



Action-Focused Toolkit for Enhanced NbS Ecosystems in Cities

Practice-inspired system of actions to foster increased engagement of the private sector in Nature-based Solutions (NbS) projects.

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1 ENHANCING BUSINESS ECOSYSTEMS FOR UPSCALING NBS

1.1 Introduction

This is the supporting documentation for the Microsoft Excel-based “NbS Ecosystem Actions Toolkit” that has resulted from the JUSTNature project (<https://justnatureproject.eu/>). It is aimed at those driving scaleup of Nature-based Solutions (NbS) in cities (e.g., municipal departments focused on greening, public works, sustainability, climate, environment, etc.). These actions are provided as **guidance / suggestions to help foster the development of an economically sustainable, NbS-focused market in cities where private companies can operate and succeed.**

The goal of the document is to elaborate on the actions described in the toolkit, enabling users to work with it more effectively. The numbering of actions in this document are the same as those used in the toolkit, and the tables below provide reasoning and further insights on how the suggested actions can be beneficial.

1.2 Background

The actions listed are based on key learnings from JUSTNature activities in seven cities from across Europe that aimed to develop favourable conditions for up-scaling of NbS projects in urban areas. This involved a series of activities and discussions with businesses and other private stakeholders on the opportunities and challenges related to engagement in the NbS ecosystems. The lessons learned from these activities have provided a broad overview of various **actions required to increase private company engagement in the NbS ecosystems** of the different cities. The resulting information is seen as applicable across other urban centres of different sizes and with different levels of existing “greening initiatives” and interventions, and so is being shared publicly for the wider benefit of the NbS industry.

The work in the project has highlighted a broad set of actions impacting different stakeholders and addresses many aspects of the system influencing the upscaling of NbS in cities. This document is intended to present these actions, essentially as a **"menu" of potential actions**, that support upscaling of NbS in cities. The target is to develop an NbS-related market where businesses can compete and derive revenues.

The toolkit is to **enable cities to assess actions** that have been seen in practice to provide positive effects in developing more engagement in NbS-focused projects. The toolkit is for those driving NbS upscaling in cities, allowing them to **pick and choose actions that best suit the specifics of the city involved**. This can therefore support cities / municipalities in implementing their own engagement strategies or extending already existing initiatives.

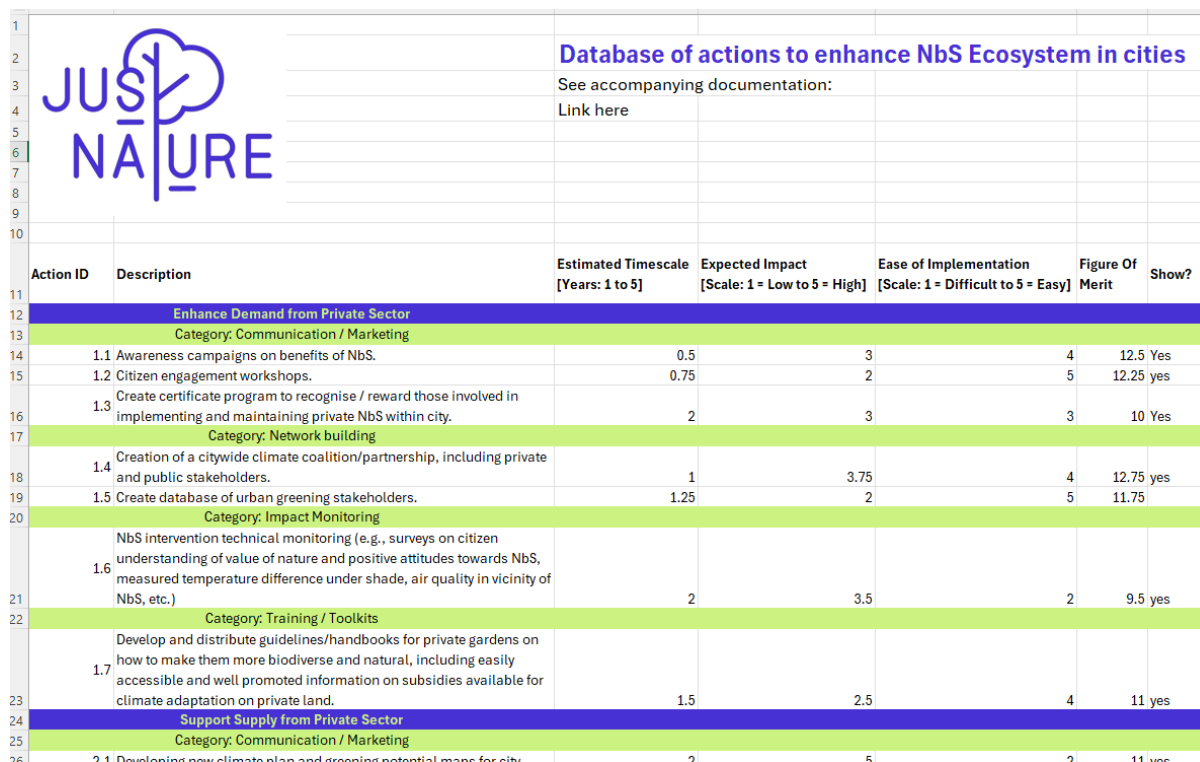
1.3 Actions Toolkit and Example Applications

