

RP2005: URBAN MICRO CLIMATES

COOLING CITIES WITH GREEN SPACES: POLICY PERSPECTIVES

Research focus

Green spaces – street trees and pocket parks, green roofs and walls, waterways and botanic gardens – mitigate the urban heat island effect and cool cities during heatwaves. Green spaces are essential for sustaining urban liveability. This research analyses the role of policies in retaining and maximising urban green spaces.



Figure 1: Green spaces contribute to urban cooling

Research methods

The research reviews inclusion of green space in urban strategies and policies, identifies policy mechanisms, and evaluates the 'effectiveness' of these policies in retaining and maximising urban greenery. The qualitative research brings together urban ecology, policy research and theories of sustainability transitions, which focus on processes to transform traditional approaches into newly emerging sustainable systems.

Data includes policy documents and interviews with policy-makers, supplemented by secondary sources.

Analysis and results

The research analysed green space policies applicable to a municipal transect of greater Melbourne, that encompasses inner, middle and outer (growth area) urban contexts. Analysis of London's approaches to green space policies provided a comparative, international 'best-practice' case study.

Green spaces are multi-functional, providing a range of ecosystem services in urban areas. This multi-functionality is reflected in the range of policy domains that address green space, including urban design and land use planning; climate change mitigation and adaptation; water quality and stormwater management; ecology and biodiversity; health; community development; recreation and emergency management. In Australia, all levels of government have policies in these domains. This complexity leads to fragmented approaches and lack of strong policy ownership and funding allocations.

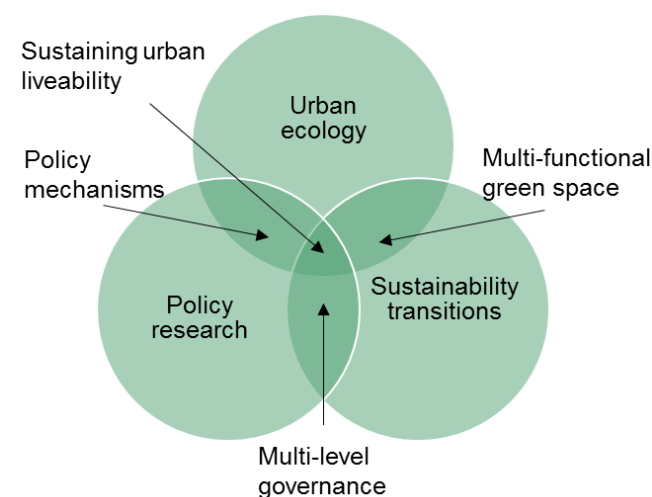


Figure 2: Research analysis framework

There are a range of policy instruments applied to green space, including information and engagement, incentives (financial and non-financial), regulation and direct government provision. A range of instruments is required to address the different barriers that limit green space. Policy measures may be either binding or voluntary, regulating minimum standards or providing incentives for best-practice.



Figure 3: A range of policy domains address urban green spaces reflecting their multi-functionality

Conclusions

Cities are increasingly adopting green space policies and programs in recognition of their importance to urban liveability. Policy mechanisms include information and engagement programs, incentives and regulations. However, to ensure influence and effectiveness, policy development must be supported by strong leadership, an active governance partnership of green space champions, and funding commitments for ongoing management.

Anticipated impacts

There are many opportunities for increasing green space in cities, by transforming concrete, asphalt and under-utilised land into green roofs, green walls, street-side parklets, gardens and open spaces. Effective policy frameworks can strengthen green space retention and maximisation and contribute to urban liveability.

Green spaces are essential, multi-functional elements of urban infrastructure for sustainable, liveable cities.

Further information

<http://urbanclimates.org/>

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