

**URBAN
ENVIRONMENT &
SOCIAL INCLUSION
INDEX**

SUSTAINABLE AND INCLUSIVE:

**Are cities meeting goals for
sustainable and equitable growth?**

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Overview

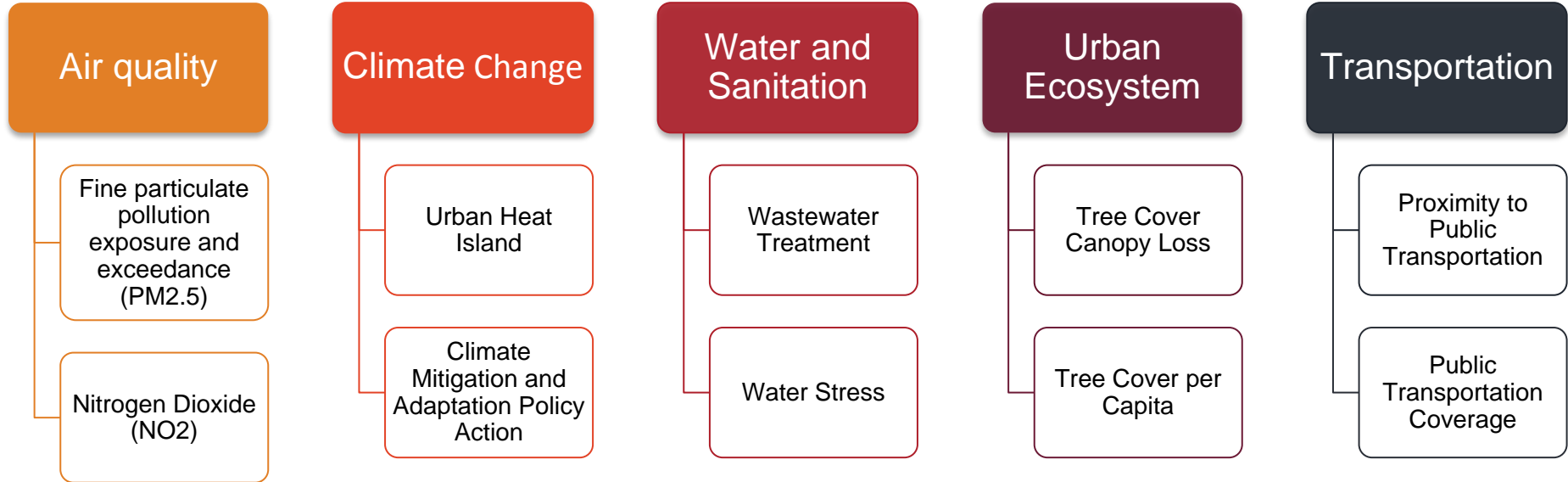
- What is the status of environmental performance in cities?
- Can we measure distributional equity?
- Results and applications

