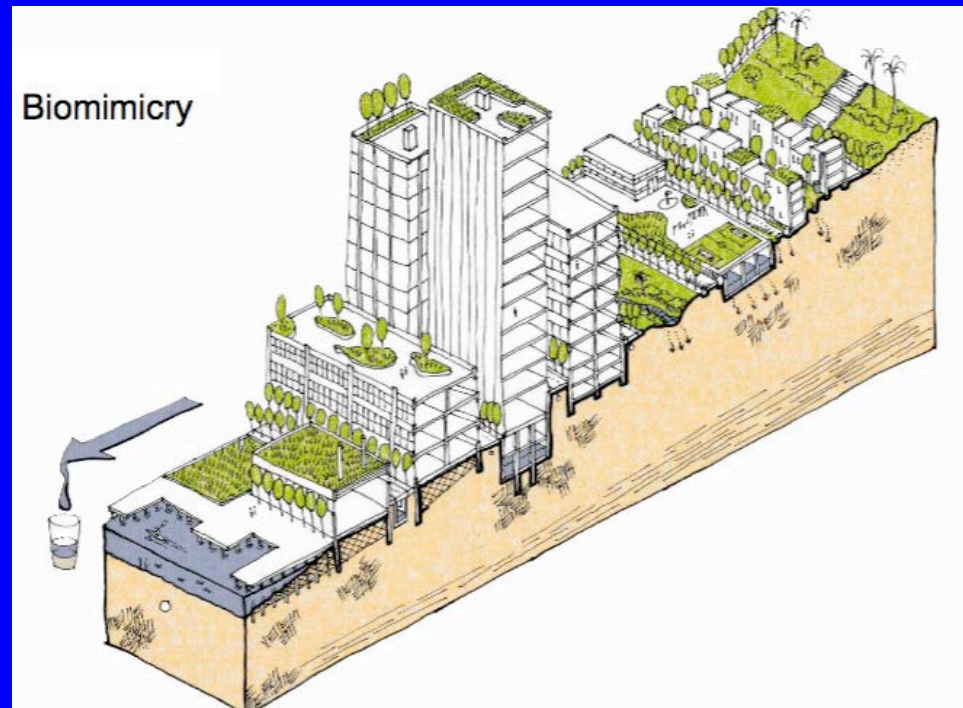


# Vegetation Health Index: developing a decision support tool for land managers



**Dr Alejandro Dussillant**

**London Climate Action Week 2020**

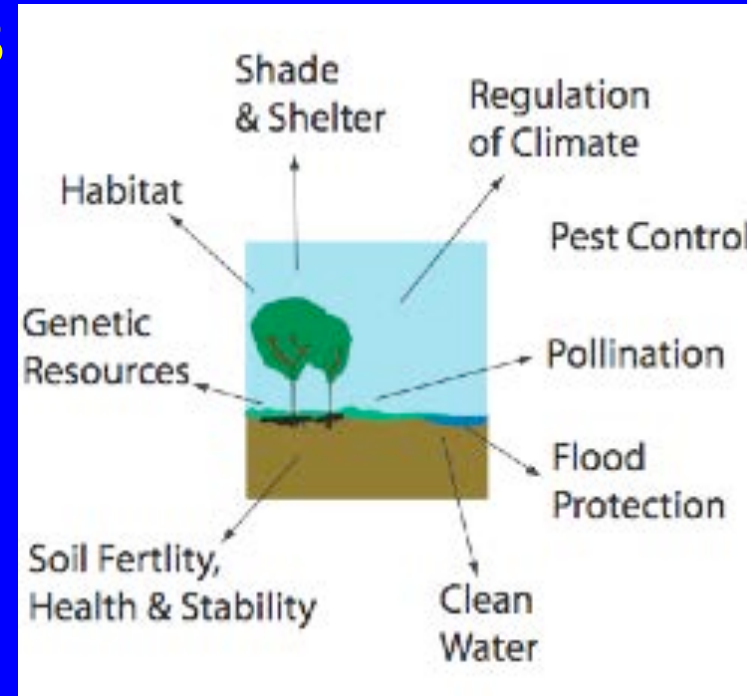
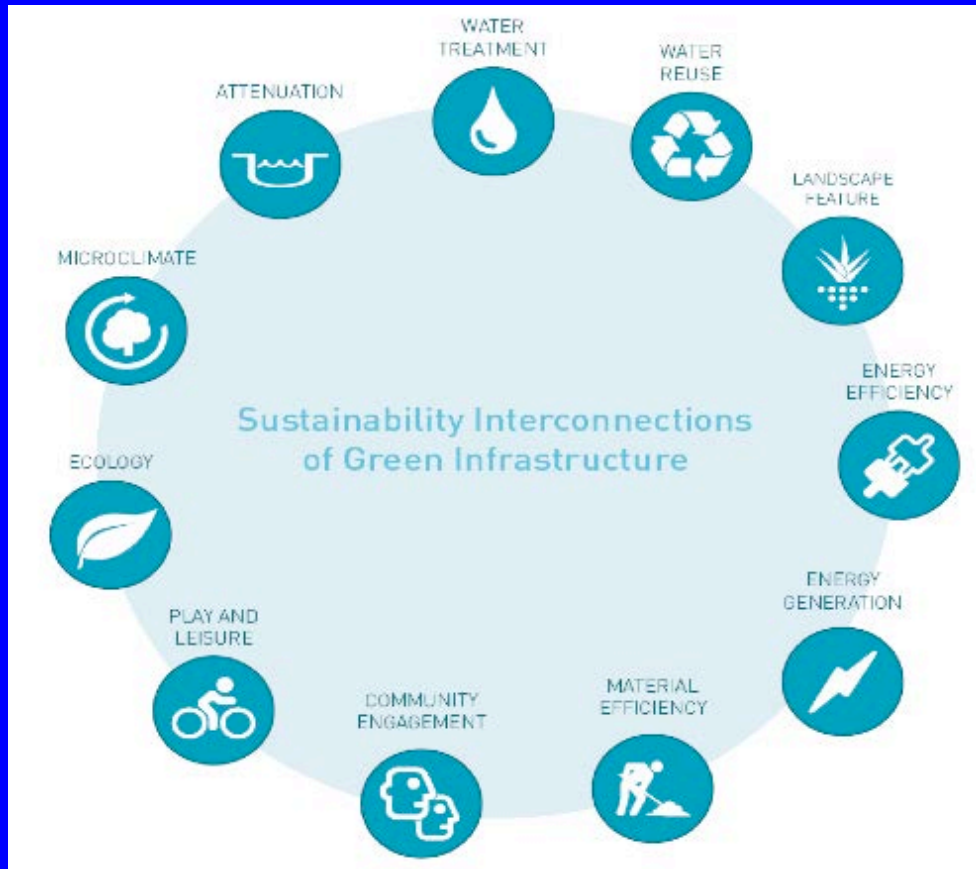
# Green Infrastructure (GI)

