



MAINSTREAMING NATURE-BASED SOLUTIONS

Climate Change



Led by Durham University, NATURVATION involves 14 institutions across Europe working in fields as diverse as urban development, innovation studies, geography, ecology, environmental assessment and economics. Our partnership includes city governments, non-governmental organisations and business. We will assess what nature-based solutions can achieve in cities, examine how innovation is taking place, and work with communities and stakeholders to develop the knowledge and tools required to realise the potential of nature-based solutions for meeting urban sustainability goals.

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More information: www.naturvation.eu



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SERIES INTRODUCTION

Cities are increasingly seen as a key arena for governing global environmental, social and economic challenges. Nature-based solutions – such as green roofs, parks or sustainable urban drainage – are gaining traction as a promising approach to sustainable urban development. They are a cost-effective and efficient strategy that can address multiple challenges in cities simultaneously.

The mobilisation of nature to enhance urban sustainability is taking place through various experimental projects. But such solutions have yet to be widely adopted and implemented. In order to realise their potential, there is an important need to develop our understanding of how to generate promising pathways for mainstreaming nature-based solutions.

Nature-Based Solutions (NBS) are defined by IUCN as actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.

Drawing on extensive research in the UK, Sweden, Germany, the Netherlands, Spain, Hungary and at level of the EU, we have identified 20 actions – stepping stones – that can build the potential for mainstreaming nature-based solutions. Rather than seeking universal pathways for mainstreaming nature-based solutions, diverse combinations of stepping stones can support their uptake to address different sustainability challenges and under diverse urban, financial and policy conditions.

This series of five reports presents promising pathways for mainstreaming nature-based solutions to address: climate change; biodiversity; economic regeneration; social inclusion and the sustainable development goals agenda. Each report asks: how can the mainstreaming of nature-based solutions be supported through this agenda? And what in turn can working with nature-based solutions do to ensure that sustainability challenges are mainstreamed at the urban level? We find a variety of complimentary pathways that can help to foster more sustainable cities for the future.

EXECUTIVE SUMMARY

This report specifically addresses mainstreaming nature-based solutions for solving the climate crisis in cities. Nature-based solutions are increasingly integrated in urban development practices. They have the potential to effectively address the climate crisis. These 'natural climate solutions' in cities can both reduce the impacts of climate change (adaptation) and reduce greenhouse gas emissions (mitigation). Drawing on extensive empirical research in European cities, this report summarises four promising pathways to mainstream nature-based solutions so that natural climate solutions become integrated into urban development:

Pathway 1: Position Nature-Based Solutions as a Promising Climate Strategy

This pathway focuses on the adaptation and mitigation benefits of nature-based solutions. Since addressing climate change is increasingly recognised as a strategic priority for urban areas, highlighting natural climate solutions for cities can result in access to resources, as well as garner interest from a broader set of stakeholders beyond those already interested in urban greening.

Pathway 2: Invest in Nature-Based Solutions to Reduce Climate Risk

As climate change impacts increase in scope and severity, nature-based solutions are being identified by both the public sector and the private financial sector as potential adaptation solutions and risk reduction strategies for cities. This pathway focuses on generating new forms of investment and workable business models for natural climate solutions, which in turn may provide a pathway for their wider uptake in relation to other sustainability challenges.

Pathway 3: Integrate actions towards coordinated climate change response and wider sustainability benefits

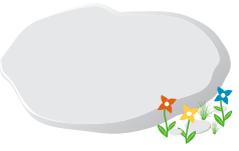
Silos between sectors and areas of expertise are the main barriers for drawing together diverse stakeholders and achieving solutions with multi-functional benefits. This pathway focuses on integrated practices and planning to overcome these barriers. It relies on positioning nature-based solutions as generating multiple-benefits for prioritised urban policy goals, institutional changes, partnerships building, and evidence building and effective monitoring.