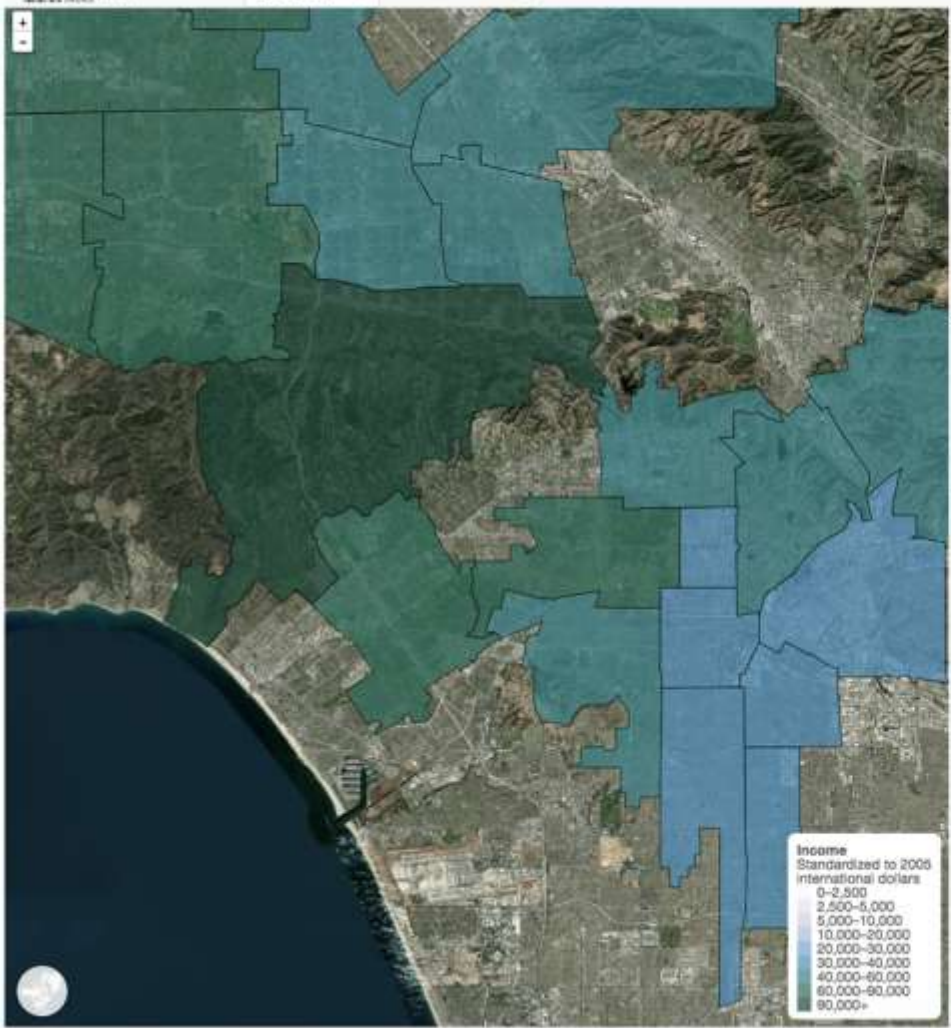
An aerial photograph showing a stark contrast between a densely packed slum on the left and a well-maintained golf course on the right. The slum features numerous small, closely packed buildings with roofs made of corrugated metal in various colors like brown, grey, and blue. A narrow dirt path or road runs through the middle of the slum. The golf course on the right is lush green with several brown sand traps and a few people visible on the grass. A semi-transparent grey rectangular box is overlaid on the center of the image, containing the text.


How are we tracking progress toward sustainable development?