The actions described below have been catalogued in a Microsoft Excel-based toolkit, which supports cities in selecting and ranking suitable actions they can carry out to enhance their local NbS-focused ecosystems.

The toolkit allows cities to consider each of the actions listed in the tables below and provide scoring according to:

- The timescale expected to implement the action
- The estimated impact of implementing the action, and
- the ease of implementation.

Each action can then be shown on a chart for comparison with others, allowing the relative ranking to be adjusted and a prioritisation to be decided on.



Action ID	Description	Estimated Timescale [Years: 1 to 5]	Expected Impact [Scale: 1 = Low to 5 = High]	Ease of Implementation [Scale: 1 = Difficult to 5 = Easy]	Figure Of Merit	Show?
Enhance Demand from Private Sector						
Category: Communication / Marketing						
1.1	Awareness campaigns on benefits of NbS.	0.5	3	4	12.5	Yes
1.2	Citizen engagement workshops.	0.75	2	5	12.25	yes
1.3	Create certificate program to recognise / reward those involved in implementing and maintaining private NbS within city.	2	3	3	10	Yes
Category: Network building						
1.4	Creation of a citywide climate coalition/partnership, including private and public stakeholders.	1	3.75	4	12.75	yes
1.5	Create database of urban greening stakeholders.	1.25	2	5	11.75	
Category: Impact Monitoring						
1.6	NbS intervention technical monitoring (e.g., surveys on citizen understanding of value of nature and positive attitudes towards NbS, measured temperature difference under shade, air quality in vicinity of NbS, etc.)	2	3.5	2	9.5	yes
Category: Training / Toolkits						
1.7	Develop and distribute guidelines/handbooks for private gardens on how to make them more biodiverse and natural, including easily accessible and well promoted information on subsidies available for climate adaptation on private land.	1.5	2.5	4	11	yes
Support Supply from Private Sector						
Category: Communication / Marketing						
2.1	Developing new climate plan and drawing potential maps for city	2	5	2	11	yes

Figure 1: Image of the Microsoft Excel Actions Toolkit, showing example scoring for the some of the suggested actions.

The toolkit also calculates a Figure of Merit that takes into account the three ranking criteria, providing the highest value for those actions that can be implemented quickly, with ease and that deliver the highest impact.

It is noted that the ranking will likely not be universal for different cities / departments / personnel using the tool and so the outcomes will be specific to the different scenarios in which it is applied. In addition, it is expected that the outcomes from using the tool will evolve over time as engagement with the ecosystem develops and lessons are learned through carrying out the initially selected actions (e.g., those with high impact that can be carried out in a short timeframe).

By way of example:

- Figure 1 shows a screenshot of the tool's interface, where scores can be provided for the different actions.
- Figure 2 is one outcome of the assessment, which is a 2-by-2 matrix view showing the expected impact of different actions versus the expected timescale of implementation.
- Figure 3 is a similar outcome that uses the figure of merit to compare each of the actions being assessed.

In each case, **the labels on the data points are the Action IDs described in the tables below and the graph is dynamic** in the sense that **it automatically responds when changes are made** to the scores. This “live update” feature makes the tool useful for interactive planning discussions.

Instructions: Rank actions from 1 to 5, type "Yes" in "Show?" column to display on graph. Each entry is labelled with the Action ID.