Pathway 4: Learn by Doing

Nature's benefits are place specific, and nature-based solutions require customisation to different urban contexts. Mainstreaming urban natural climate solutions thus requires significant applied and context-specific knowledge. Pilot and demonstration projects that develop data and expertise is critical since they can also support collaborative learning to develop new connections between stakeholders and shared knowledge about urban nature's climate benefits.



			
Provide a public mandate	Regulate for No Net Loss	Include in contractual requirements	Align with strategic priorities
The mainstreaming of NBS can benefit from policy-makers and investors giving a clear mandate for NBS to be included in urban development through tender and procurement policies, policy instruments (e.g. land use planning guidance), and where possible mandatory regulation.	No net loss / net gain regulation for urban nature (biodiversity) has the potential to generate greater interest in NBS across Europe. Developing harmonised regulation across Europe with strong monitoring and sanctioning to increase effectiveness has the potential to support NBS mainstreaming	Utilities (e.g. water, waste, energy) and network service providers (e.g. road and rail authorities, waterway authorities) are either publicly owned or operate on long-term contracts that are bound by regulatory requirements for service provision. Including NBS as required for the delivery of mandated functions (e.g. water quality treatment) or for the upkeep of land-holdings (e.g. train sidings, roadside verges) provides an important avenue for mainstreaming.	Positioning urban NBS as generating benefits for prioritised policy goals through generating narratives and evidence (i.e. climate change mitigation & adaptation, circular economy and healthy urban living) can widening their relevance and community of practice.
			
Create intermediaries	Generate partnerships	Establish demonstration projects	Engage insurance sector
In order to overcome institutional silos within both public and private sector organisations, new organisational forms that work across these divisions are required. Intermediary units can either be established within organisations or outside (by external bodies) and provide co-ordination between departments as well as platforms for innovation.	Stimulating partnerships between public, private and third sector organisations for the co-design, development and maintenance of urban NBS is critical for generating initial action on the ground and increasing support for mandatory urban greening policies.	Demonstration or pilot NBS projects, often involving research, can create shared learning and knowledge development as well as providing tangible demonstrations of how NBS can work in practice, creating confidence amongst partners about their potential.	Engage the insurance sector to support upscaling of urban NBS based on their risk reduction needs and damage cost expertise

			
Facilitate community-based action	Provide economic incentives	Develop markets	Build co-financing arrangements
Facilitate and support community-based action for local urban NBS through improving citizen awareness and support	Provide economic incentives (tax cuts, subsidies) for integrated delivery of urban NBS as a component of urban sustainable development.	Positioning NBS as a sustainability solution offering wide societal and reputational benefits can support the development of demand for NBS projects which in turn can stimulate supply.	Build governance arrangements between the public and private sectors to enable co-funding for NBS development and maintenance
			
Work with investment cycles	Stimulate institutional investment for risk reduction	Target areas of low land value	Improve data & monitoring
Integrating urban NBS into infrastructure projects and renovation cycles to increase their (multi)functionality and can save costs by reducing the need for additional outlay and drawing on existing budgets	Institutional investment for urban NBS is likely to be forthcoming based primarily on their climate risk reduction value (adaptation and mitigation), and specific data/modelling may be required to realise this potential.	NBS can face competition from other land-uses which return a higher rate on investment. Using urban space with a lower value can suit some forms of NBS and provide a more cost-effective means of urban greening (e.g. street green, pocket parks and building-integrated green)	Mainstreaming NBS will require the development of evidence on their performance urban NBS, through the use of 'big data' and new assessment tools that can support effective monitoring, evidence-building and assessments of their effectiveness in addressing key urban goals.
			
Advance valuation models	Grow practitioner expertise	Incorporate in green investment products	Promote certification schemes
Making the case for NBS requires that we develop and disseminate valuation models that specify the different (monetised) benefits and costs of NBS, to facilitate public and private investment decisions.	Make practitioner-oriented expertise on urban NBS available to facilitate integration of NBS in the actual urban development process (i.e. practitioner guides and collaborative design).	Include urban NBS into (existing and new) green / impact / sustainable investment products in order to enable projects to access this source of finance.	Integrate urban NBS criteria into green certification schemes, in particular for buildings, based on recognition of NBS the contribution NBS can make towards sustainability goals.