Source: Johnny Miller / Unequal Scenes; <https://unequalscenes.com/>

UESI MEASURES 5 ENVIRONMENTAL DIMENSIONS



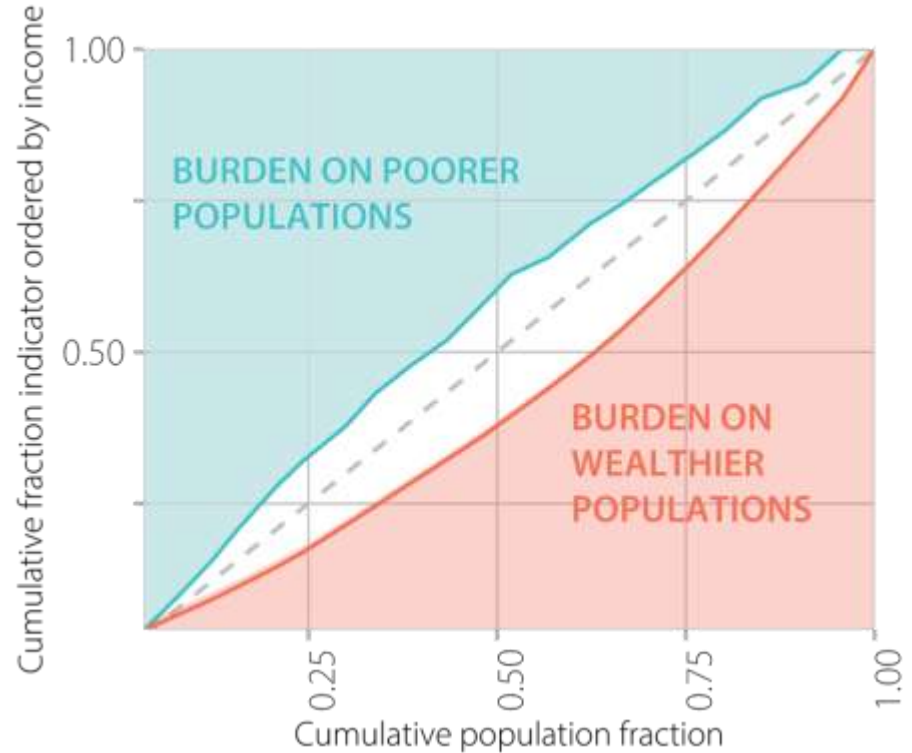


An aerial photograph of an urban area, showing a large, light-colored open field on the left, several tennis courts with blue and green surfaces on the right, and a dense residential neighborhood with red-tiled roofs and narrow streets. A semi-transparent white box is overlaid on the center of the image, containing text.

How are access to environmental goods and 'bads' distributed within urban populations?