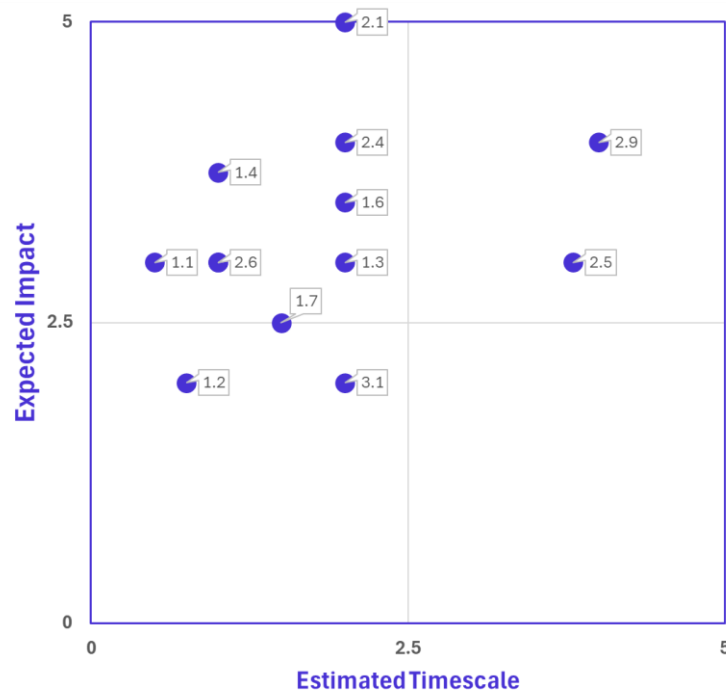


Figure 2: Example of the output from the Actions Toolkit, showing the relative ranking of different actions, based on expected impact and the timeline to implement each action. This interface is intended to support those planning NbS ecosystem engagement activities in prioritising actions to take.

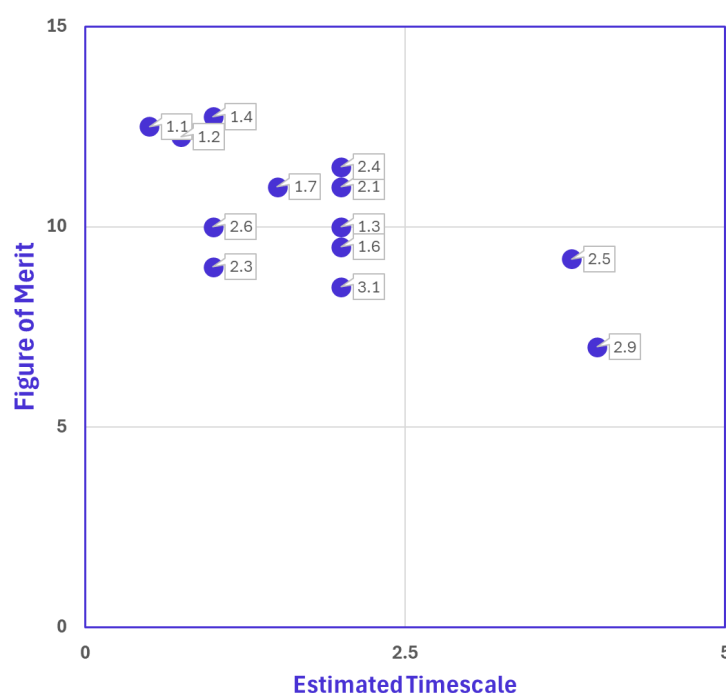


Figure 3: Example of the output from the Actions Toolkit, showing the relative ranking of different actions, based on the overall figure of merit of each action and their estimated implementation timelines. This interface is intended to support those planning NbS ecosystem engagement activities in prioritising actions to take.

1.4 Action Categorisation

As mentioned, the actions are presented as recommendations for those driving scaleup of NbS in cities (e.g., departments focused on greening, public works, sustainability, climate, environment, etc.). They can be implemented in order to foster the development of an economically sustainable, NbS-focused market in cities where private companies can operate and succeed.

The actions have been categorisation as shown schematically in Figure 4. There are four major sections of the so-called “Actions Database” that include actions to encourage market growth through **enhancing demand for NbS projects** and **supporting supply within the ecosystem of stakeholders to meet that demand**. The supply- and demand-related actions are further segregated by presenting actions related to private and public sector stakeholders, who are both seen as critical for driving NbS-focused projects in cities.

This categorisation is complemented by cross-cutting activities in Section 1.5 that help to foster development of the NbS market within a city, which is driven by underlying requirements to adhere to existing policy recommendations and mandates coming from regional, national and/or EU government.

A more detailed explanation of each segment of Figure 4 is presented in the tables that follow.