URBAN NATURE-BASED SOLUTIONS FOR ADDRESSING CLIMATE CHANGE CHALLENGES

Cities are increasingly recognised as both key contributors to the climate change problem, and essential to solving the problem. Cities account for 70 percent of energy-related greenhouse gas (GHG) emissions which drive global climate change.¹ Yet cities are also at risk from the impacts of climate change. By 2050, the economic cost of rising seas and flooding is expected to reach \$1 trillion USD, and 800 million people in over 570 coastal cities will be at risk from flooding and storm surges.²

Addressing climate change requires action for mitigation, i.e. reducing GHG emissions, and for adaptation, i.e. reducing vulnerability and building resilience. Nature-based solutions in cities can help to tackle both of these challenges.

Turning first to **mitigation**, urban nature can sequester and store carbon. While the total amounts of carbon storage provided by land and water in urban environments are small compared to rural landscapes, nature-based solutions can provide additional carbon storage capacity. More significantly, nature-based solutions can *reduce energy demand* by cooling the built environment. Recent analysis by the International Energy Agency suggests that demand for cooling is driving increases in energy demand and emissions.³ Nature-based solutions can also provide insulation for buildings in cold climates. Leveraging nature-based solutions to reduce energy demand in the built environment is a key action that cities can take to play a strong role in reaching the goals of the Paris Climate Agreement.

In terms of **adaptation**, nature-based solutions can address the increasing risks of climate impacts at the urban level.⁴ Giving space to nature in areas which might be particularly exposed to flooding or storm damage can reduce the exposure of people and property to climate risks. Nature-based solutions can also reduce the impact of urban heat islands, by increasing tree cover, or storms and flooding by restoring wetlands or coastal ecosystems. In addition to reducing exposure to risk, nature-based solutions can build resilience through cool outdoor spaces that act as refuges for vulnerable populations to escape from urban heat. Sustainable urban drainage schemes and making space for water in cities can also increase resilience to flooding, while working with drought tolerant species can support natural systems and the services and benefits that they provide for society.

In contrast with many engineered solutions, nature-based solutions have the potential to tackle climate mitigation and adaptation challenges together at relatively low-cost while delivering multiple additional benefits for people and nature. For example, restoring urban wetlands and planting trees can sequester carbon while tempering the heat island effect and managing stormwater flow. Restoring nature in rivers can reduce greenhouse gas emissions, increase adaptive capacity, protect animal and plant species and improve health and well-being. For certain sectors such as tourism, conservation management, and agriculture and forestry, a nature-based approach can create new economic opportunities. Nature-based approaches can be cost-effective, long lasting, and provide multiple benefits.

¹ UN Habitat (2011). *Hot Cities: Battle-Ground for Climate Change*. Global Report on Human Settlement 2011.

² C40 Cities. *Staying Afloat: The Urban Response to Sea Level Rise*.

<https://www.c40.org/other/the-future-we-don-t-want-staying-afloat-the-urban-response-to-sea-level-rise>.

³ IEA (2018), *The Future of Cooling*, IEA, Paris <https://www.iea.org/reports/the-future-of-cooling>.

⁴ https://naturvation.eu/sites/default/files/result/files/snapshot_climate_adaptation.pdf.

