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Policy Brief | What policymakers need to learn from bottom-up biodiversity action

More substantial efforts to halt and reverse biodiversity loss are urgently needed. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services ([IPBES](#)) calls for transformative societal change that evolves along 'system-wide shifts in views, structures and practices' (O'Brien 2025: 5). IPBES underscores the critical role of bottom-up actors, asserting that meaningful change cannot just be forced top-down by public authorities.

Initiatives and interventions generated by bottom-up actors – citizen groups, non-governmental organisations, and frontrunning enterprises and civil servants engaged in innovative practices – can and often do open new avenues for the making of transformative change. This was shown in recent findings by the project '[Biodiversity Nexus: Transformative Change for Sustainability](#)', co-funded by Horizon Europe and the UK Research and Innovation.

Three reasons why policymakers need to stay attentive to bottom-up action

1. Bottom-up action can point to processes and arrangements crucial for biodiversity protection.

Reforms are needed in land-use, landscape planning and resource management practices, but also, for example, in the operation of private banks which finance biodiversity degrading businesses. Bottom-up actors can provide ideas and insights on problematic practices and arrangements. At the same time, they indicate how biodiversity concerns can be turned into attainable and 'action-able' issues. For example, bottom-up actors across Europe view land-use planning as both as a potential hindrance and as an opportunity for the actualisation of transformative change. Bottom-up action may also rest on the introduction of policy initiatives, management experiments and business models, among others.

2. Recognising the diversity of bottom-up action enables the integration of 'top-down' and 'bottom-up' aspirations, while also acknowledging the synergies and potential conflicts between them.

Although bottom-up actors often seek to influence how biodiversity is governed, they do not always view public governance bodies as allies. In some cases, governance is seen as part of the biodiversity problem. For example, some bottom-up actors argue that policymakers systematically prioritise the interests of forest industries or agribusiness over biodiversity concerns. At the same time, public bodies can generate the conditions for bottom-up action through the provision (or lack) of resources, data and visibility. For innovative companies, governance can create forerunning positions and favourable market conditions. Additionally, regulations and voluntary schemes may provide tools that support integration of biodiversity concerns into existing practices.

3. Attentiveness to bottom-up action opens up new pathways for citizen and stakeholder engagement.

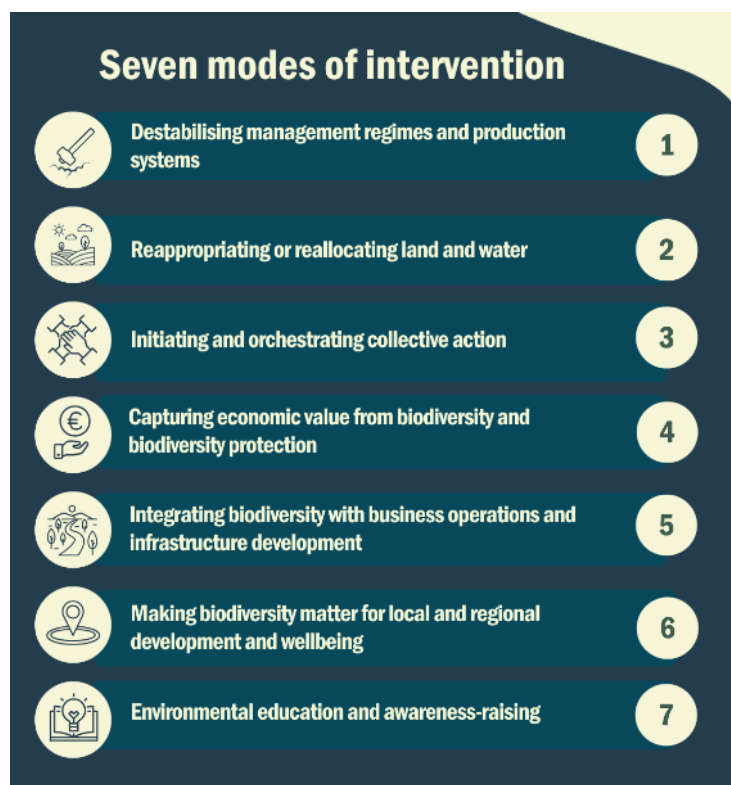
Public engagement can be expanded so that it reaches beyond the town halls, websites and process phases specifically dedicated to consultation. Public governance structures and official problem formulations tend to determine how and in what terms participation can unfold. However, when policymakers engage with practices and aspirations that evolve spontaneously, it is the bottom-up actors who set the stage for dialogue. Engagement does not always need to occur face-to-face; but it can materialise as policymakers reflect and learn from bottom-up activities.

