



NATURVATION
cities – nature – innovation



Mainstreaming Urban Nature-Based Solutions

Include in contractual agreements

Nature-based solutions can be included as a requirement in contracts for utilities, such as water, waste, and energy, and for entities that manage roads, railways and waterways. The provision of these services are usually either publicly owned or operate on long-term contracts bound by regulatory requirements. For example, contracts can require the use of nature-based solutions in water quality treatment or wildlife-friendly land next to railways or roads. Reducing the cost of nature-based solutions can be accomplished by incorporating them within construction projects to draw on existing budgets, or by linking 'green' infrastructure such as parks with 'grey' infrastructure e.g. buildings, which lowers the land use opportunity cost. One potential vehicle is the DBFMO (Design-Build-Finance-Maintain-Operate) contracting framework, where one actor or a consortium is responsible for the life cycle of a project, often spanning 25-30 years.



Nature-based solutions are integrated into some of Sweden's transportation infrastructure investments. The transportation company owned by the national government, Trafikverket, developed **green infrastructure guidelines** articulating the company's priorities for ecosystem services alongside transport needs. And the city of Malmö **combined the public departments** that manage streets and parks, which provided opportunities for road engineers, landscape architects and planners to interact more frequently and negotiate trade-offs and innovations. These efforts address the challenge of traffic departments that are mandated to maintain road infrastructure but may be unwilling to compromise road performance in order to seek multiple benefits.



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.