

Regenerative Cities

Welcome Address

Urban Solutions & Sustainability R&D Congress
Science of Cities Symposium

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CREATE *ETH* zürich



(FCL) FUTURE
CITIES
LABORATORY
GLOBAL

Rationale

Future Cities Laboratory (FCL) Global aims to make interdependencies between cities and their hinterlands more sustainable and liveable.

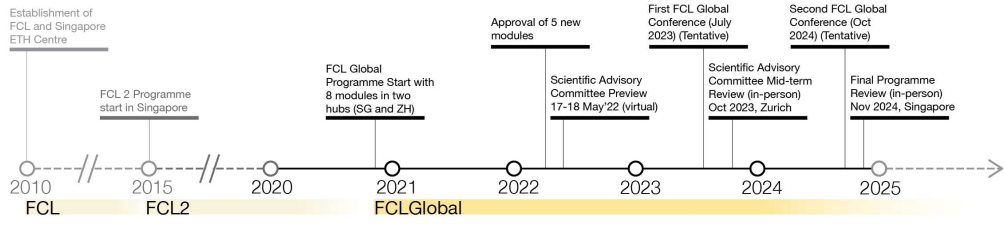
Vision
Sustainable Cities and Settlement Systems

Mission
Through Science, by Design, in Place, over Time

Structure
2 symmetrical Hubs in SG and ZH
4 Research Clusters
13 Research Modules supported
1 Engagement Platform

International Competence Centre

This involves understanding how existing interdependencies function, and developing solutions that capitalise on local resources (e.g. energy, water and waste management), on the one hand, and that balance regional and global exchanges on the other hand.