Navigating the diversity of bottom-up action: Seven modes of intervention

Despite differences across European contexts and challenges, there are notable similarities in how biodiversity is made relevant to social and political life. BIONEXT identified *seven modes of intervention* (graph 1) adopted by European bottom-up actors to enable transformative change (Valve et al., 2025). While this typology is comprehensive, it is not exhaustive. As data and understanding of biodiversity action continue to evolve, additional forms of intervention may emerge.

Addressing the problems raised by bottom-up actors

BIONEXT offers several recommendations to address the critical challenges identified from the insights and experiences of bottom-up actors. These challenges are crucial for policy makers to address when seeking to catalyse transformative change through diverse modes of intervention, with a core goal of enabling synergies between ‘top-down’ and ‘bottom-up’ aspirations and actions.



Graph 1. Seven modes of intervention

Example: Towards more sustainable tourism: lessons from Greece

The establishment of a national park in a Greek coastal region protects biodiversity in a tourism-intensive region. Initiated by researchers, protection of the coastal area required new regulations, the enrolment of financial resources and the engagement of local entrepreneurs and fishermen (Intervention mode 2). In another region, a local policymaker works to make biodiversity central to the fostering of regional well-being. Public funding is targeted to infrastructure renewal (e.g. water supply, drainage), and new tourism concepts are being developed (Intervention mode 6).

- **Public governance bodies need to develop new approaches that prioritise biodiversity protection over short-term interests.** Bottom-up actors concerned about biodiversity loss across Europe argue that currently public policies permit natural resources management practices that often harm biodiversity. This questions the effectiveness and legitimacy of biodiversity governance as it is practiced within the European Union, the nation states, and the regional and local jurisdictions.

- **European regulators and policymakers should alter institutional and political arrangements hindering transformative change.** Bottom-up actors draw attention to the detrimental influence of financial dependencies and lobbying power that shape policymaking and resource management. These entrenched relationships contribute significantly to biodiversity problems and must be addressed and dismantled.
- **The underperformance of biodiversity governance institutions must be addressed.** At present, voluntary initiatives and time-limited projects carry a disproportionate burden because public institutions are failing to meet their agreed-upon commitments to biodiversity protection. The problem may not always lie with existing policies and regulations, but with their poor implementation at national and regional levels. Across Europe, biodiversity governance institutions often suffer from insufficient expertise and financial capacity.
- **Intermediation should be more widely applied as a governance instrument to boost transformative efforts.** Bottom-up actors frequently cite bureaucracy and unclear regulations as barriers to their work, while emphasising the importance of learning from others as an enabler of bottom-up action. For example, individuals and groups seeking to harness regional development programmes to the nurturing of biodiversity could benefit from an intermediating organisation that supports transformation-seeking initiatives. At the same time, regulations must be reviewed and revised to eliminate obstacles that hinder bottom-up contributions.
- **Policymakers need to remain attentive to the diverse ways in which transformative change is driven ‘from below’.** It is not enough to expect bottom-up actors to merely respond to predefined policy plans and agendas. Policymakers should actively support the proactive, innovative and even resisting capacities of those aiming to drive transformative change from below. Recognising the emerging ‘modes of intervention’ can offer valuable guidance for policymakers in engaging with and learning from the diversity of biodiversity actions taking place across Europe.

Example: Citizens driving change: continuous cover silviculture in Kemiö, Finland

Continuous cover silviculture (CCS) supports biodiversity protection, reduces nutrient emissions to water bodies, and maintains carbon sinks better than clear cuttings. However, CCS is still a relatively marginal forest management method in Finland. A radical rupture to the business as usual was made by a rural municipality of Kemiö, which decided that only CCS can be practiced in city owned forests. The policymakers were persuaded by active citizens who championed ecological and recreational values of forests. The public support for CCS was confirmed by a survey among the municipal residents, providing further boost for transformation of forest management practices. (Intervention mode 1)

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The project: BIONEXT is a research and innovation project that joins the fight for nature and biodiversity. The project produces new evidence to better understand biodiversity loss and demonstrates how biodiversity underpins every aspect of life; the water we drink, the food we eat, and our health. To secure and protect these values, the project demands transformative change: BIONEXT's goal is a sustainable society, where links between biodiversity, water, food, energy, transport, climate, and health are acknowledged and nature and biodiversity are a part of everyday choices and policymaking.

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