

Mekong Environmental
Resilience Week

14 September 2023

Parallel Session C: Urban Futures in a Changing Climate

Eastin Grand Hotel Sathorn
Bangkok, Thailand



Parallel Session C: Urban Futures in a Changing Climate



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Building Inclusive Urban Climate Resilience Through Multi-functional Public Open Space

*Building Climate Resilience in the Mekong Region:
Bridging Science, Policy, and Practice*

Dr Jianbin Wang
Chief Innovation Officer
Water Sensitive Cities Australia
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14 September 2023



Climate Resilience in Urban Context

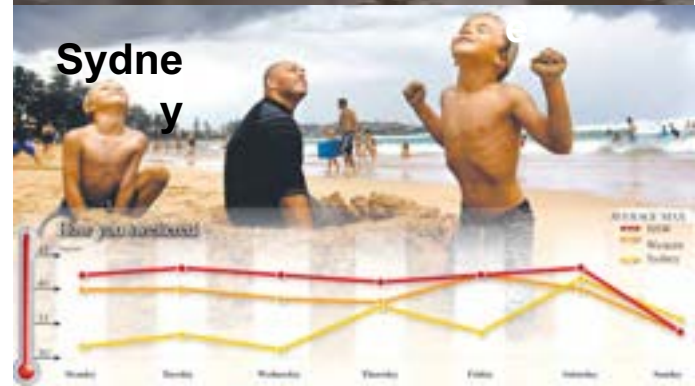
Multiple challenges

- water pollution
- drought and water scarcity
- urban floods
- river degradation
- urban heat island/heat waves

Climate change and extremes

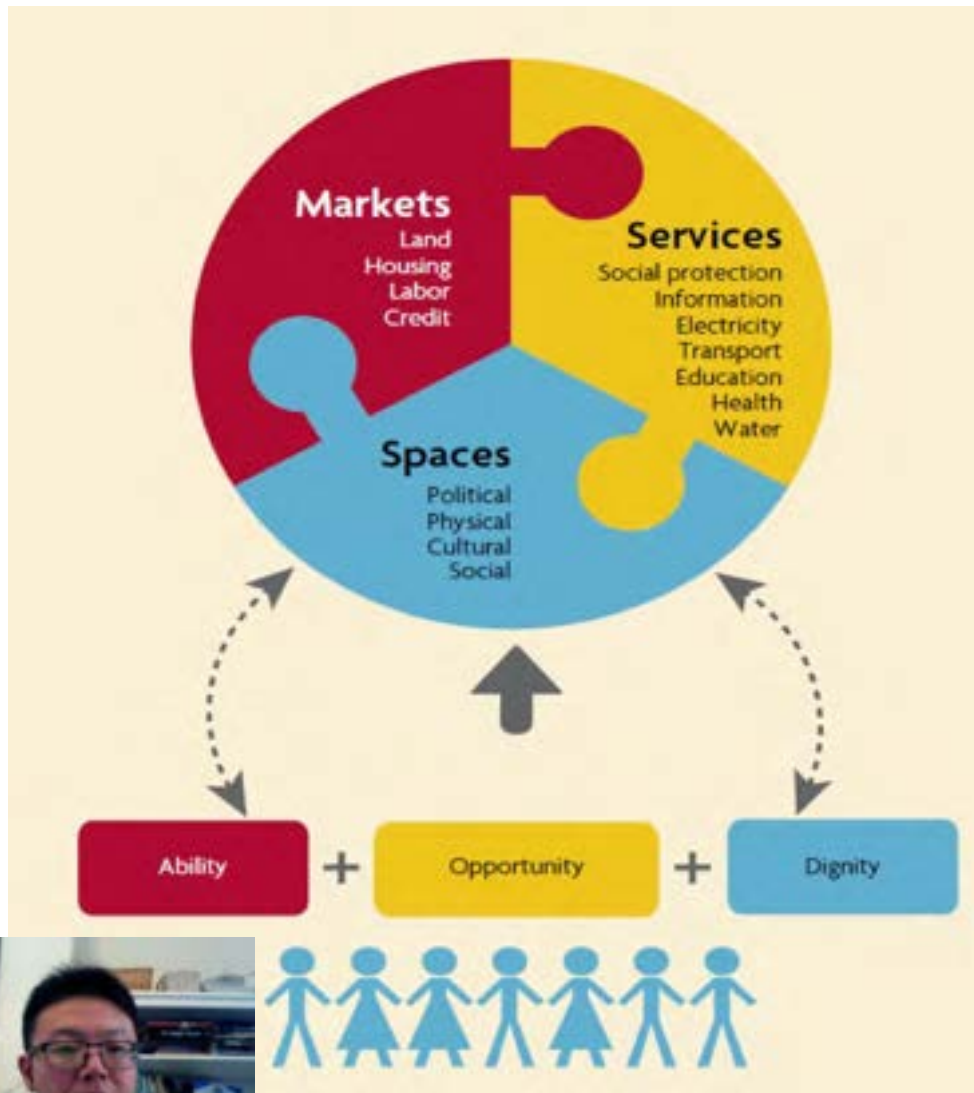
- Exacerbate and compounding events
- Dealing with uncertainty

