

Reading place

Sense of connectedness

Gathering place

Sense of place

Place for playing music

Relaxing place

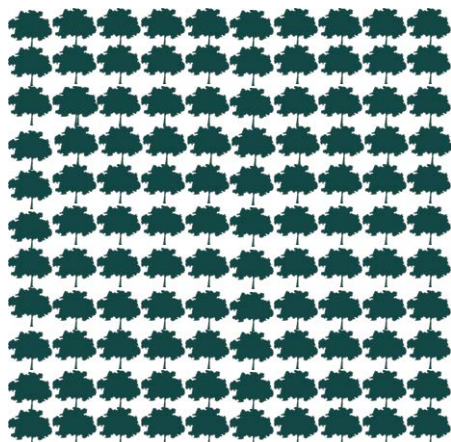
Spaces for activities

Cultural activities

Photos: DEVB



## QUANTITY



Since 2010,  
around 40 million plants  
with **~4 million trees**

## GMP



Support **CEDD** on the  
**Greening Master Plans**  
(GMPs)

## QUALITY



From  
**Quantity**  
To  
**Quality**

## HOLISTIC APPROACH



From  
**Thematic Planting of  
Single Flowering  
Trees**  
To  
**Holistic Approach to  
Thematic Landscape**

## MULTIPLI-CITIES OF LANDSCAPES

### Place Ecology Master Plan

Based on climate resilience and adaptation  
Place ecology as primary driver to sustainable development  
Landscapes based on a thematic approach to constructed ecology  
Green infrastructure as a holistic approach across all urban landscape typologies

#### Transport

**Hierarchy**  
Street Network  
**Roadways**  
Median Strips  
Median Refuges | Traffic Islands  
**Roadside**  
Roadside Landscapes  
Edge Conditions  
Noise Walls  
**Streetscape**  
Features  
Soft Landscaping  
Hard Landscaping  
Urban Furniture  
Waste Furniture  
Shelters  
**Elevated Accessways**  
Road Bridges  
Noise Walls  
Skywalks  
**Open-air Car Parks**

#### Green Infrastructure

**Hierarchy**  
Green Infrastructure Network  
**Treatment Typologies**  
Wetlands + Treatment Beds  
Bio-swales | Bio-filters  
Aeration Systems  
**Ecologies**  
**Roadside**  
Urban + Main Streets  
Avenues + Promenades  
Market Streets  
Laneways + Residual Spaces  
**Open Spaces**  
District  
Precinct  
Neighbourhood | Local  
Private  
**Inter-Tidal + Floodways**  
**EEQ + IEQ**  
Urban Heat Mass  
Health + Wellbeing  
Passive Thermal Management  
**Carbon Sequestration**  
Compensated Trees

#### Public+Private Open Space

Leisure | Culture | Interpretation  
Municipal + Civic  
Housing  
Education  
Sport + Event Sites  
Heritage + Conservation  
Emergency Accessways  
Landmarks  
Health + Wellbeing  
Tourism  
Commercial + Mixed-Use  
Places of Worship  
Places of Remembrance  
Sites of Cultural Significance  
Cemeteries  
Security  
Unallocated + Unleased (UUGL)  
Landfill

#### Specialist Landscapes

**Tactical Urbanism**  
Incubators  
Pop-ups  
Flash Mob-iles  
Guerilla Gardening  
Community Colours  
Re-coding  
**Main Streets**  
Markets and Market Streets  
Avenues + Promenades  
**Laneways + Residual Spaces**  
**Waterfronts**  
Flood Amentation  
Edge Conditions  
**Play Scapes**  
Continuous Learning  
Nature Play  
**Picnic Spaces**  
**Skate Parks + Youth Spaces**  
**Remote Sites**  
Outdoor Recreation  
Environmental Art  
Slopes + Embankments





# Thank You



Photo: DEVB TMO