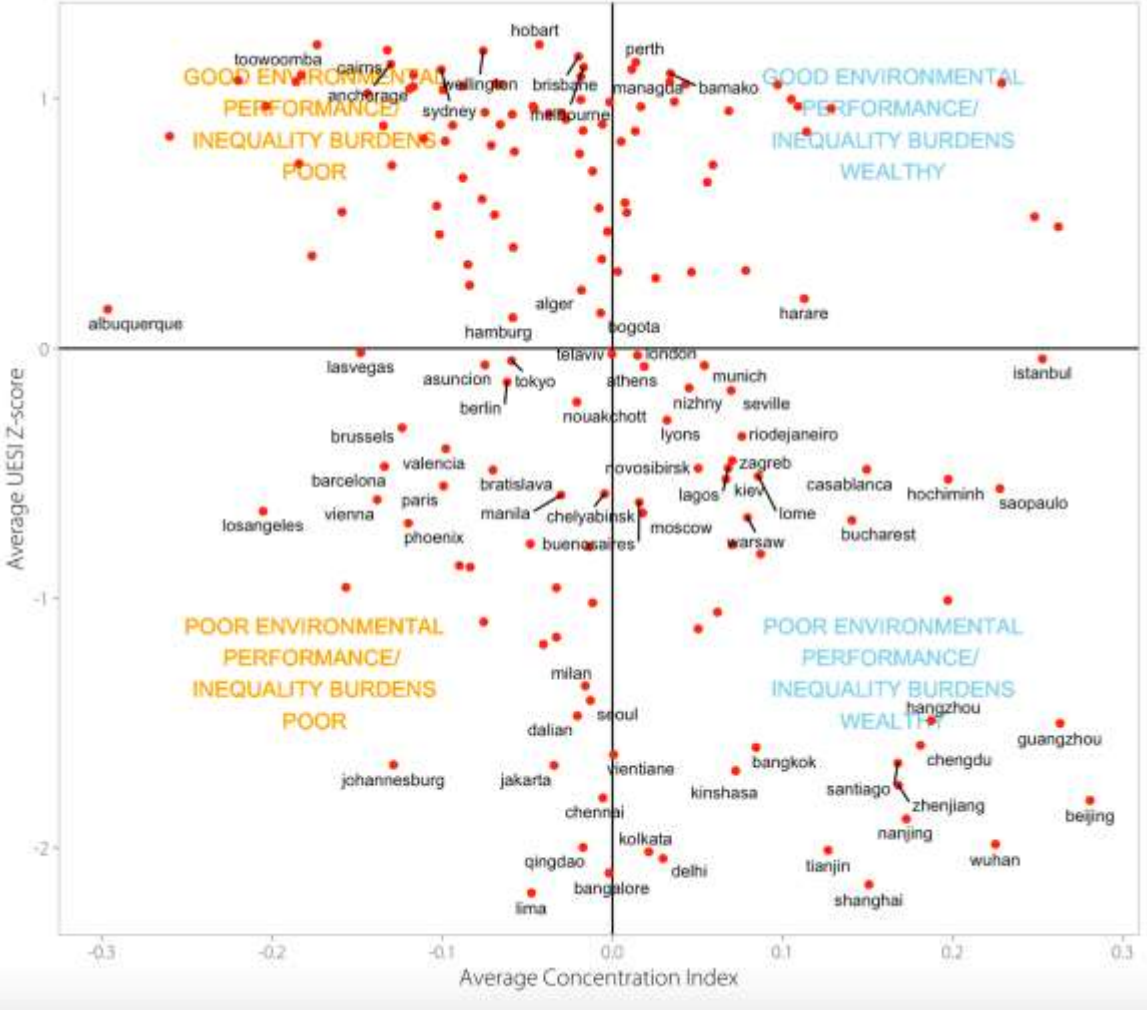
MEASURING EQUITY

Concentration Index for Environmental Outcomes

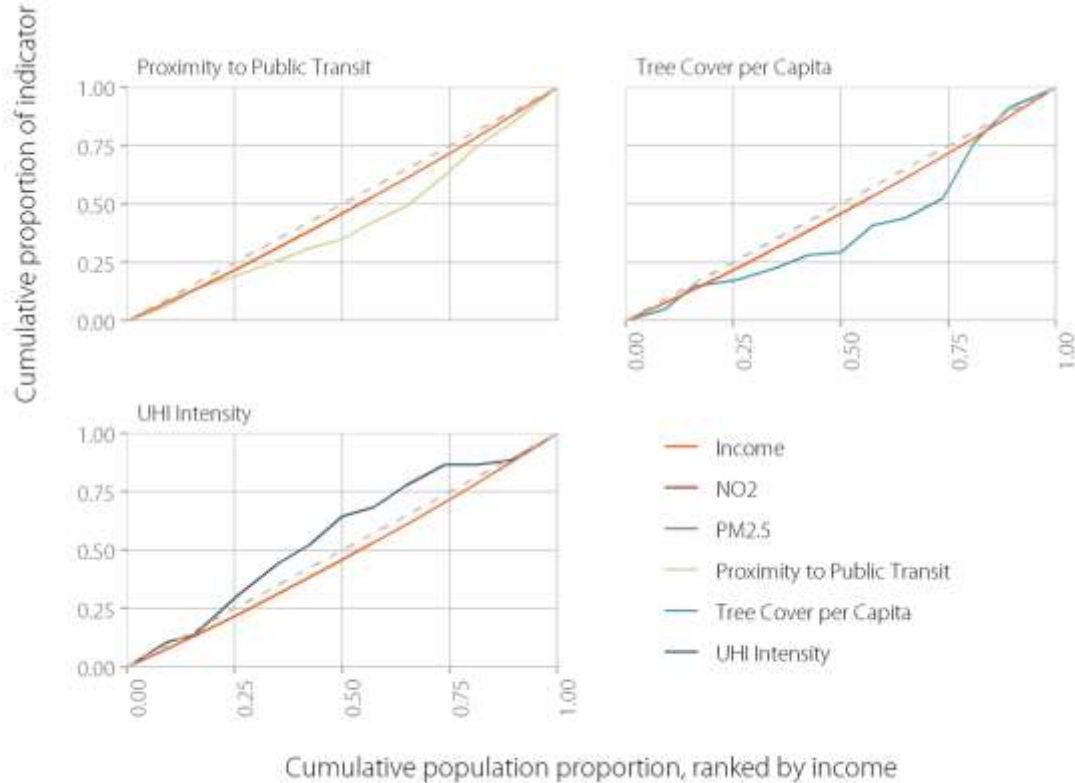


$$ECI = 1 - 2 * AUC_{env}$$

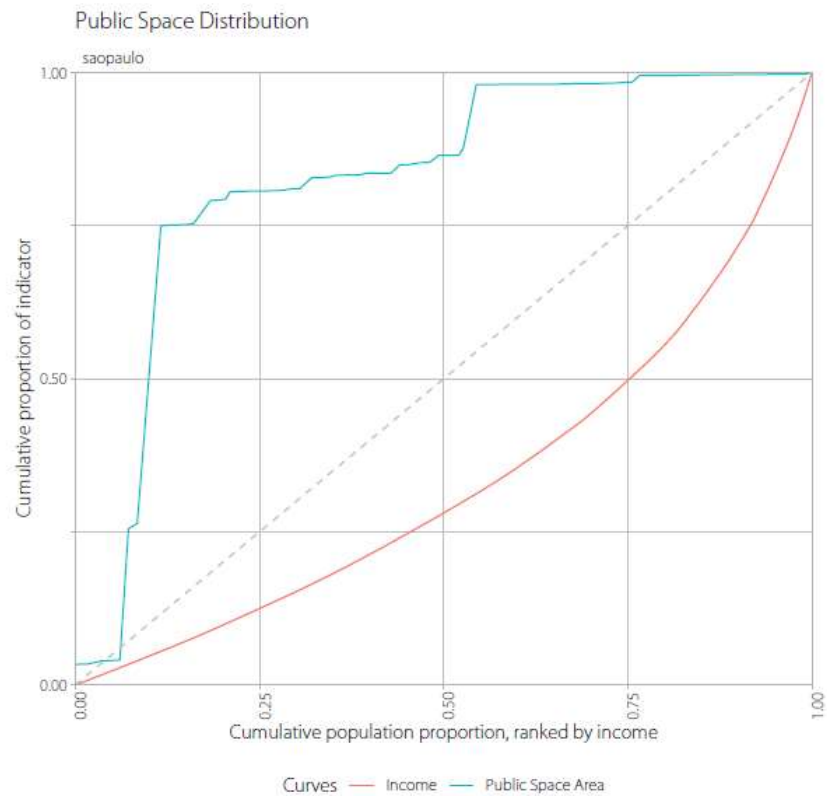