Multi-functional infrastructure embedded in public open space



Inclusive Urban Climate Resilience

The most relevant aspects can be clustered under three interrelated domains: markets, services, and spaces



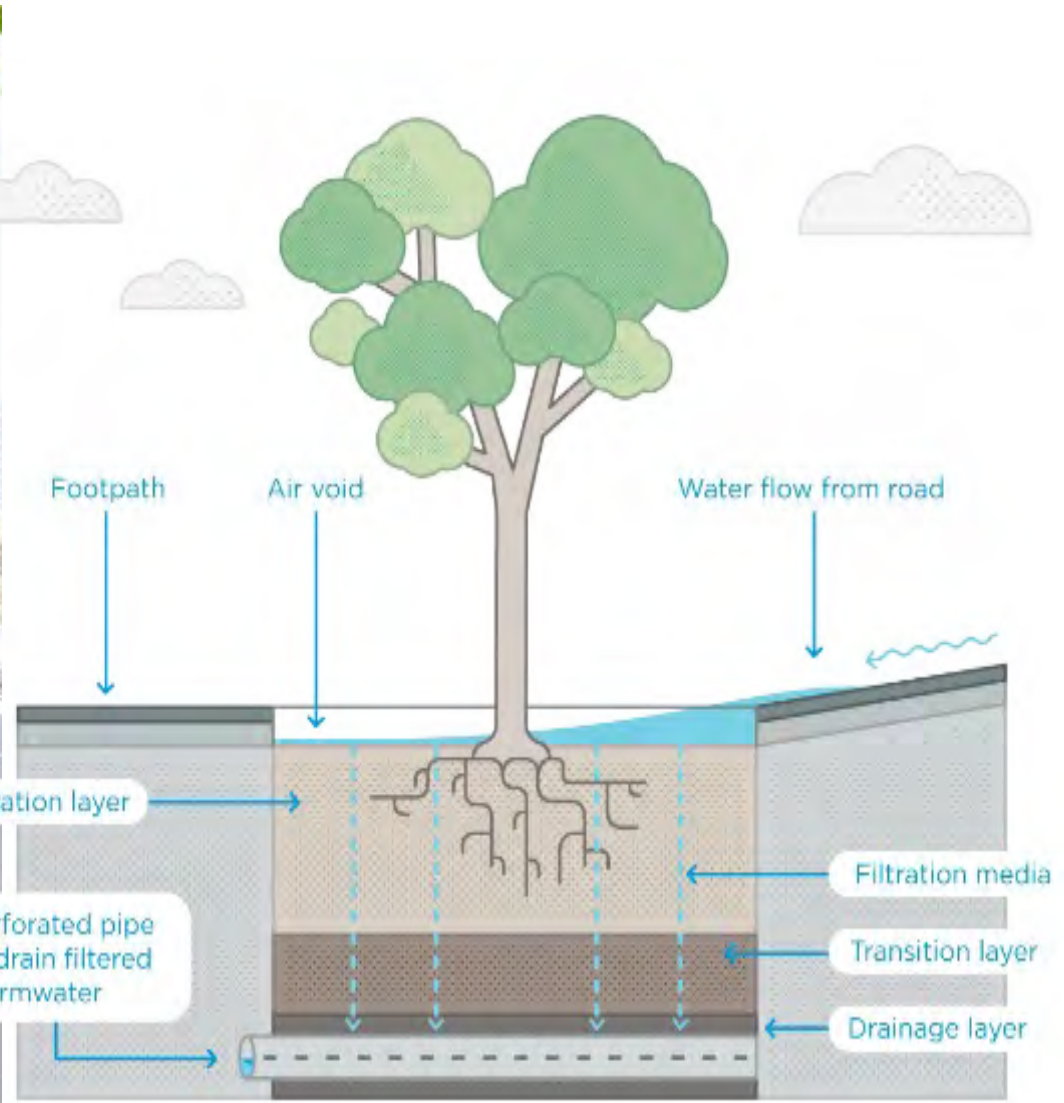
- 1. Multi-functional open space delivering multiple eco-system services and therefore benefits**
- 2. Inclusive public open space ensure the services and benefits reach all community**
- 3. Social inclusion implemented through design so everyone can participate/take part in society**