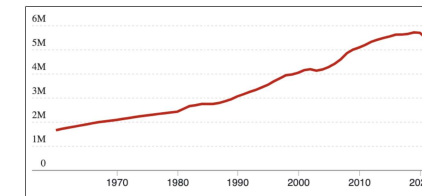


(FCL) FUTURE CITIES LABORATORY GLOBAL

Singapore



Population 5.454 million



datacatalog.worldbank.org

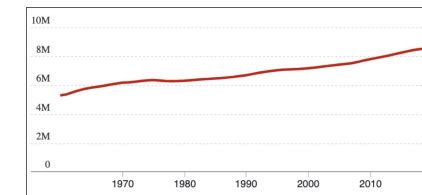


Surface Area 728.6 km²

Switzerland



Population 8.703 million



datacatalog.worldbank.org



Surface Area 41,285 km²

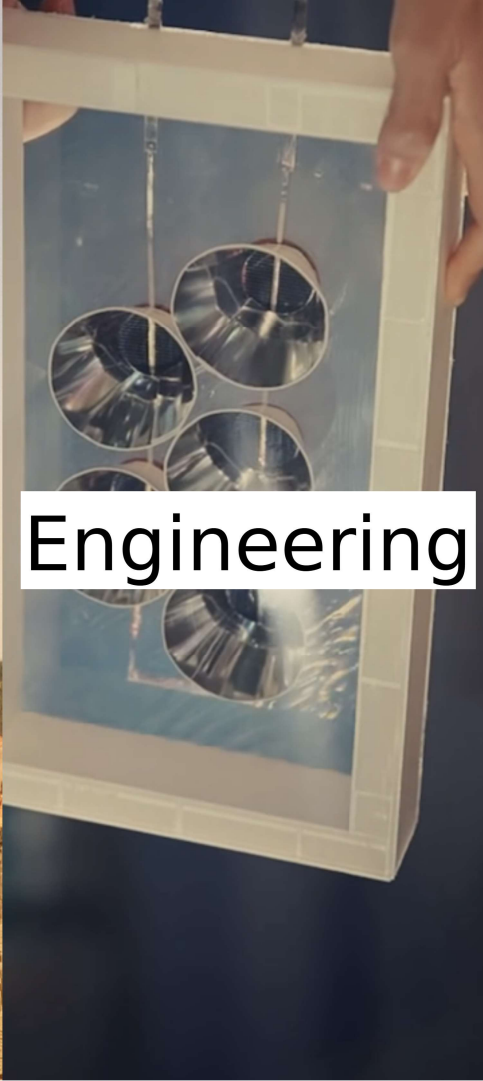




Science



Design



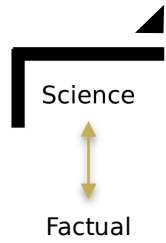
Engineering



Governance

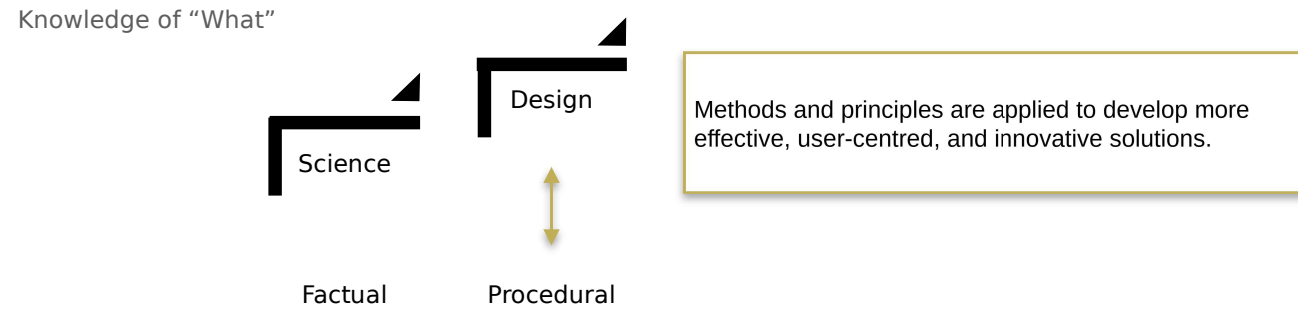
The 4 dimensions of the FCL Global knowledge loop

Knowledge of "What"

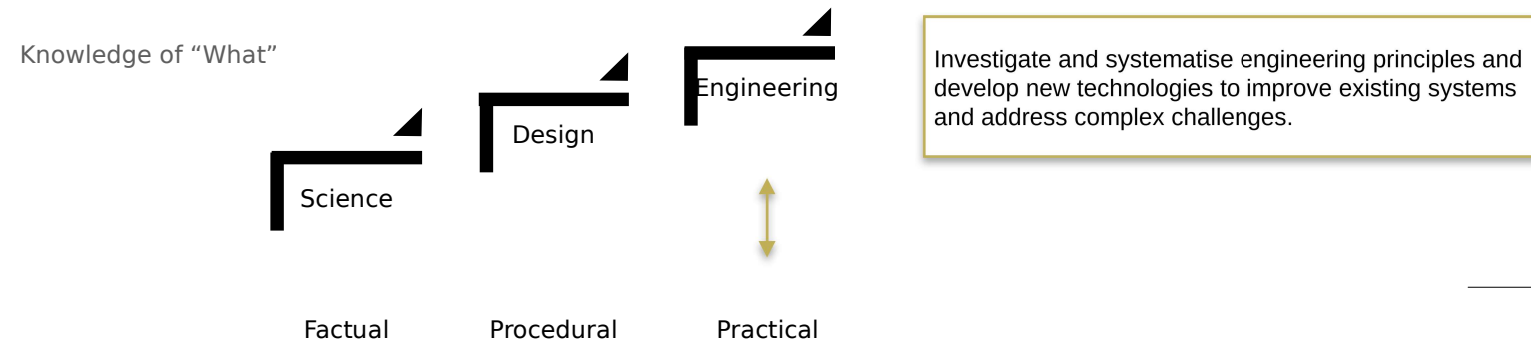


To understand, analyse, and address various aspects of urban environments and their challenges

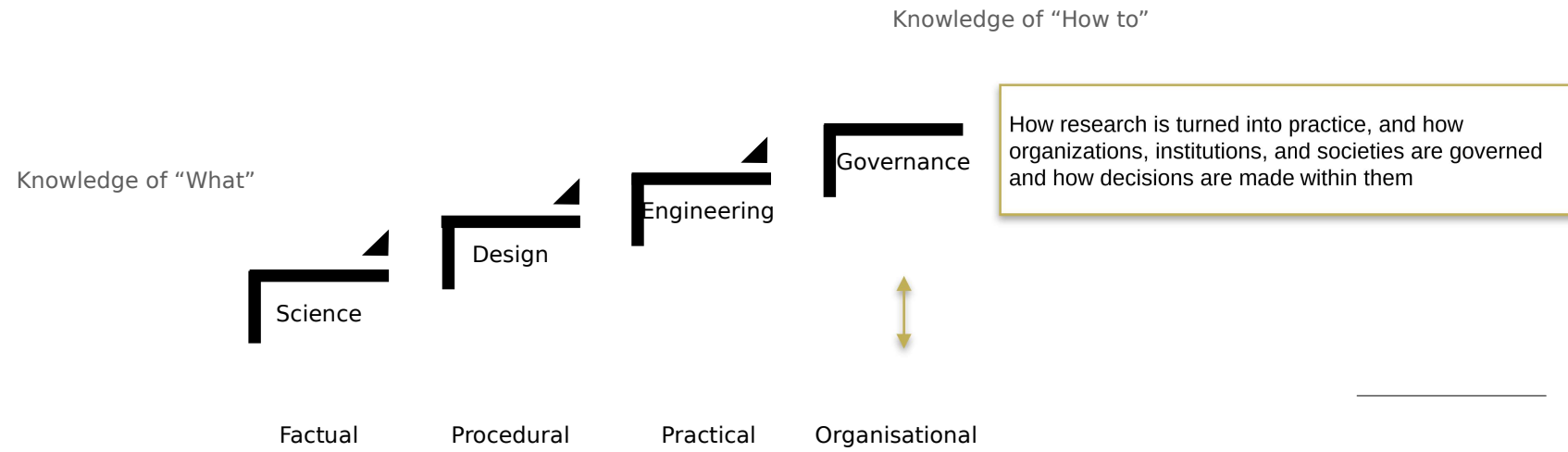
The 4 dimensions of the FCL Global knowledge loop