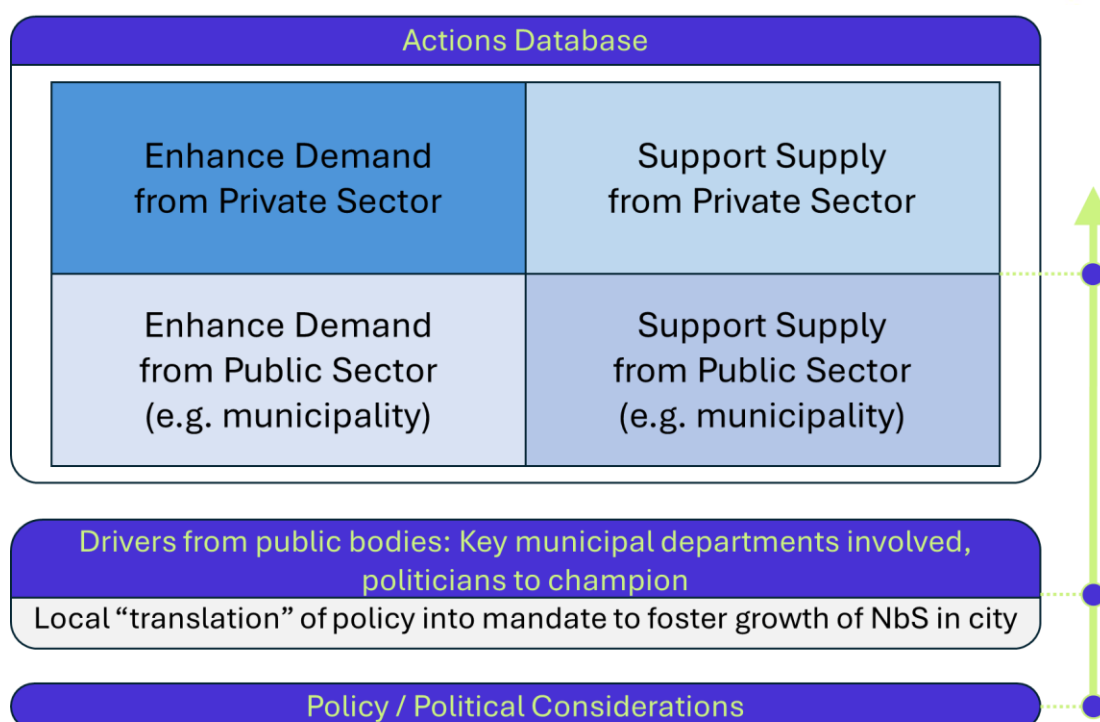


Figure 4: Generalised categorisation of actions.

Table 1: Actions to enhance NbS demand from private sector actors.

Enhance Demand from Private Sector		
Objectives: Communicate the benefits of NbS to individual citizens and businesses to encourage buy-in from the private sector and enhanced demand for NbS interventions. More demand from the voter-base can support the justification of future investment from the city, while also encouraging citizens and businesses to implement more NbS themselves with private funding / using private land.		
Category: Communication / Marketing		
Action ID	Action Description	Reasoning
1.1	Awareness campaigns on benefits of NbS.	<p>Enhance general visibility of NbS and broadly educate community, i.e., at all ages and across all demographics, including marginalised communities, on benefits of NbS.</p> <p>A key stakeholder to support this process is the city's communication department, who could bring the expertise to execute such public engagement activities that enhance community awareness.</p>
1.2	Citizen engagement workshops.	<p>NbS information evenings/sessions/webinars to enhance awareness of NbS and related activities underway in the city.</p> <p>It has been reported in JUSTNature that effective stakeholder engagement depends on tailored and direct communication, particularly through in-person and informal channels.</p>

		<p>Such engagement activities can also be used to promote opportunities to participate in strategic urban greening projects.</p> <p>Linking these activities with on-going events / organisations (e.g. environmental or community-focused NGOs) with related themes / interests can be a low cost, yet effective means of enhancing engagement / awareness among large groups. This can be particularly useful where NbS ecosystem engagement is in the initialisation phase. This has been seen to be effective for citizen engagement as well as showing businesses potential growth opportunities.</p>
1.3	Create certificate program to recognise / reward those involved in implementing and maintaining private NbS within city.	<p>To enable those implementing NbS to showcase an official acknowledgement of positive contribution to the environment. Encourages further engagement through gamification, especially if supported by marketing campaign by city officials. Can be used by businesses to showcase their engagement in corporate social responsibility (CSR) activities.</p>
Category: Network building		
Action ID	Action	Reasoning
1.4	Creation of a citywide climate coalition/partnership, including private and public stakeholders.	<p>Create network of ecosystem stakeholders, including public and private actors to facilitate discussions, sharing of information, ideation, co-creation, etc.</p> <p>The opinions of citizens are important to integrate into the creation process to ensure their needs and expectations are taken into account at an early stage, which can lead to stronger citizen buy-in and higher acceptance of and demand for future NbS projects.</p> <p>These multi-stakeholder partnerships can include diverse organisations at different scales (city, regional, national, international) and can facilitate sharing of resources, lessons learned, collaborative evaluation of design, creation of synergies between public authorities, citizens and the business community.</p> <p>This can be facilitated through an interested organisation (e.g. NGO, academia, etc.) that can coordinate actions, facilitate collaboration, and communicate between members of the partnership.</p>
1.5	Create database of urban greening stakeholders.	<p>Databases to facilitate citizens and businesses looking for specialists experienced in providing greening solutions and for them to better understand products / services on offer in local ecosystem for enhanced access to and quality of NbS implementations.</p>
Category: Impact Monitoring		
Action ID	Action	Reasoning

