NATURVATION
cities – nature – innovation

Mainstreaming Urban Nature-Based Solutions

Advanced valuation models

Valuation models that monetise the benefits and costs of nature-based solutions can help governments and investors steer investment toward sustainable infrastructure. While energy efficient and green buildings are highly valued in Europe, there is limited awareness of the possibilities of nature-based solutions, and thus a need to improve data, modelling, and performance metrics to increase the valuation of these solutions. In the context of conflicting options, economic valuation of nature-based solutions through cost-benefit analysis can improve decision making. In the insurance sector, valuation models inform catastrophe risk modelling and risk management. Existing models include Sustainable Asset Valuation (SAVi), which assigns financial value to economic, social, and environmental risks and shows how these risks affect the financial performance of infrastructure projects, and S&P Global Ratings' Green Evaluation.

Natural Capital Accounting is an established valuation model in the UK. An independent government advisory committee composed of academics, Natural Capital Committee, advises the national government on the value of the UK's natural assets to the economy and provides input on policy. The Committee tests out their guidance on valuing natural capital in specific places by partnering with five Pioneer Projects throughout the UK, and other local governments have piloted natural capital accounting for their jurisdictions. The Office for National Statistics produces annual reports on natural stocks in the UK and ecosystem services provided by green space in urban areas, such as cooling and property value increases. Natural capital is also embedded in the country's Industrial Strategy.

Mainstreaming Nature Based Solutions

Promising Pathways for Sustainability Goals

Climate Change

With the race to reach 'net zero' targets and build back resilience, nature-based solutions are increasingly seen as a critical tool for responding to climate change. Whether by cooling cities and reducing energy demand or providing new ways of managing flooding, nature-based solutions are gaining support globally. We identify four pathways through which mainstreaming is taking place: recognising their potential as a climate solution; investing to reduce climate risk; integrating climate action with other sustainability goals; and learning through practical experience on the ground.

Biodiversity

As the world seeks to develop a transformative agenda for biodiversity over the next decade, we explore how mainstreaming nature-based solutions can enable cities to conserve, restore and thrive with nature. Four pathways are identified based on regulating for 'no net loss' of biodiversity, developing co-governance arrangements for public-private finance, integrating biodiversity with existing sustainability priorities, and integrating biodiversity into urban development and the built environment.

Social Inclusion

Nature-based solutions such as new parks, rooftop gardens, and tree-lined streets play an important role in improving wellbeing and enhancing community spaces. However, the potential for gentrification and displacement of lower income groups means that these solutions must actively foster social inclusion and tackle inequalities. We identify three pathways that strengthen social inclusion: broadening community participation, securing genuine political commitment and policies that support social inclusion, and pursuing social inclusion measures as a way of achieving health and wellbeing.

Economic Regeneration

Nature-based solutions can create economic regeneration through increasing economic activity and employment and by improving the quality of life. Nature-based solutions both directly contribute to economic vitality and well-being, and leverage new forms of economic activity in cities that generate opportunities. Mainstreaming for economic regeneration takes place through developing partnerships for investment, increasing our knowledge of their economic value, seizing opportunities emerging from other sustainability initiatives, and stimulating market demand for nature-based solutions.

Sustainable Development Goals

To achieve the SDGs, urban development must prepare for growing populations while also creating sustainable and inclusive cities. Nature-based solutions can address a range of sustainability goals from climate resilience to health to economic development. For example, green space provides cooling, reduces pollutants, and encourages physical activity. Pathways that engage urban nature-based solutions to address SDGs include: involving diverse actors, strengthening local engagement, addressing multiple sustainability objectives simultaneously, establishing institutional arrangements that integrate sustainable development, and monitoring and assessing sustainable urban transformation.