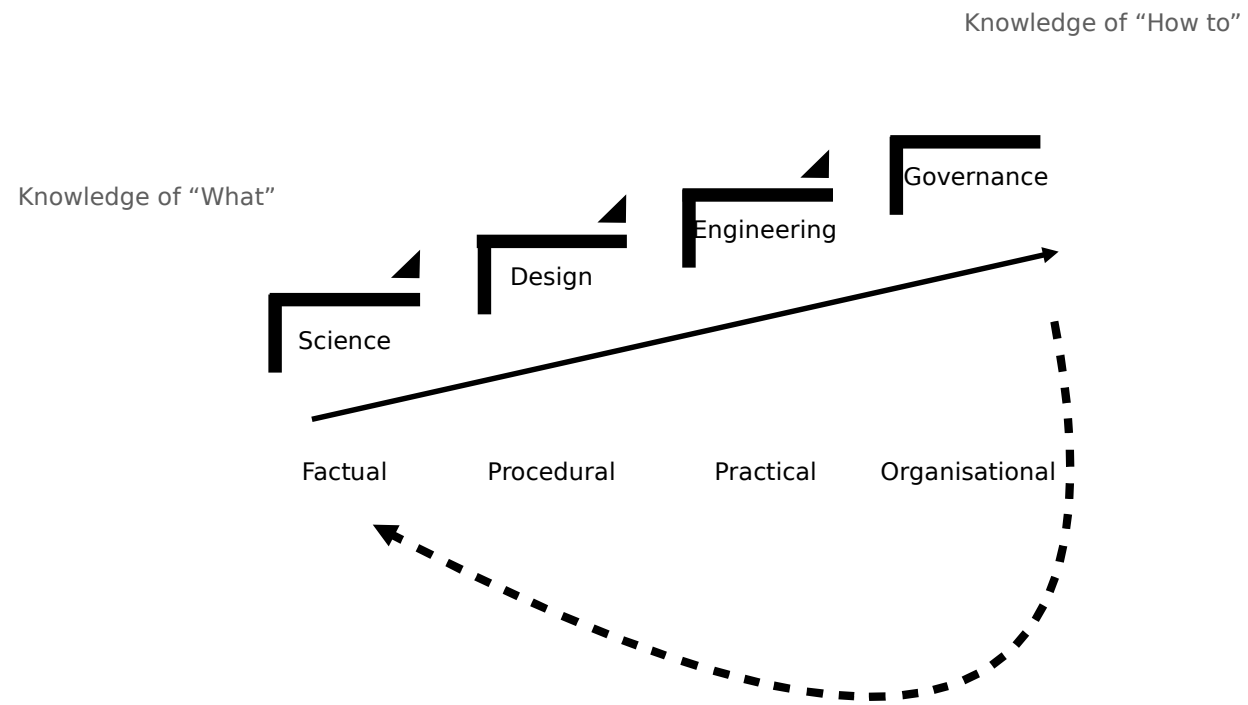
The 4 dimensions of the FCL Global knowledge loop