MAINSTREAMING NATURE-BASED SOLUTIONS FOR CLIMATE ACTION

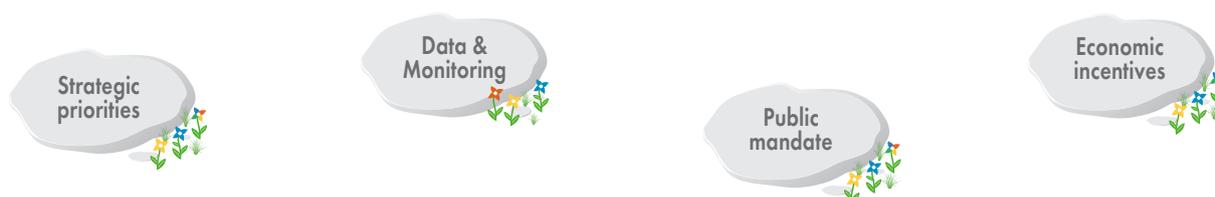
Nature-based solutions can be mainstreamed at the urban level through several pathways to address the climate crisis. Drawing on extensive empirical research on current practices in European cities, this report summarises four promising pathways to mainstream nature-based solutions so that natural climate solutions become integrated into urban development:

PATHWAY 1: Position Nature-Based Solutions as a Promising Climate Strategy

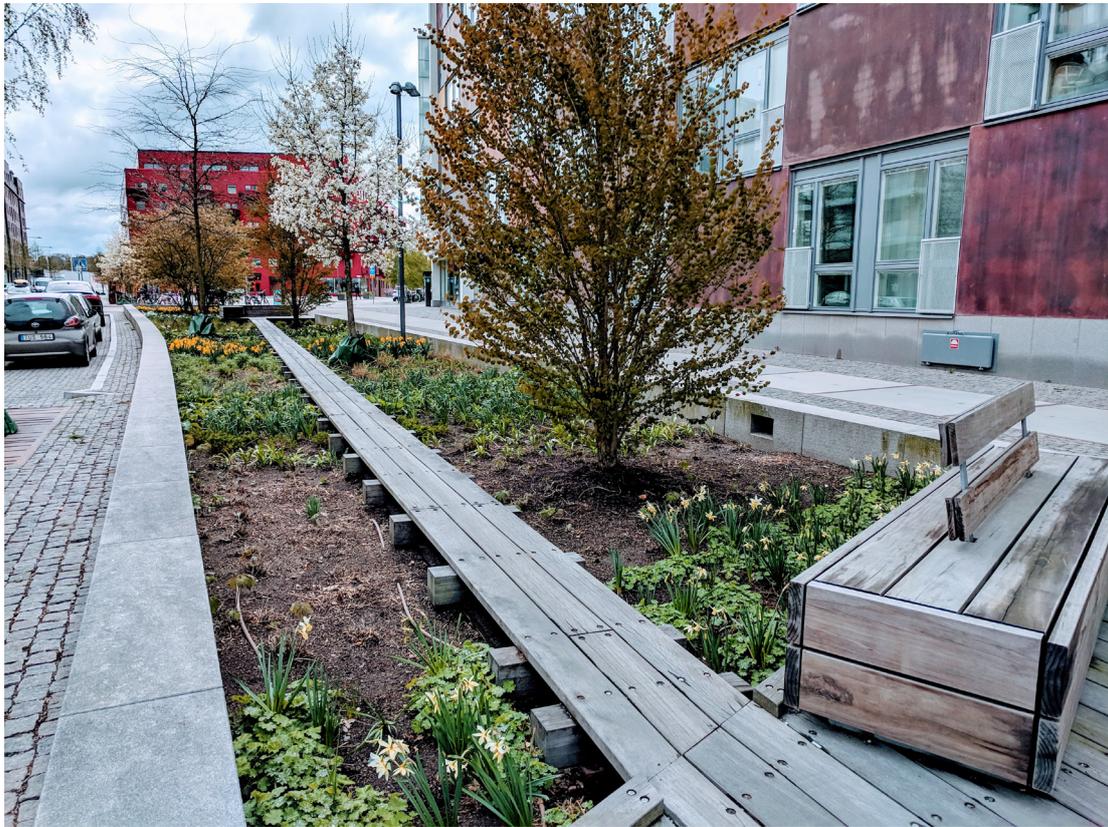
Addressing climate change is increasingly recognised as a strategic priority for urban areas. One way that nature-based solutions can be mainstreamed into urban development is by positioning them as ‘natural climate solutions’ for cities. To do so, it is necessary to develop knowledge and data about the climate benefits of various kinds of nature-based solutions in terms of both adaptation and mitigation outcomes. By highlighting climate benefits and positioning nature-based solutions as part of an urban climate change response strategy, nature-based solutions gain credibility and access to resources to support their implementation. In addition, aligning nature-based solutions with policies that incentivise or mandate action to address climate change is one way to leverage interest in nature-based solutions beyond those stakeholders who are already engaged in urban greening.

