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Unveiling the Power of Domestic Gardens: Can they enhance local air quality and mitigate heat stress?

The Clean Air Gardens Project

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Clean Air Gardens



At a time when the health hazards of air pollution and rising temperatures are being amplified by climate change, if designed correctly, domestic gardens may have the potential to protect communities, particularly the most vulnerable people, from local effects of these impacts.



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Project Aims and objectives

Investigate how domestic gardens impact local air quality and temperature regulation, and how this impact is linked to the spatial configuration of planting in gardens.

Objectives:

1. **Scope experimental sites** where poor air quality and social deprivation correlate.
2. **Quantify and compare** the pollutant/temperature reduction potential of three distinct types of garden design (open, grey infrastructure barrier and vegetated barrier) under close-road conditions.
3. **Transfer findings** into preliminary domestic garden design recommendations for air quality and thermal comfort improvement.



Achievements to Date



Literature review (paper)



Identified garden locations



Selected domestic gardens



Measuring Temperature & Air pollutants (S)



Expectations for the remainder of project