The 4 dimensions of the FCL Global knowledge loop

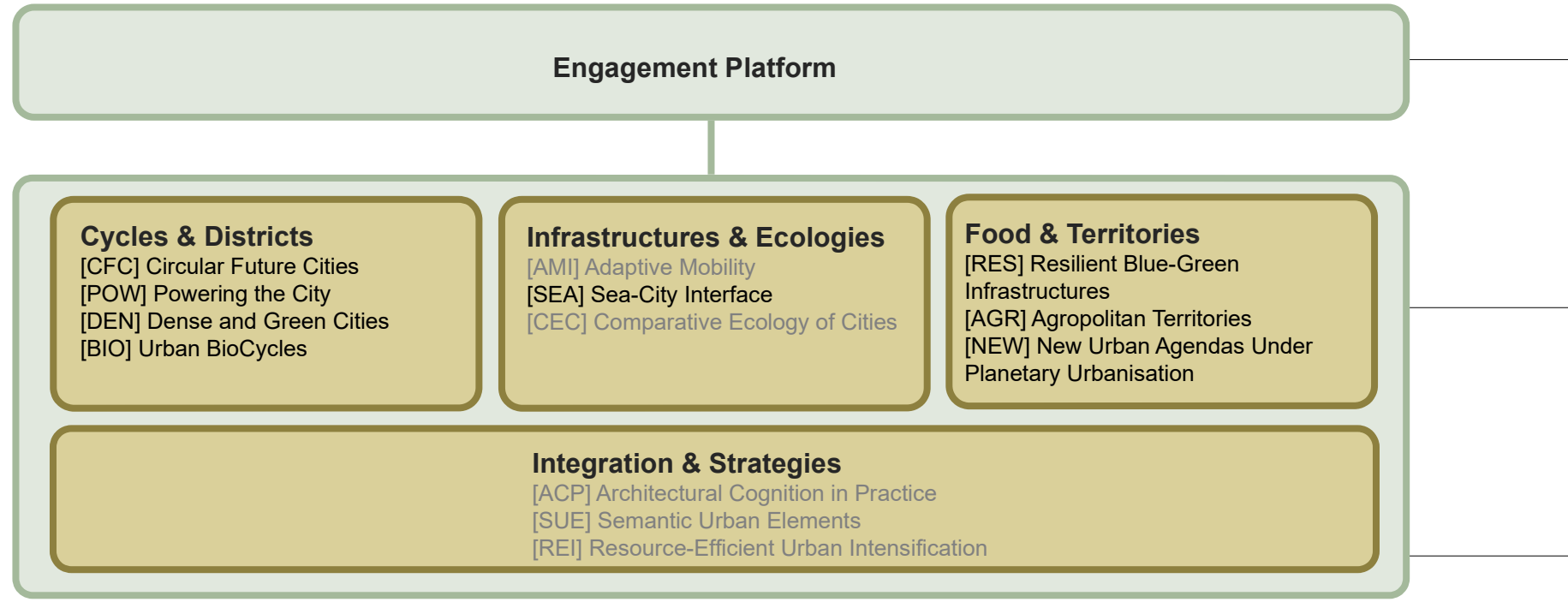


The FCL Global Knowledge diagram



Source: Dr. Julio Paulos

Programme structure



Engagement Platform

Integrating research efforts through, a comparative data repository, data management, building capacities in digital literacy and interdisciplinary research, new teaching and learning initiatives, innovative communication, dissemination and knowledge exchange

<https://fclg-ep.ethz.ch/>

The screenshot displays the Engagement Platform interface. At the top left, it identifies the user as '(FCL) FUTURE CITIES LABORATORY' and the platform as 'Engagement Platform' with the tagline 'Sustainable future cities and settlement systems: Through science, by design, in place, over time...'. A 'Login' button is visible in the top right.

The main area features a world map with several hubs highlighted: Zurich, Greece - Arcadia, India - New Dehli, India - Bangalore, China - Chengdu, and Singapore. A sidebar on the right of the map allows for filtering by 'Hubs', 'Modules', 'Partnerships', 'Research Sites', and 'Layers'. Below the map is a 'Tools' section with links to 'ur-scape', 'Singapore Views', and 'City Energy Analyst (CEA)', each with options for Website, Video, and Source Code.

Other panels include 'Bibliographic Outputs' showing 30/115 Publications, 5/70 Conferences, 2/12 Policy Reports, and 2/17 Exhibitions. A 'Partnerships' section displays a network diagram connecting 'SEC' (Cooling Singapore, Digital Underground, FHT) to 'Partners' (Industry, Non-profit/NGO, Government, Inter-governmental, Academia, Research Institute). A 'Sustainable Development Goals' panel features a donut chart for Target 2.a (Zero Hunger) with a goal of increasing investment in rural infrastructure and agricultural research.

A 'Social Media' panel shows a tweet from aurel von richthofen (@aurelvr) dated Jun 12, 2022, praising a collection of open-source urban analytics and planning software.

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