1.6	Technical monitoring of NbS interventions (e.g., surveys on citizen understanding of value of nature and positive attitudes towards NbS, measured temperature difference under shade, air quality in vicinity of NbS, etc.)	To demonstrate impact and value of NbS, developing data-based positive messaging, justifying impact of NbS. Effectively promoting such information can be used to inspire others to engage in NbS-focused activities and increase interest-levels from the private sector.
Category: Training / Toolkits		
Action ID	Action	Reasoning
1.7	Develop and distribute guidelines/handbooks for private gardens on how to make them more biodiverse and natural, including easily accessible and well promoted information on subsidies available for climate adaptation on private land.	<p>The goal is to promote eco-friendly gardening practices by educating the wider community to avoid poor implementation and encourage the correct type of greening that enhances biodiversity and climate resiliency with simple, practical guides.</p> <p>Providing information on grants, policy and technical information supports wider-scale NBS design and implementation by citizens. For example, such guidelines can cover ecological management of private gardens and balconies.</p> <p>A “keep it simple” approach in terms of providing clear and accessible guidelines is recommended.</p> <p>Can be used to accelerate already existing initiative to make private gardens bee-friendly and more natural / biodiverse.</p>

Table 2: Actions to support supply of NbS interventions and associated services from private sector actors.

Support Supply from Private Sector		
Objectives: Dedicated activities to ensure businesses active in the local ecosystem have the necessary skills and appetite to invest in NbS-focused activities to meet increased levels of demand, while encouraging new entrants to the market.		
Category: Communication / Marketing		
Action ID	Action	Reasoning
2.1	Developing climate plan and greening potential maps for city.	<p>These can be used to clearly demonstrate the level of potential NbS-focused opportunities available for businesses to compete for, with the goal of increasing confidence of suppliers that engaging in the NbS ecosystem will lead to long-term revenues.</p> <p>Showing alignment of the greening plan to current climate policies and national initiatives can also enhance the confidence in NbS market growth among local practitioners and property owners, therefore supporting further growth in the market.</p>
2.2	Public information campaigns.	Continued marketing support from public bodies can encourage landscape architects, gardeners, and others involved in supplying and implementing greening solutions to see NbS as a viable business

		opportunity due to growing demand from citizens and active support of public bodies to promote NbS as essential for future climate resiliency.
2.3	Use outputs from research work and practical implementations to promote city as a sustainable future-looking city.	This is a marketing action that stimulates confidence in future NbS-related activities, encouraging companies to enhance their skills in this area in anticipation of increased opportunities providing nature-focused solutions.
2.4	Digital platforms for communications on available projects / tenders.	Provide a project list, clarify responsibilities, requirements, and answers to frequently asked questions to lower engagement barriers for businesses wishing to provide NbS-focused solutions to city.
Category: Network building		
Action ID	Action	Reasoning
2.5	Create database of urban greening stakeholders.	<p>Databases to connect urban greening stakeholders to public bodies for information sharing. This also facilitates communication between citizens, businesses and / or the city, removing barriers to finding suitable projects as businesses can be made aware of upcoming tenders, while promoting their products / services to the local ecosystem.</p> <p>This database could also enable sharing of information on available training for NbS creation and maintenance, thus facilitating upskilling of those involved in supplying NbS (e.g. landscapers, gardeners, etc.).</p> <p>Such a database can also provide an organisational structure of the city / municipality with clear definition of roles, responsibilities and a method to contact the associated people / departments. This facilitates reduced efforts for businesses to engage with the city and a better understanding of relevant contact people with the necessary competencies to support NbS project implementation.</p> <p>It can also be a means of clarifying the products and services that businesses have available, allowing municipalities to link their needs to service providers.</p>
2.6	Networking and information workshops (i.e., design and implement effective ecosystem engagements).	The goal is to plan for and facilitate workshops and information sessions to allow private ecosystem stakeholders to better communicate among themselves and with the city. This increases opportunities for interdisciplinary collaborations among companies from different areas of interest, while lowering barriers to entry for those wishing to initiate participation in the ecosystem, particularly smaller SMEs.

