

GOVERNING NATURE-BASED SOLUTIONS



KEY POINTS

- Withdrawal of public financial support for green areas and parks is a key challenge for NBS.
- Privately implemented and managed
 NBS tend to be financially unfeasible for most urban dwellers.
- Participative and reflexive forms of governance involving multiple stakeholders are central to NBS success.
- Planning of NBS needs to consider the pertinent economic and social inequalities and the uneven landscape of socio-economic power relations.
- Divestment from grey infrastructure is a necessary condition to confront existing socio-ecological challenges in urban areas.

ABOUT THE PROJECT

NATure-based URban innoVATION is a 4-year project involving 14 institutions across Europe in the fields of urban development, geography, innovation studies and economics. We are creating a step-change in how we understand and use nature-based solutions for sustainable urbanisation.





Governing Nature-Based Solutions for Urban Sustainability

The concept of nature-based solutions is now increasingly being used to reframe policy debates on urban sustainability. Yet there has been limited research on identifying successful governance, business, finance and public participation schemes for the implementation of NBS, or on understanding how and why nature-based solutions may come to be politically contested. This paper contributes to setting the stage for these debates within the NATURVATION project. This briefing note summarises a review paper based on a systematic analysis of relevant literature. Using a structured search of the Scopus database we identified over 750 relevant papers. The abstracts and titles of all selected articles were reviewed and sieved through, with additional expert guidance, to arrive at about 40 studies for an in-depth analysis according to the extent of their thematic relevance, namely: presence of political, governance or socio-cultural reflections (data/analysis/insights) on greening initiatives/spaces in urban areas.

Contrasted and contested visions of Nature-Based Solutions

The literature takes contrasting perspectives on the means and ends of governing nature-based solutions, which are often highly contested, according to whether the perspective from which these processes are understood and evaluated. Belief in the feasibility of decoupling economic growth from environmental and social harms, also known as *weak sustainability*, is a central premise underlying the 2015 European Commission report on nature-based solutions where they are framed as attempts to develop "business models that enable economic growth through sustainable urbanization, whilst providing health, well-being and economic progress" (EC 2015). In this vision, nature-based solutions are able to simultaneously provide smart growth and jobs together with inclusivity, justice and environmental sustainability.

Strong sustainability approaches take a more critical perspective to understanding urban sustainability governance and the capacity of economic growth to drive environmental and social improvements in cities. Urban sustainability plans necessarily involve contested negotiations over economic, environmental and equity rationales. Neoliberal agendas and



corporate partnership in nature-based solutions is seen as counter-productive to the well-being of citizens and the natural environment. The outcomes of processes of governance are found in the literature to frequently lead to an unequal distribution of (access to) urban green space/areas, between classes, ethnic/cultural minorities, and different socio-economic groups, further entrenching existing inequalities.



The planning, implementation and realisation of nature-based solutions may not match with the needs and realities of local residents. Attending to *issues of social and ecological justice* in the governing of nature-based solutions is critical to address these concerns. Urban Political Ecology provides an important conceptual framework for this task.

Approaches to Governing Nature-based Solutions

Unsurprisingly, the governance of nature-based solutions emerges as a complex phenomenon, involving multiple social and political actors, premises and visions. Multiple actors can lead the governing of nature-based solutions, be it public authorities, private/for profit entities, civil society/non-for-profit organizations, academia or grassroots movements. For the most part, there are few cases where only public or private authorities govern nature-based solutions in cities, creating a hybrid and often experimental terrain of design and practice. Despite growing interest and capacity in the use of nature-based solutions, our review identified some key governance challenges.

Traditionally many urban green initiatives were initiated and governed by state actors. However, over time the role of state, or public stewardship in greening/nature-based initiatives in cities have shifted. The withdrawal of *state involvement* in the management of public parks and urban forests in the context of diminishing public budgets is a key concern. In some countries a clear gap between state-driven greening projects and commitments to their long-term stewardship is identified, leading to calls for long-term financing and management strategies to protect public interests and values.

One of the dominant visions on the governance of nature-based solutions rests upon the idea of *sharing costs and risks* between the private sector and the state. Engaging multiple actors in is seen as a potential win-win solution, where innovation, economic gains biodiversity, and climate protection could go hand in hand. Another approach to NBS governance, management and financing is through mobilizing the *private sector*.



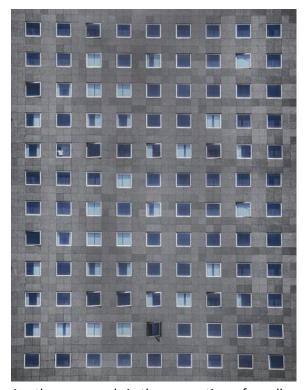
The projects initiated by the private sector enterprises are mostly in the field of green roofs and facades. These are reported as being particularly expensive and risky to install and maintain, and require the state to underpin



their development at scale. Nature-based urban developments which are completely privately governed and managed tend to be economic accessible only for a minority of residents.

In the context of limited capacity and resources, a great deal of hope is invested in *public engagement and volunteerism* for the stewardship of green spaces and parks. Indeed some participants in urban gardens envision bottom-up greening projects as engaging with politics that aims for a radically different, socially just and ecologically sustainable city. Other authors, however, warn on the dangers of the neoliberalism imbued in self-organized spaces, as they may cultivate civil withdrawal from state politics. One promising approach is the use of participatory evaluation schemes with multiple stakeholders, as well as reflexive forms governance.

This said the literature is ambiguous on who shall be considered a stakeholder in such dialogues, where academia, business, practitioners and state officials as seen as the usual suspects or invitees in consultations and dialogues.



There are particularly significant challenges in governing nature-based solution in the context of gentrification pressures and persistent uneven landscapes of socioeconomic power relations and inequalities in access to urban ecologies. A number of studies show that the provision of green space is associated with increasing realestate prices placing economically vulnerable part of the population at a disadvantage. Likewise, low-income individuals tend to live in areas with less green space and higher levels of environmental risk. The risk of green gentrification needs to be taken into account from the outset of urban governance processes. One strategy at the design stage is active inclusion and consideration of community members, concerns, needs, and desires.

Another approach is the promotion of small-scale green interventions scattered over all parts of the city, rather than larger green areas that have stronger gentrifying effect. At the same time, it is critical that nature-based solutions divest from existing forms of urban development that produce social inequalities and environmental risks if nature-based solutions are to be truly successful.