



# NATURVATION

cities – nature – innovation



## A GREEN PATHWAY TO NET-ZERO IN NEWCASTLE



### KEY FINDINGS

- Cities tend to be overlooked as sites for nature-based climate solutions, but have tremendous potential for creating a step-change in their use for sustainable urbanisation.
- The city of Newcastle introduced an innovative governance and finance model to maintain the city’s parks and allotments in light of significant austerity-driven budget cuts.
- Potential benefits and opportunities of nature-based solutions need to be more widely promoted and supported nationally.
- Local ‘champions’ can play a vital role in moving the nature-based solutions agenda forward.
- The COVID pandemic has reinforced the importance of easily accessible urban green spaces.

### THE NATURVATION 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.

Durham University | LUND UNIVERSITY | eco logic  
 GRIMMA | Utrecht University | UAB Universitat Autònoma de Barcelona  
 I.C.L.E.I. Local Governments for Sustainability | CEU CENTRAL EUROPEAN UNIVERSITY | ent environmental management  
 Newcastle City Council  
 PBL Netherlands Environmental Assessment Agency | City of Utrecht | Malmö stad | Leibniz-Institut für Länderkunde ifl

This project has been funded by the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 730243

## Protecting urban nature: The role of local and national governments



Local and subnational governments are increasingly recognised for their central role in protecting and restoring nature for sustainable urbanisation. Nature-based solutions are at the forefront of such discussions, boasting a multifunctional character which can simultaneously contribute to social, environmental and economic goals. Nature-based solutions can, for example, improve public health and wellbeing, reduce pollution, conserve biodiversity, decrease flood risk, increase resilience, and regenerate urban spaces. Yet these benefits have not yet been realised to their full potential.

Wider implementation of nature-based solutions requires, amongst other factors, increasing awareness of their benefits as an alternative to traditional grey infrastructure, leveraging resources and finances for implementation, capacity building and pilot projects, and developing standards for urban nature (e.g. quality, quantity and access). National governments

have an important role to play in creating these conditions and developing a regulatory framework that supports local and subnational governments in mainstreaming nature-based solutions across planning and policy.

This brief outlines the activities of Newcastle to increase the local consideration of nature-based solutions and highlights opportunities for increased support by national institutions and/or agencies (e.g. Department for Environment, Food and Rural Affairs, Ministry of Housing, Communities and Local Government, Department for Business, Energy and Industrial Strategy, The Environment Agency). A set of recommendations encourage national actions that can increase the impact of nature-based solutions across the UK and help urban decision-makers to overcome barriers they face in this regard.

### Newcastle: paving the way towards sustainable urbanisation

As part of the EU-funded Naturvation project, Newcastle has engaged over the last four years in a process of change in how nature-based solutions are understood and begun integrating these into local policies and plans for sustainable urbanisation. Together with the Durham University and strategic urban governance actors, Newcastle is bridging knowledge between research and policy and has created a shared vision and roadmap for how to utilise nature-based solutions to address critical urban sustainability challenges.

The main challenges identified in the city of Newcastle relate to the governance of water and flooding, land use and urban regeneration as well as health and well-being. To address these challenges, the project held a series of interactive events, workshops, awareness raising campaigns and meetings. Having the local [Tyne Estuary project](#) running alongside the research has influenced the way in which the lead officer from the Environment Agency thinks about this topic, enabling a wider range of interested parties to be exposed to the work of the project and the concept of nature-based solutions.

In addition, the city of Newcastle has co-developed cutting-edge tools that can be applied in other cities, such as the [Urban Nature Atlas](#) (the world's largest database of nature-based solutions with over 1,000 European cases) and the [Urban Nature Navigator](#), which helps to evaluate nature-based solutions and identify how they contribute to sustainability goals.

### What are nature-based solutions?

Nature-based solutions are spatial interventions that use the natural properties of ecosystems to deliver multiple benefits. As such, they have the potential to limit impacts of climate change, enhance biodiversity and enhance the environmental qualities of the living environment while contributing to economic activities and social well-being.



Ongoing processes of regeneration, flood risk due to changing climatic conditions and aging infrastructure all challenge Newcastle. The years of austerity impacted progress towards decarbonisation and environmental objectives. However, following the publication of the [City's Net Zero 2030 action plan](#) in autumn 2020, Newcastle was named as a global climate leader by [CDP](#), one of only 88 places globally and only one of four in the UK.

Facing significant reductions in their public finances, Newcastle City Council sought to engage with a national network of actors (e.g. National Trust) to develop a new and innovative approach to funding the city's parks. It became the first demonstration project of an innovative governance and business model whereby public parks, allotments and green spaces are put into a public trust to secure their future maintenance. Currently 33 city parks and over 50 hectares fall inside this [programme](#).

### Opportunities for increased national level support

Building on the lessons learned throughout this project, several opportunities for the national government and its bodies to provide increased nature-based solution support for local and subnational governments have been identified. The lessons below are listed individually, but are all related and necessary in conjunction with one another to increase the mainstreaming of nature-based solutions at the local level. Key opportunities include:

- National promotion, support and guidance on the value, importance and benefits of mainstreaming nature-based solutions that can be generated at the local level. This would assist local actors in the creation and maintenance of green spaces in towns and cities, aiming to shift perceptions of green space as a financial burden and instead identify benefits and opportunities.
- National promotion of the value of collaboration within, across and between national and local levels in order to understand the stressors on cities and how nature-based solutions can help address them.



- Identifying ‘champions’ and key actors within local authorities and communities to drive, engage and make connections regarding nature-based solutions to propel agendas forward. Guidance and support for this at the national level would foster an increased mainstreaming of nature-based solutions across local authorities.
- A broader understanding and definition of climate change is required to ensure such debates acknowledge that it is not just about energy and the reduction in carbon. A broader, more inclusive definition should then in turn help with collaborative working on issues such as energy, carbon reduction, public health and well-being, social inclusion, biodiversity and nature-based solutions.

COVID-induced restrictions have led many people to reassess the importance of easily accessible green space which can be shared by the population. Building on insights from Naturvation about the many physical and health benefits of nature-based solutions should be encouraged through research spending and calls for action from national actors. Changing the discourse could be a first step, viewing natural spaces as necessary and valuable assets for urban populations.