Multi-functional public open space – urban tree pit @ Melbourne



- 1. Double the growth rate (Hogg, S. and G. 2019)
- 2. Canopy 8 -10 x larger (Lackmann et al. 2008)
- 3. Increased lifespan from 13 to 50 years (Owen, S. and G. 2019)
- 4. Economic Benefit Leaf



Source: Melbourne Water

Multi-functional public open space – Kunshan culture plaza

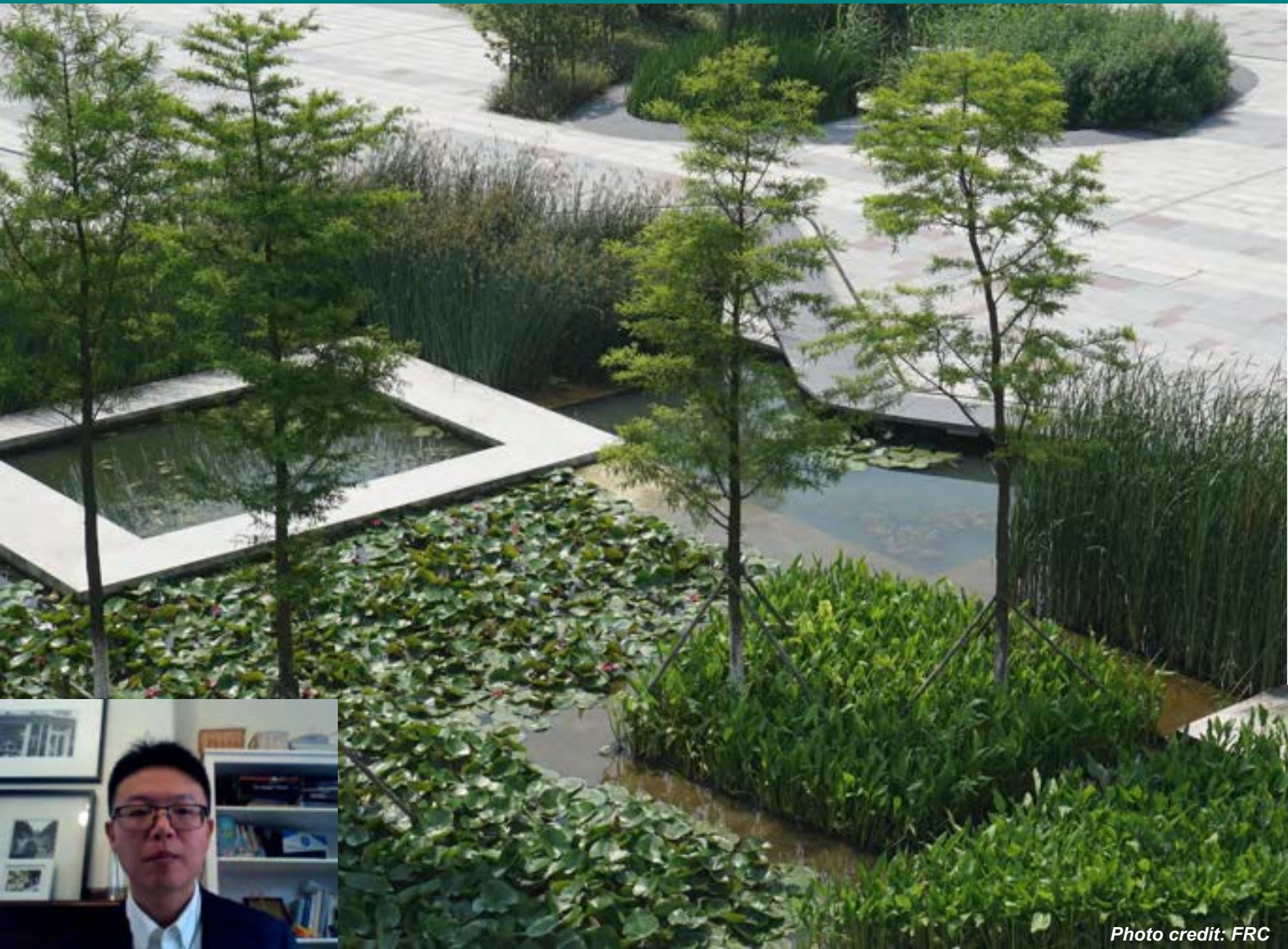
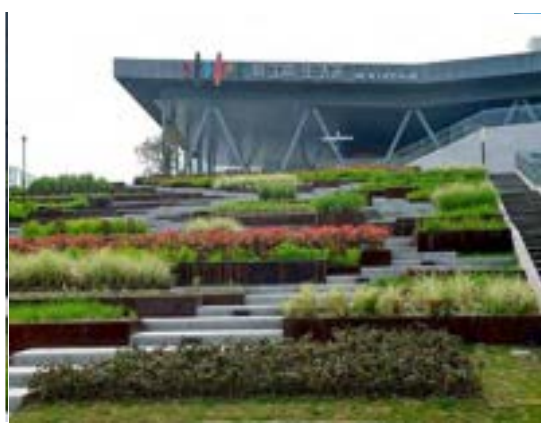
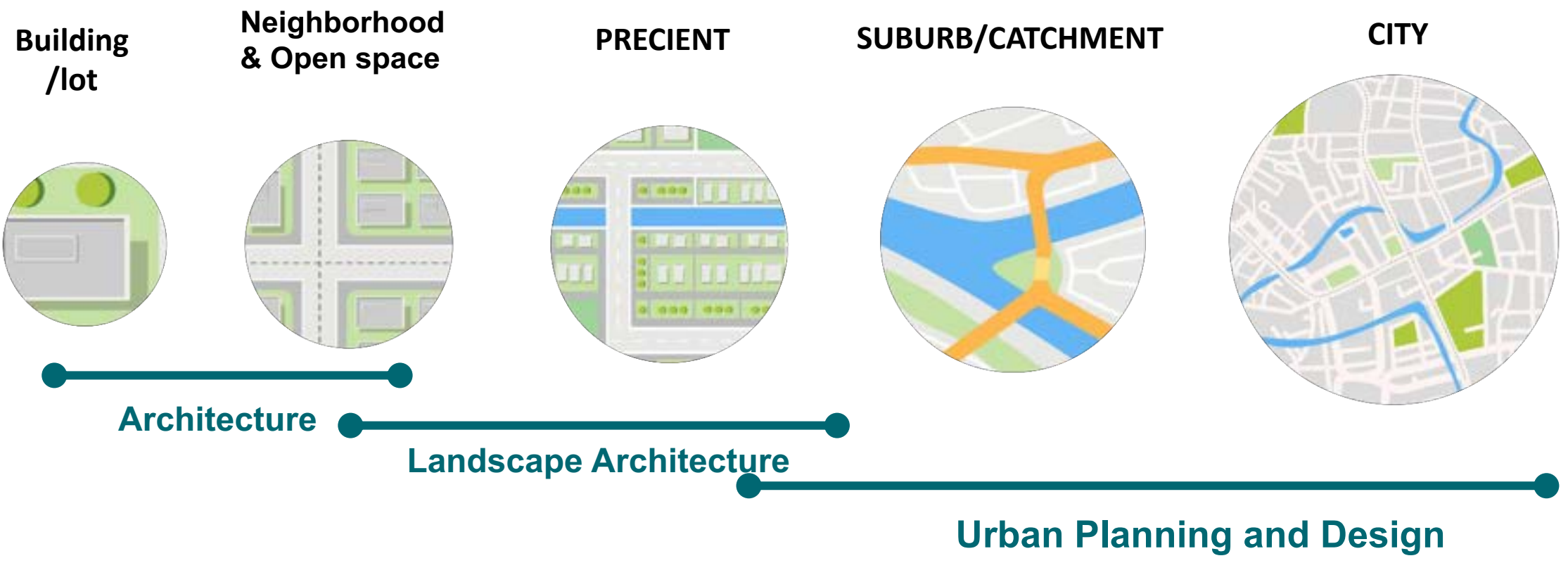