		<p>This type of workshop can tackle issues such as lack of clarity about the city's objectives and align expectations of contractors, while facilitating discussions on challenges related to NbS-centred projects.</p> <p>This document and the associated toolkit acts as a guide for cities to create a roadmap of actions that suits the specific needs of each city.</p>
Category: Training / Toolkits		
Action ID	Action	Reasoning
2.7	NbS-focused training and support.	<p>Create opportunities to enable landscape architects, gardeners, generally those involved in supplying and implementing greening solutions, to acquire the necessary skills to effectively and efficiently implement NbS interventions using appropriate materials, plants, etc.</p> <p>On-site training at existing NbS intervention is seen as highly practical and effective, especially when involving practitioners with firsthand experience of implementing NbS.</p> <p>Open initiatives for landscapers/ gardeners to assist in the monitoring and maintenance of existing NbS is a means of enhancing the local skills-base on this topic.</p>
2.8	Learn from available implementation toolkits.	<p>JUSTNature will produce several toolkits, such as JUSTPlant¹, and various public deliverables² on lessons learned that can provide practitioners with on-the-ground, first-hand experiences of NbS implementation projects across various cities. These are aimed at facilitating ease of deployment and maintenance of future NbS interventions.</p>
Category: Funding		
Action ID	Action	Reasoning
2.9	Establish fund for NbS-focused projects that can support short-to-medium term monetary incentives for sustainable and nature-positive solutions.	<p>Following standard approaches to support initial market growth in areas of public interest.</p> <p>Consider strategies aligned with standard approaches to incentive schemes, such as rebates on expenses, tax breaks, subsidised training, etc.</p> <p>Consider system to gather funding from private businesses. This mechanism can be promoted as a</p>

¹ JUSTPlant T - Strategic Planning Method-Kit for Ecological Justice: Online. Available: <https://zenodo.org/records/15614320>

² See <https://justnatureproject.eu/> for: 1) D4.6: Training toolkit for city facilitation teams – With lessons learned; 2) D5.3: Project diaries of the Low carbon | High air quality NbS solutions in the 7 CiPeLs, 3) D7.4: Handbook & training toolkit on co-governance capabilities and interventions, which are due at end of project, and 4) D8.1: Setting the stage - Report on the entrepreneurial activation process.

		<p>means for businesses to offset their carbon footprints through local greening actions.</p> <p>Providing financing supports to smaller businesses, e.g. micro enterprises, startups, etc., is often necessary to remove barriers and enable them to build capacity by engaging in NbS projects / initiatives, especially before a sustainable market is established in the city.</p>
2.10	Engagement with city procurement officials to discuss methods to streamline / simplify tendering processes.	<p>The goal here is to lower barriers and facilitate collaboration with companies.</p> <p>Time-consuming tendering processes were identified in JUSTNature as a significant obstacle that discourages the private sector from involvement in or direct implementation of NbS projects.</p> <p>Slow decision-making processes and a lack of clarity on planning decisions and tender processes have been identified as being sources of barriers for business engagement, particularly for smaller businesses who are more sensitive to cashflow delays compared to larger companies that are better placed to manage risks to cashflow due to higher available resources.</p> <p>Practical suggestions to discuss are in terms of shortening decision-making paths and/or standardising procedures to enable shorter procurement cycles, which are especially required by smaller companies delivering NbS-focused solutions.</p> <p>Investigate the possibility to revise award criteria in selected tenders to explicitly prioritise NbS-centred impacts (e.g., biodiversity benefits, carbon impact, nature-based design).</p> <p>Facilitating open calls has been suggested as a route towards enabling more experimentation and innovative approaches to NbS-focused projects in cities and to increase the willingness of companies and the city to pursue new ideas.</p>

Table 3: Actions to enhance NbS demand driven by public sector actors.

Enhance Demand from Public Sector (e.g. municipality)
<p>Objectives: The actions listed here are intended to drive demand for increased numbers of NbS interventions being developed by cities, who are major developers / maintainers of NbS and therefore key to creating a lucrative ecosystem for interested businesses.</p>

