Urban Greening insights

for climate change action planning at LGA level

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Brisbane City wide tree cover

Brisbane Residential tree cover
Overview

- Our changing climate imperative for urban greening
- Learnings from others actions
  - “Neighbourhood Shadeways” - Brisbane
  - “Treemendous Trees” - Sunshine Coast
- 3 key points
  - “home-grown” evidence builds triggers for action
  - opportunities come in all shapes and sizes
  - challenge traditional constraints - with an outcome focus
Changing climate imperative for urban greening

From “Adapt NSW - Urban Heat”
Urban Heat - surface temperature mapping
Greener Places
Cooling Western Sydney
A strategic study on the role of water in mitigating urban heat in Western Sydney

- Measured by reduction in Cooling Degree Days (CDD)
- 1726 GWh in annual cooling load savings for residential and commercial buildings and
- maximum reduction of the peak demand of 5%, or 1.2GW

Multipurpose GREEN INFRASTRUCTURE

- Shading /Cooling UHI effects *
- Air quality improvement*
- Carbon sequestration and storage*
- Stormwater cleaning and runoff reduction*
- Business vitality & work productivity
- Property value increase
- Sense of place and time
- Physical and mental health and well being*
Environmental Benefits

Social Benefits

Economic Benefits

Challenges

Disservices, Liabilities, Risks
Brisbane - “Neighbourhood Shadeways”

- Greener, cooler & attractive pathways to encourage walking and cycling
- Started with a link to an existing Council agenda.....added some evidence/measures/maps
- Baseline 35% footpath tree cover
- 50% target based on capacity and cooling effect
- Priority shade-hungry pathways in shade-hungry suburbs - “walk to” zones
- 10 years on - 50,000+ trees, 5,000+ community participants, 20% funded by others
Ingredients of success

- Strong links to local LIVEABILITY
- Clear prioritisation
- Practical links to others programs that translated to
  - funding partnerships
  - allocation/design of space for trees
- Sensible tree species choices
- Community participation and political support
- Monitoring and evaluation- including business case for ongoing investment
Helped change “business as usual” ...new streetscape design

City Boulevards

Residential streets

City Plan 2014 - Infrastructure Design PSP
....with more space for large, healthy long lived urban trees
used a combination of two and three-dimensional tree cover mapping considering percentage canopy cover and projected shade, foliage density and tree height.

a “foliage score” for each of the 27 Local Plan Areas (LPAs) across the Sunshine Coast region,
The eight principles developed to guide future street tree planting on the Sunshine Coast are to:

- Ensure locally responsive species selection and placement that reflects or complements existing character and design intent.
- Plant large canopy trees and groups of trees to build canopy wherever space permits and conflict potential is low.
- Plant large canopy feature/anchor trees in strategic locations (specifically engineered for tree planting if necessary) to enhance the sub-tropical look and feel of the region.
- Shade and cool major pedestrian routes, cycle ways, connections between community facilities and recreation reserves, and urban hot spots with street tree plantings.
- Create attractive and coherent streetscapes through infill and extension planting in avenues along major thoroughfares, lead-ins and entry ways.
- Reduce conflict potential through better tree selection and placement of street trees and ongoing partnerships with internal and external stakeholders.
KEY POINTS

1. “home-grown” evidence builds triggers for action

2. opportunities come in all shapes and sizes

3. challenge traditional constraints - with an outcome focus
Urban greening advice...
More urban greening advice...

- https://treenet.org/
- www.urbanforester.com.au
Streets are the worst and the best place to plant trees.