Photo credit: FRC

Scalability beyond buildings



Multi-functional urban park – Kunshan Forest Park

BCR for Kunshan Forest Park 2.71 (WB)



Photo credit: KCID

Multi-functional City Corridor – Kunshan Ring Road

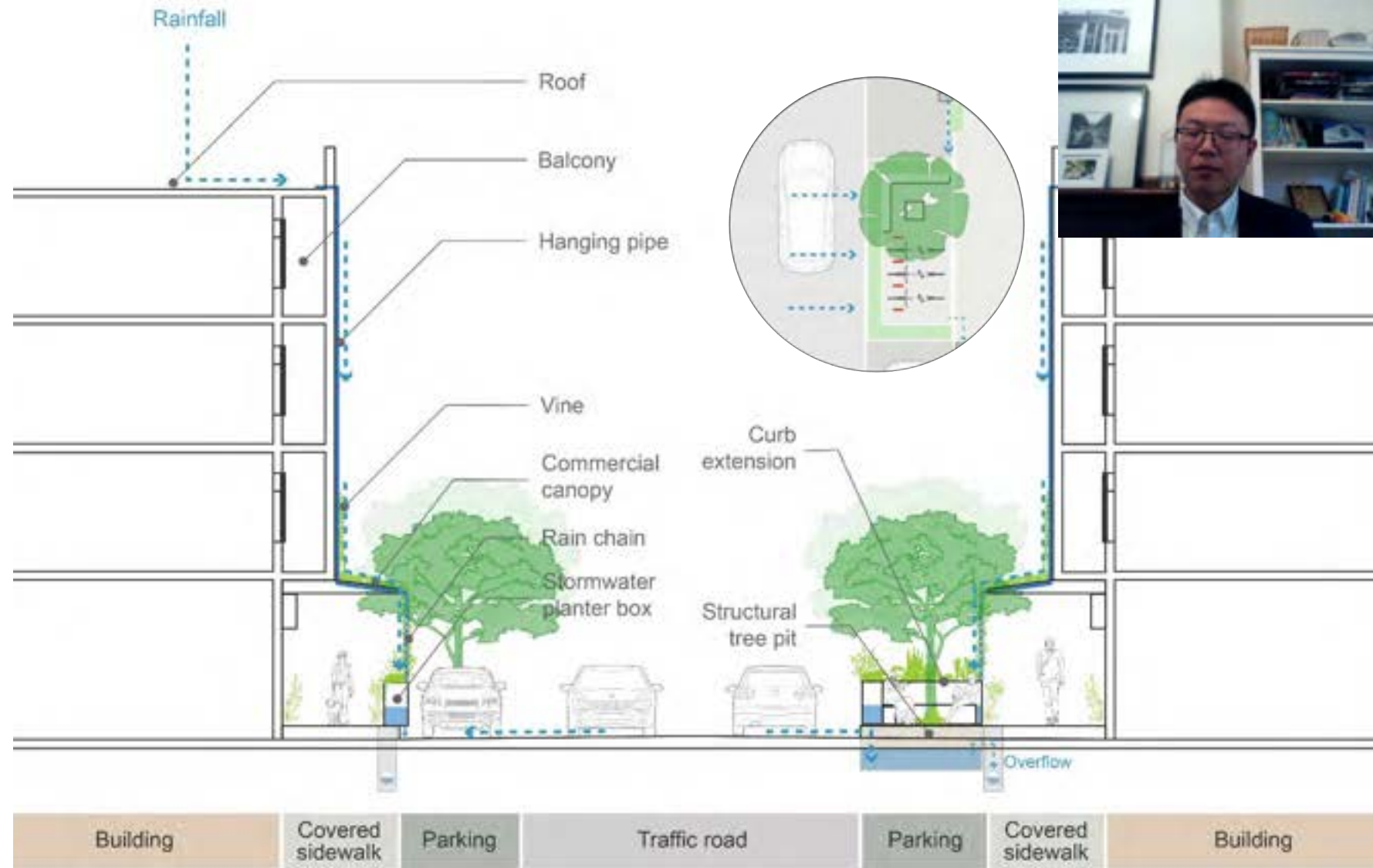


Building Climate Resilience for City of Rayong, Thailand

- Urban heat
- Flooding
- Combined sewer overflows