Nature-based solutions are starting to be integrated into some of the climate strategies in cities, mainly in terms of adaptation. Often the opportunities for nature-based solutions arise through changes to land use planning or building codes that require urban development to take climate change into account. This provides advantages for those seeking to mainstream nature-based solutions, as urban climate change policymaking is often better established and has forged the kinds of cross jurisdictional and multilevel institutional connections that are also necessary to support implementation. In some cases, climate action and targets have been adopted into law and this legal weight makes implementing nature-based solutions as a climate response strategy into a potentially powerful pathway. Likewise, providing economic incentives through tax cuts or subsidies to urban developments that contribute to climate change mitigation or adaptation can also promote integrated delivery of urban nature-based solutions as a component of urban sustainable development.

WHAT IS NEEDED TO ACTIVATE THIS PATHWAY?



Natural Climate Solutions in Swedish Cities to Address Flooding and Heat Waves



While climate change mitigation has been a priority in Sweden, recent heavy rainfalls and heat waves have increased the focus on climate change adaptation. In some Swedish cities, growing concern about climate impacts is starting to redirect financial resources, shift the priorities of agencies, and motivate changes to planning rules in order to adapt to extreme weather. In recognition of this growing interest, the climate adaptation benefits of nature-based solutions are increasingly being recognised in cities like Malmö.

(Photo credit: Laura Tozer)

PATHWAY 2: Invest in Nature-Based Solutions to Reduce Climate Risk

As climate change impacts increase in scope and severity, more urban stakeholders are becoming concerned about reducing exposure to climate related risks. Nature-based solutions are being identified by both the public sector and the private financial sector as potential adaptation solutions and risk reduction strategies for cities. In particular, the financial sector is increasingly recognising and trying to deal with financial risks of climate impacts. For example, the Task Force on Climate-related Financial Disclosures (TCFD) continues to drive international discussion on climate risk and discourse, and insurers increasingly convene urban stakeholders to find ways to reduce exposure to climate risks.

Additional interest in nature-based solutions investment to reduce climate risk is being driven by the cost effectiveness of green and blue infrastructure in the face of climate impacts. The scale of current and projected impacts makes some grey infrastructure solutions unfeasible, with nature-based solutions becoming cost effective in comparison. To make the case for nature-based solutions and to draw public and private investments requires the development and dissemination of valuation models that specify the different (monetised) benefits and costs of nature-based solutions. Understanding the cost and benefits of nature-based solutions intervention can also facilitate the establishment of new partnerships between the public and private sector actors that have shared interests in reducing climate risks (e.g. insurers and property owners) and make use of new or existing financial instruments (e.g. green bonds) to co-fund nature-based solutions development and maintenance. Moreover, this pathway can be a means through which to develop trust in nature-based solutions amongst the investment community, which can then open up wider interest in nature-based solutions.

WHAT IS NEEDED TO ACTIVATE THIS PATHWAY?



Dutch Insurance Companies Raise Client's Awareness of Climate Risk and Encourage Investment in Natural Climate Solutions



While climate change mitigation has been a priority in Sweden, recent heavy rainfalls and heat waves have increased the focus on climate change adaptation. In some Swedish cities, growing concern about climate impacts is starting to redirect financial resources, shift the priorities of agencies, and motivate changes to planning rules in order to adapt to extreme weather. In recognition of this growing interest, the climate adaptation benefits of nature-based solutions are increasingly being recognised in cities like Malmö.