- Parks
- Nature conservation areas
- Sports fields
- Woodlands
- Community gardens
- Green roofs
- Riparian vegetation
- Cemeteries



# Green Infrastructure (GI)

## Ecosystem Services

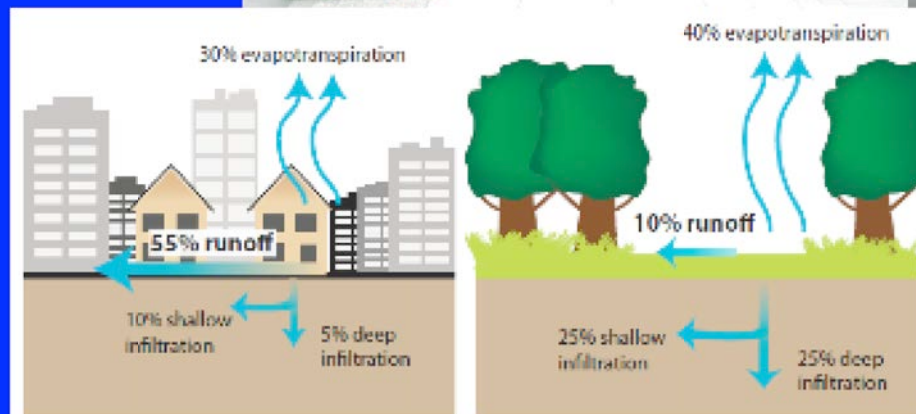


**Sustainability  
interconnections**

**NATURE-BASED SOLNS**

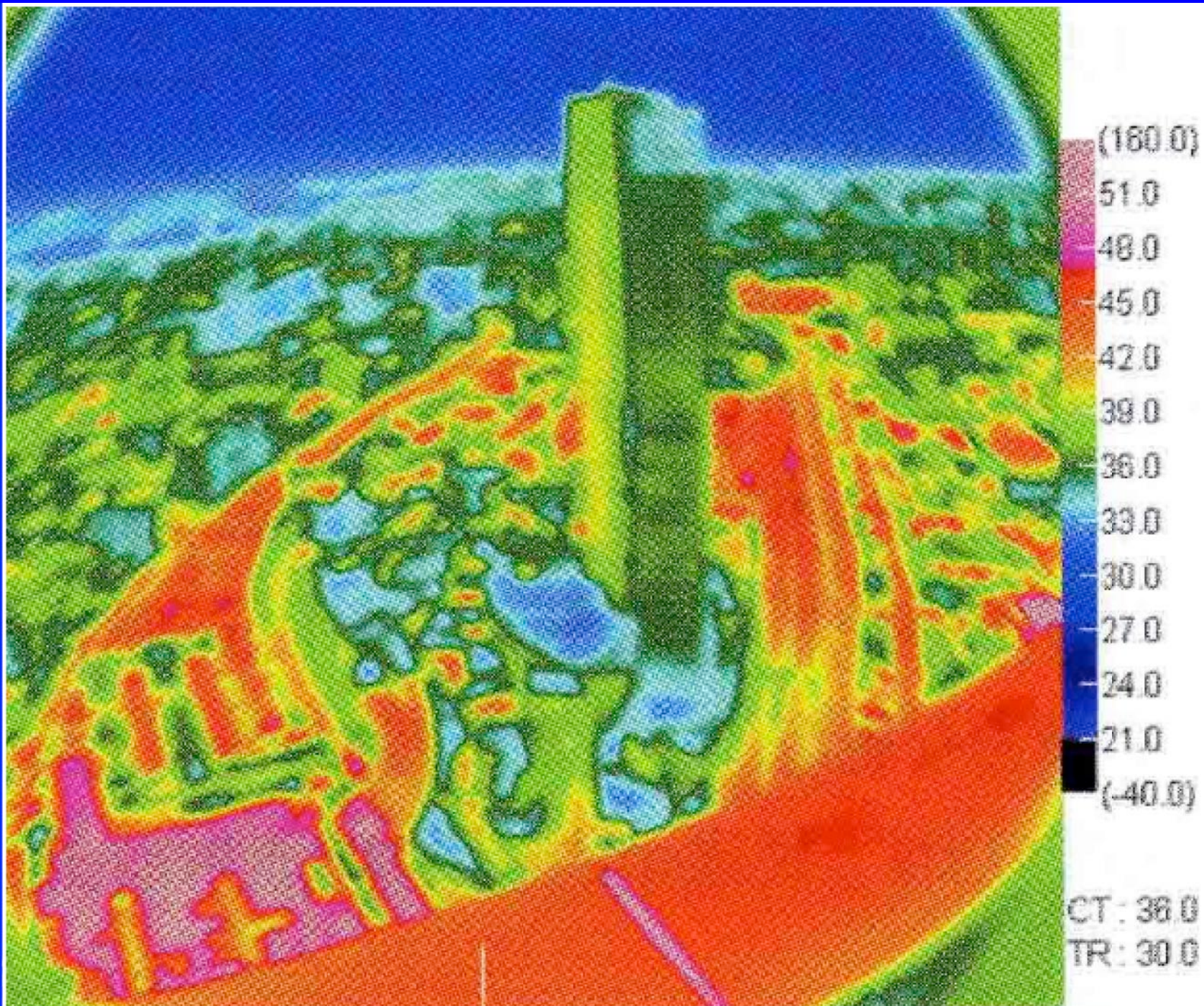
# GI services

- Mitigate heat
- Reduce flooding
- Retain pollutants
- Store carbon
- Provide habitat
- Improve air quality
- Reduce noise
- Aesthetics
- Recreation
- Wellbeing
- Health





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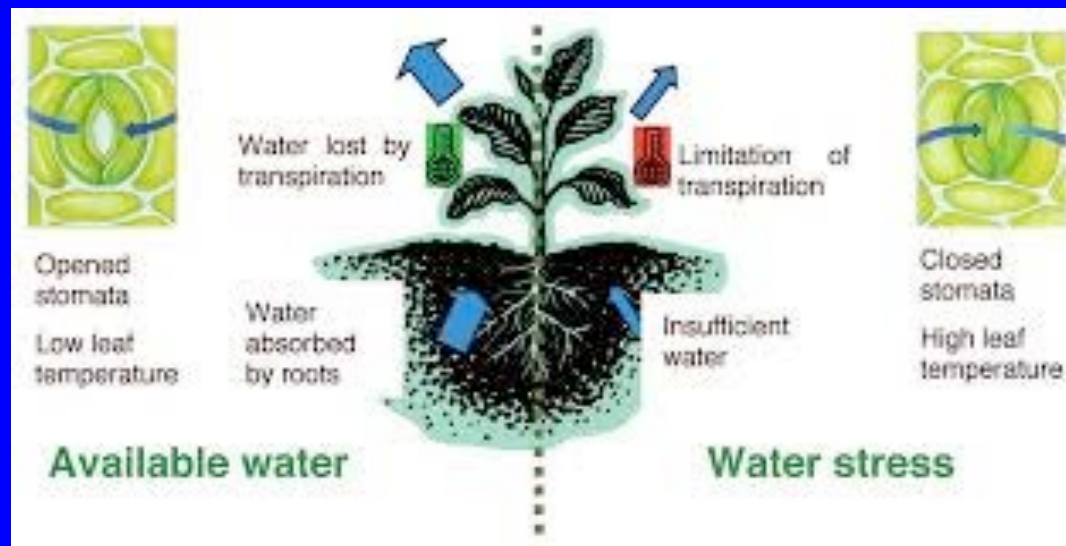


London

# Vegetation Health Index (VHI)

## tool for land managers

- Index idea established by Space4Climate working with LCCP as outcome from Heat & vulnerability + mapping GI in London
- Detect plant stress in time to hopefully help management
- Plant water stress shown in signals that can be detected from space by satellite sensors:
  - Reflected radiation from vegetation
  - Increase in temperature due to reduced plant transpiration (caused by lack of water)



# Vegetation Health Index (VHI) tool for land managers

- Presented proposal to UKRI NERC Embedded Researcher in Space4Climate, with support from scientists & industry experts in S4C & LCCP (including speakers/attendees today :-)
- Steps/objectives:
  - Scoping: evaluate existing tools & datasets
  - Stakeholders: identify needs & challenges
  - Open source prototype development
  - Evolution prototype



More info: