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City living is proving pretty popular. The proportion of people living in urban areas in 1950 was a bit less than one-third. Today, it's more than half. By 2050, two-thirds of the global population will call a city home — a complete reversal of the situation 100 years earlier. The health and happiness of these people, and the world's responses to the specific challenges faced by city-dwellers, are therefore central to the future prospects of humanity.

Climate change poses several threats to city life. Rising global temperatures will hit built-up areas hard, but 'supercool' materials that turn back some of the Sun's heat could help to prevent meltdown (see page S2). In response to the growing risk of flooding, some cities are taking action to restore waterways to a more natural state, giving water somewhere to go other than their streets, homes and businesses (S5).

Changes to how cities are built might also help to slow climate change. Building with wood, rather than concrete and steel, can reduce a structure's lifetime carbon emissions considerably, and a growing number of architects and engineers are trying to promote the practice (S8). And some cities are ditching natural gas for geothermal energy networks that use bore-holes drilled deep into the ground as an efficient way to heat and cool many buildings at once (S16).

The purpose of all of this is to improve the lives of people who live and work in cities, and that includes both their physical and their mental health. Greenery has been linked to better mental health, and now some researchers are trying to identify the specific features of urban landscapes that promote good health, and use them to redesign public spaces (S11). Intelligent urban planning can also help make cities work better for women, who are disproportionately burdened with caring duties in spaces and on transport networks not designed with that as a priority (S12). Transportation in cities could also be improved by the arrival of networked autonomous vehicles and smart infrastructure (S13). The city as we know it is evolving, and this will benefit urbanites everywhere.

We are pleased to acknowledge the financial support of the Novartis Foundation in producing this Outlook. As always, *Nature* retains sole responsibility for all editorial content.

Richard Hodson

Senior supplements editor

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Change is coming to the urban environment.

Credit: Vera van Wolferen

About Nature Outlooks

Nature Outlooks are supplements to *Nature* supported by external funding. They aim to stimulate interest and debate around a subject of particularly strong current interest to the scientific community, in a form that is also accessible to policymakers and the broader public. *Nature* has sole responsibility for all editorial content — sponsoring organizations are consulted on the topic of the supplement, but have no influence on reporting thereafter (see go.nature.com/33m79fz). All *Nature Outlook* supplements are

available free online at go.nature.com/outlook

How to cite our supplements

Articles should be cited as part of a supplement to *Nature*. For example: *Nature* Vol. XXX, No. XXXX Suppl., Sxx–Sxx (2025).

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