(Photo credit: www.freerangestock.com/TomasAdomaitis)

PATHWAY 3: Integrate actions towards coordinated climate change response and wider sustainability benefits

This pathway is focused on integrated practices and processes that can not only overcome silos between sectors, various municipal departments and units, and areas of expertise in designing and implementing nature-based solutions, but also enable synergy among different urban sustainability agendas. In some cases, the creation of new institutions that better match the scope and complexity of sustainability challenges are leading to improved climate action. The cross-cutting nature of climate action is leading to responses such as increased integration across government departments and the adoption of holistic, sustainability focused targets at regional and national levels. This can open up opportunities for stakeholders to work together across silos which otherwise make it difficult to draw together the diverse expertise needed for implementing nature-based solutions and realising their multi-functional benefits. By positioning them as part of developing integrated approaches to climate change, nature-based solutions no longer have to be undertaken as standalone initiatives. By aligning urban nature-based solutions that have climate benefits with other key sustainability goals, their relevance can be enhanced and new communities of practice formed. For example, as the value of urban greening for health and wellbeing of urban populations is increasingly recognised, positioning nature-based solutions as generating benefits for both climate and health and wellbeing can enable access to additional expertise and funding from health insurance companies, housing corporations and foundations, which can also lead to increasing support for nature-based solutions across a wider range of organisations.

In order to overcome institutional silos and enable coordination and collaboration within and between public and private sector organisations, new organisational forms that work across these divisions are required, which can be facilitated by the existence of intermediary units. Besides establishing partnerships between different stakeholders, improving data and monitoring is required to support the design and implementation of a holistic nature-based solutions intervention that can deliver integrated sustainability benefits (including climate change mitigation/adaptation).

WHAT IS NEEDED TO ACTIVATE THIS PATHWAY?



Barcelona's Climate Commitment Motivates New Cross-Cutting Municipal Directorate



Barcelona's Commitment to the Climate led to the establishment of the Urban Ecology municipal directorate, which brought together the expertise of different departments (Environment, Planning, Mobility) for policymaking and the development of new projects on the topic of urban sustainability. This integration brought together various departments that are relevant to nature-based solutions implementation. Furthermore, Barcelona's Climate Strategy describes 280 projects with many of these related to introducing more greenery in the city. It includes references to urban green infrastructure for climate change adaptation, particularly related to reducing the urban heat island effect and supporting vulnerable people.

(Photo credit: Francesc Baró)

PATHWAY 4: Learn by Doing

This pathway is focused on learning by doing since mainstreaming nature-based solutions to address climate change in cities requires significant applied and context-specific knowledge. In many cases, it is through experimentation and demonstration projects that the climate benefits of urban nature-based solutions are being pursued. The climate benefits that are provided by nature are often place specific and therefore nature-based solutions require customisation to different urban contexts. Data and expertise developed through pilot and demonstration projects is critical in generating this knowledge. To obtain and further harness such practice-based knowledge requires regular evaluations of the performance of the pilot projects, which are enabled by the development and innovation of assessment tools. Ensuring that practitioner-based expertise on urban nature-based solutions is widely shared and available can inspire and further facilitate the wider uptake of nature-based solutions in urban design, planning and development in both the local areas and other places and contexts.

Besides the direct contribution to showcasing the effectiveness of natural climate solutions, pilot and demonstration projects also facilitate collaborative learning which is particularly important for establishing new connections across sectors and silos and generating shared knowledge about urban nature's climate benefits. In this vein, pilot projects also allow urban stakeholders to understand how an urban nature project pursued for other purposes (e.g. biodiversity enhancement, health and well-being etc.) can also deliver co-benefits for climate change adaptation or mitigation. Such experimentation is important because the performance of nature can be more uncertain than grey infrastructure (which has more widely understood performance metrics and calculations of risk) and approaches that accommodate learning can build crucial capacity in applied, contextual knowledge about urban nature's climate benefits.

WHAT IS NEEDED TO ACTIVATE THIS PATHWAY?