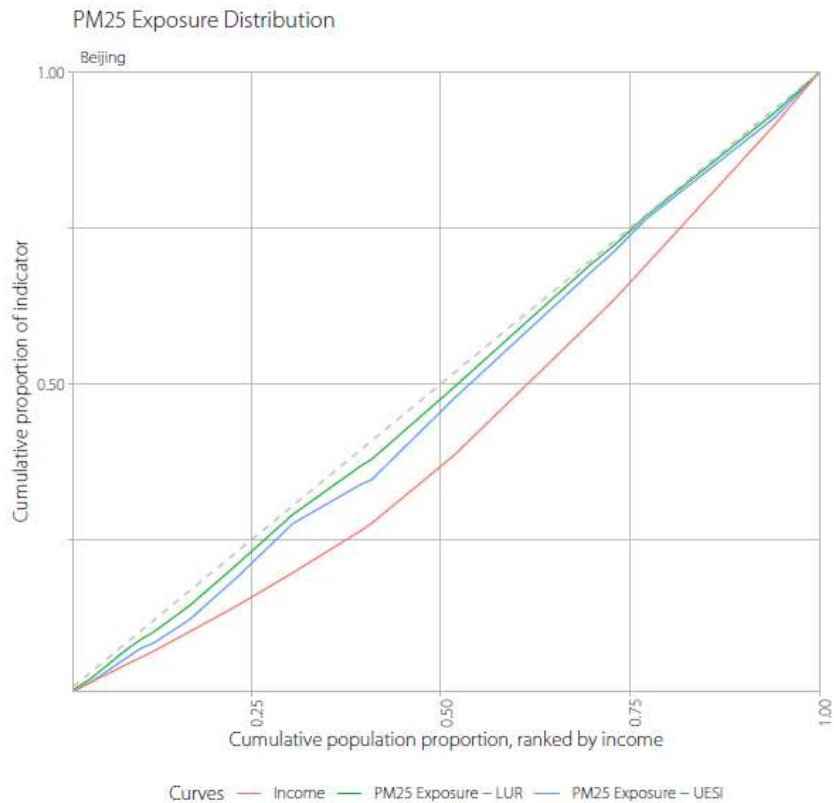
2019 Average UESI Score & Concentration Index



2019 UESI Concentration Index - Berlin



ADAPTABILITY TO NEW DATASETS



THANK YOU

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