Category: Communication / Marketing		
Action ID	Action	Reasoning
3.1	Developing climate plan and greening potential maps for city.	<p>These can be used to clearly demonstrate the level of potential NbS-focused opportunities available in the city and can be used as the basis for developing a roadmap for increasing numbers of NbS interventions in cities.</p> <p>Such a roadmap can act as a focal-point for planning activities and help explain longer-term goals when securing buy-in from politicians / other decision makers. Such a plan should also highlight opportunities for installing green roofs and other innovative solutions that address issues of limited space typically found in cities.</p>
3.2	Use outputs from research work and practical implementations to promote city as a sustainable future-looking city.	This stimulates confidence in future activities in NbS-related work and places city in stronger position to attract EU and other types of funding for supporting future NbS initiatives.
Category: Network building		
Action ID	Action	Reasoning
3.3	Creation of interdepartmental climate resiliency task force.	<p>Formalised set of actors driving actions that support climate-positive changes within the city.</p> <p>The involvement of various municipal departments is important to gather a “360 degree” view from those involved in planning, authorization, monitoring and maintenance of public and private green areas to validate the outcomes of the collection of green and related policies.</p>
3.4	Make contact lists available of those internal to municipality that can support implementing greening solutions in cities and maintaining priority of greening efforts in cities.	<p>This can be seen as a single reference point that facilitates internal communication between municipal departments and reduces barriers to inter-departmental cooperation that is necessary for successful NbS project implementation. It can also help to reduce duplicated efforts, share resources more effectively and lead to enhanced NbS project delivery.</p> <p>Multiple departments have been identified through the work in JUSTNature, and although names can change from city to city, the following list can be helpful in finding relevant departments / roles in different cities: Greening and Public Works, Greening, Sustainability, Mobility, Heritage, Community/Social workers, Communications, Education, Construction, and Climate/Environment, IT, Finance and Procurement.</p>
Category: Training / Toolkits		

Action ID	Action	Reasoning
3.5	Implement pilot NbS.	<p>Create focal points to prove increasing interest in NbS, de-risk future projects through gathering knowledge on NbS and develop a narrative for public and private stakeholders to understand future opportunities associated with NbS (e.g., business opportunities for landscape gardeners, enhanced government approval based on positive reception from citizen-base).</p> <p>An emphasis on promotion and education of local and national stakeholders with potential to engage in NbS would be essential to enhance impact of pilots.</p> <p>Promotion among citizens, NGOs, local businesses, etc. can help garner political will for wider support of NbS through citizen feedback on positive impacts.</p>
3.6	Address "decision-makers' limited knowledge of NbS.	<p>Increasing interest in and awareness of NbS among city, regional and national government officials is important to motivate policymakers, politicians, etc. to engage more in future projects. This communication can be enhanced by highlighting outcomes from pilot projects and citizen engagement activities.</p>
3.7	Educate city planners on most recent green/climate-related policies.	<p>This activity is intended to ensure city planners understand the importance and drivers for having increased numbers of NbS in cities.</p>
Category: Funding		
Action ID	Action	Reasoning
3.8	Continually apply for NbS-focused funding opportunities in collaboration with educational and research institutes.	<p>To increase numbers of NbS in city and highlight on-going demand (i.e., prove a favourable business environment). This approach can also create increased opportunities to engage citizens and showcase positive effects of NbS, which, in turn, can help influence funding decision for future NbS interventions.</p>
3.9	Continually apply for NbS-related funding opportunities.	<p>Identify alternative funding schemes related to e.g. water management and use knowledge to help secure further funding.</p>
3.10	Establish fund that can support NbS-focused projects that maintain or enhance green public spaces within cities.	<p>Such funds can help to ringfence finances for dedicated purposes and possibly be used to test innovative projects focused on creating positive environmental impacts. Such funds can act as testbeds for evaluating new projects that can inform future practices within the city.</p> <p>Consider system to gather funding from private businesses. This can be a mechanism for businesses to offset their carbon footprints through</p>

		local greening actions, which can be coupled with marketing campaigns highlighting companies making positive contributions to the city environment.
3.11	Create standardised processes to support hand-over of maintenance activities of privately created NbS interventions from private actors to city authorities.	Lack of funding was highlighted as a primary issue during JUSTNature's business engagement workshops, as it is difficult for private actors to cover all implementation and maintenance costs, especially for large-scale NbS solutions.
Category: Impact Monitoring		
Action ID	Action	Reasoning
3.12	NbS intervention monitoring (e.g., temperature difference under shade, air quality in vicinity of NbS, etc.)	To gather the data necessary to demonstrate impact and value of NbS, developing data-based, positive messaging that justifies increased public spending.

Table 4: Actions to support the supply of NbS interventions and associated services from the public sector.