Natural Flood Risk Management Demonstration Project in Glasgow



Glasgow City Council, with funding from the Scottish Government's Green Infrastructure Strategic Intervention (GISI), is enhancing urban nature alongside a canal in north Glasgow. This blue-green infrastructure project is located on the cutting edge of international surface water and flood risk management. The project can not only address the predicted increase in rainfall and intensity due to climate change, but can also support economic regeneration in a deprived area of Glasgow. This project is one of the projects funded by GISI to demonstrate how green infrastructure can achieve multifunctional outcomes, including benefits related to climate change, biodiversity, and better places to live. These demonstration projects can enhance communities, while at the same time develop broad understanding of the multifunctional benefits of green infrastructure and inform the future implementation and maintenance of nature-based solutions.

(Photo credit: Shutterstock/Isotlanda Photography)

CONCLUSION

Urban nature-based solutions have a tremendous potential for reducing energy demand and building resilience to climate risks. Not only they can address climate challenges, but they can also contribute to multiple urban sustainability goals. Yet such potential thus far has not yet been fully achieved. In this report, we have presented four pathways and their associated stepping stones to stimulate the mainstreaming of natural climate solutions in urban development practices.

Pathway 1: Position Nature-Based Solutions as a Promising Climate Strategy;

Pathway 2: Invest in Nature-Based Solutions to Reduce Climate Risk;

Pathway 3: Integrate actions towards coordinated climate change response and wider sustainability benefits;

Pathway 4: Learn by Doing.

These pathways reinforce each other and include some core interventions that are fundamental for building strong pathways for nature-based solutions, such as the creating of partnerships and improving data and monitoring. No one pathway will be sufficient on its own for mainstreaming nature-based solutions, rather they offer complimentary routes that can be taken together to enable biodiversity action.

While the relevance of these pathways to specific urban contexts will vary, the underlying stepping stones can be applied in diverse settings. We encourage you to use these resources to explore how working with stakeholders and communities you can take the next steps together for mainstreaming biodiversity through action at national and local levels.





Mainstreaming Nature Based Solutions

Promising Pathways for Sustainability Goals



The NATURVATION project uncovered specific pathways that advance Nature Based Solutions and address challenges as diverse as climate change, biodiversity, social inclusion, and economic regeneration. Each pathway is made up of stepping stones, which are summarised in a set of 20 briefing cards. The stepping stone highlight actions in the realms of either policy, finance, or urban development, as well as real-world examples collected during research in the UK, Sweden, the Netherlands, Germany, Spain, Hungary, and at the EU level. Policymakers and others interested in pursuing Nature Based Solutions may select a pathway that aligns with their particular context, and use the designated stepping stones to learn about key actions that will advance that pathway.



Mainstreaming Urban Nature-Based Solutions

Work with investment cycles

Integrating nature-based solutions into building developments and renovations expands the functionality of that infrastructure and reduces costs by drawing on existing budgets. One approach is to identify strategic partners for large green infrastructure projects, as Rooftop Revolution in the Netherlands did with housing corporations planning roof renovations. Roofing firms may also opt to work with homeowners associations to increase the scale of the green roof investment. Water utilities provide a similar opportunity in the UK, where there is increased investment in sustainable drainage systems and flexibility in the financing of infrastructure investments. Public infrastructure providers can require greening or water management in agreements with developers. The Swedish Transport Administration developed guidelines that articulate the integration of ecosystem services into transportation investments.



Municipal investment in urban infrastructure in Sweden offers a substantial opportunity for synergies and cost savings through multi-functional infrastructure that delivers on climate adaptation, mitigation, and ecosystem services. The government articulated that urban greenery and ecosystem services must be integrated into the planning, building and administration of Swedish cities by 2025. Significant investment in transportation, public housing, culture, and recreation flows through local governments, supported by revenue from taxes. Green streetscapes can be pursued through transportation budgets, for example, rather than environmental protection budgets. Overcoming the perceived conflict between policies that promote dense urban infrastructure and policies on urban greening will help unlock public infrastructure investment for nature-based solutions.