City of Rayong – Green Canyon Strategy



Urban Regeneration – Kunshan Sponge City Demonstration Park



Before



Before



After



After

Leaving No One Behind





Thank you



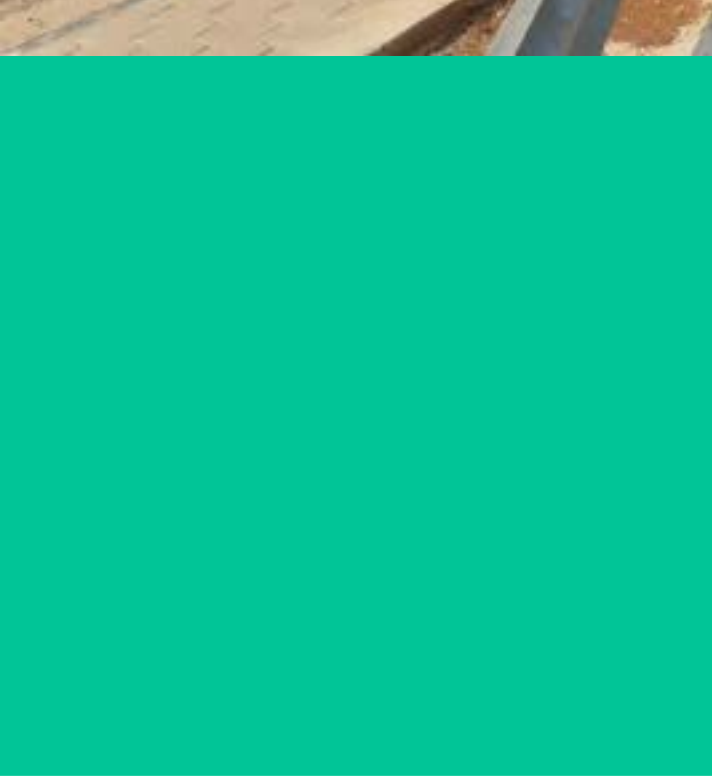
MONASH
University

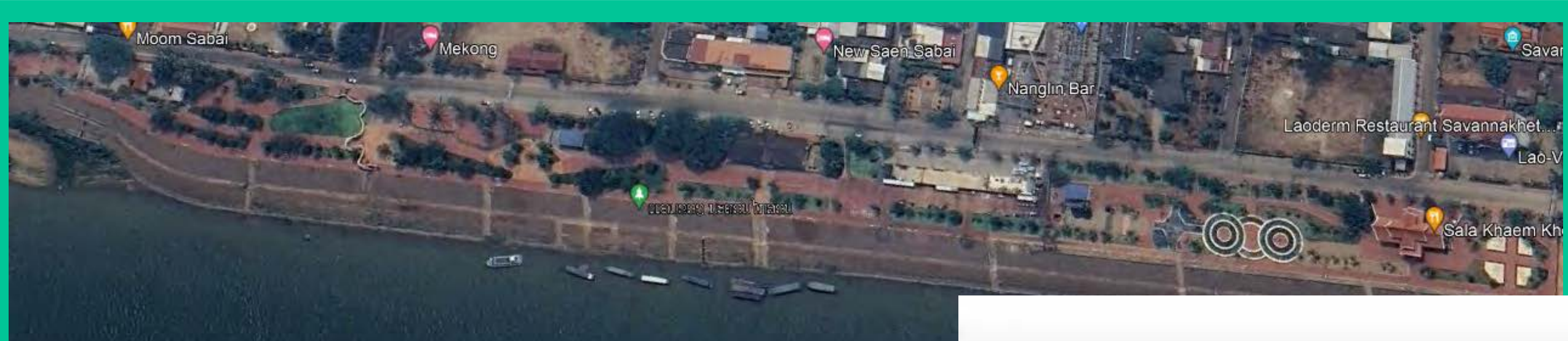
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Thank you!