Support Supply from Public Sector (e.g. municipality)		
Objectives: Actions focused on ensuring cities / municipalities have the necessary skills to efficiently and effectively deliver NbS-focused projects. Also considers actions to increase supply of publicly accessible green space and address associated barriers.		
Category: Training / Toolkits		
Action ID	Action	Reasoning
4.1	Training of planners, city architects on effective and efficient design and implementation of NbS.	<p>To provide the skills, knowledge and practical design recommendations to appropriate personnel to ensure city development plans include viable, compliant and effective NbS that can be implemented cost-effectively.</p> <p>Training can include establishing connections between municipal technical staff working on NbS, to enable, e.g., pooling of resources, reduction in duplicate efforts, while inspiring others through cross-sharing of ideas and best practices.</p> <p>Training can also be focused on co-design principles to enhance citizen acceptance.</p> <p>Publishing leaflets / guidelines on best practice in various areas of interest, for example, combining green roofs and solar, can facilitate effective planning and implementation of NbS projects.</p>
4.2	Training of city gardeners.	Especially in maintenance skills focused on NbS solutions and suitable, climate change-resilient plants. Also, consider education on the value of NbS, creating justification for changes in public space design principles (e.g., in cases of changes

		away from simple grass lawns to urban forests that require different maintenance considerations).
4.3	Toolkits made available to public administration staff to facilitate replication of NbS interventions in different areas.	Ideally a toolkit, for example, based on the lessons learned from JUSTNature, is used to address the specific needs of a city, enabling each city to efficiently repeat citizen / business engagement process and implementation of NbS, while avoiding pitfalls in terms of barriers highlighted by the experiences in JUSTNature. For example, see the project's public deliverables at: https://justnatureproject.eu/
Category: Repurposing under utilised land for NbS		
Action ID	Action	Reasoning
4.4	Making small but accessible public green areas more attractive for citizen in the neighbourhood.	This is seen as a very low-cost way of enhancing the amount of publicly-available green space. Examples include, opening unused land for biodiversity gardens or urban forests. However, measures need to be taken to ensure public safety and that liability concerns are addressed.
Category: Liabilities		
Action ID	Action	Reasoning
4.5	Clarify liability for works undertaken by private entities / individuals in public spaces.	Important for situations where private areas are made available for public use and/or where citizens engage in maintenance and/or upgrades in publicly-accessible areas to support greening initiatives. This can be part of an initiative for municipalities to benefit from access to more green space within the city and / or encourage private stakeholders to invest in NbS on their land. Such actions offer private individuals / businesses an opportunity to enhance their image in terms of corporate social responsibility (CSR) and the possibility to offset their CO ₂ emissions.

1.5 Cross-Cutting Actions

The bottom of Figure 4 refers to policy and the involvement of elected officials. This was included because through the activities of JUSTNature certain observations were made regarding the importance of policy and regulation in creating an underlying system that supports the development of an NbS ecosystem within cities.

The actions described here can be seen as cross-cutting activities that can support the longer list of actions described in the tables above, and are targeted at achieving systemic supports for upscaling NbS:

- An essential initial step is the need for city authorities to gather and analyse existing “green” and climate-relevant policies at municipal, provincial, national, and EU levels. These should be discussed with multi-stakeholder groups from across the municipal departments, both for education purposes and for developing coordinated local policies for green space use and greening objectives within the city (i.e., a translation of policy to mandate upscaling of NbS in cities, which is highlighted in Figure 4). It is recognised that these efforts to upscale the number and effectiveness of NbS in cities needs to be part of a long-term strategy, meaning consistent and continual review and education on these climate-relevant policies is required.
- For situations where policies and associated regulation do not sufficiently support the implementation of NBS, engagement with politicians on the subject should begin. The goal is to encourage local governments to petition national governments to provide a more supportive framework for implementing NBS, with the long-term goal of achieving wide-scale benefits across the population. The engagement of politicians has been highlighted as being essential to enable effective change of relevant policies and plans. This engagement and the associated supportive policy environment was shown to be extremely effective for justifying NbS-focused initiatives and enabling their technical implementation in JUSTNature. In some project cities, policies, regulations and incentive schemes have been aligned to ensure nature is a core part of the urban planning process.
- Where not already present, one specific goal would be to petition governments to ensure there is a requirement to include NbS as part of city building regulations. In JUSTNature, this was seen to be the most effective mechanism to unlock private funding for NbS, especially when supported by guidelines and checklists that help to ensure effective NbS are implemented as part of building projects. Such regulations can be justified as a means of minimising the environmental impact of construction activities within cities.
- An on-going process of discussing NbS with representatives of the local / regional government regarding the knowledge gained from NbS-focused projects, especially regarding the impact of the NbS, best practices, and the level of acceptance within the voter-base, can be useful in building support for the systemic changes discussed above. This can be further supported through continual national and international collaborations with other cities on NbS topics, which builds evidence of wider activities in this space and facilitates information sharing and building of “critical mass” for driving policy changes at national and international levels.

1.6 Contact Us

For more information, please see the JUSTNature website: <https://justnatureproject.eu/>

1.7 Acknowledgements

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1.8 Funding



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