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

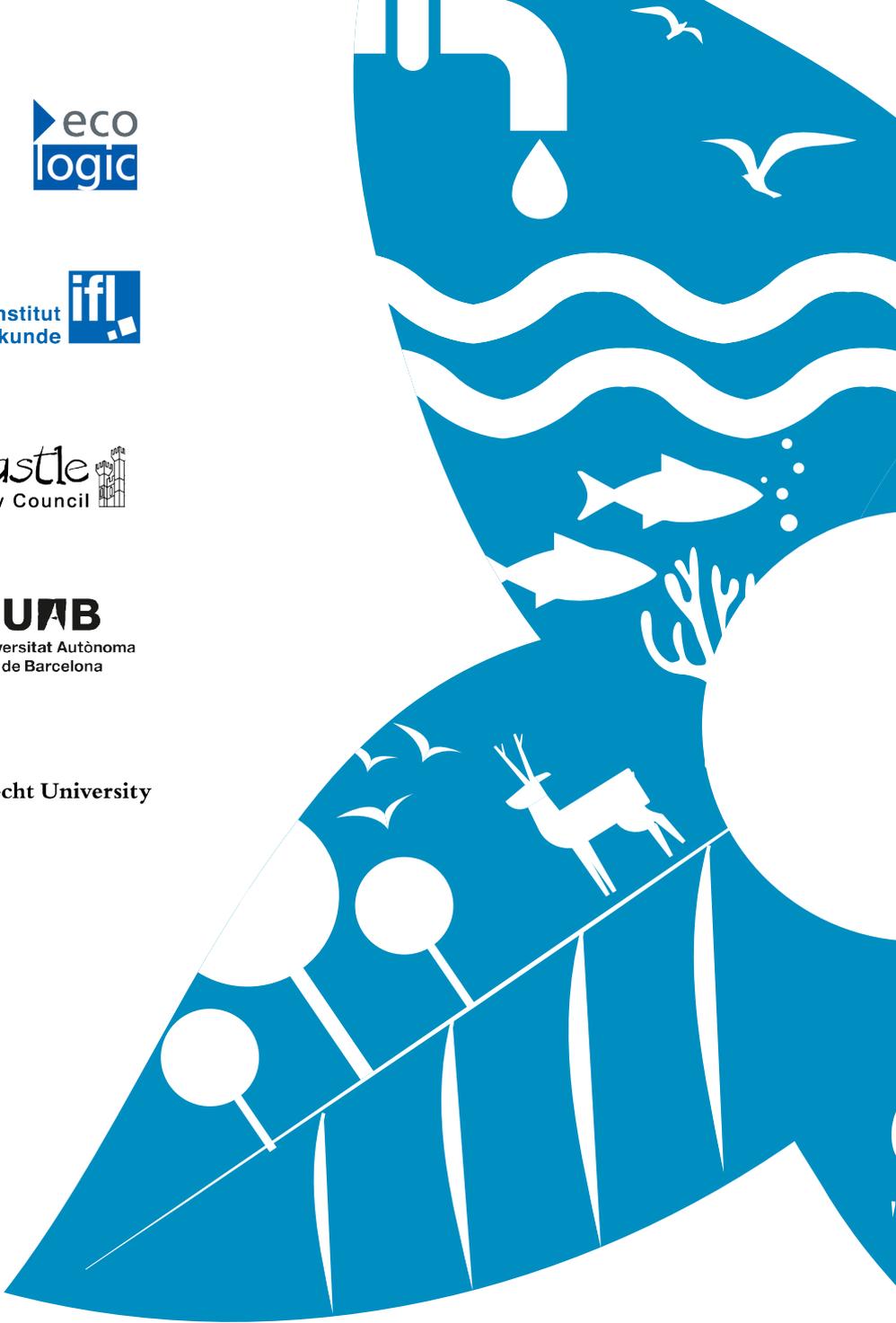
Nature-based solutions can create economic regeneration through increasing economic activity and employment and by improving the quality of life. Nature-based solutions both directly contribute to economic vitality and well-being, and leverage new forms of economic activity in cities that generate opportunities. 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.



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