



Urban Nature Declaration

Signatory Cities Planned Actions to Deliver Commitments



Durban (eThekweni)



Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

- The Durban Metropolitan Open Space System (D'MOSS) is a city wide layer that flags areas of environmental importance and is integrated with all municipal planning land use schemes as a controlled development layer. Members of the public therefore already have access to the city's environmental protection intentions and targets.
- The Systematic Conservation Assessment dives a step further into the D'MOSS layer by categorizing ecosystems of importance, original and current spatial extents, protection targets for each ecosystem, as well as non-negotiables.
- Update Durban's Biodiversity Strategy (previous iteration undertaken in 2017) regarding intentions and spatial priorities for biodiversity conservation.
- Publish a 'rough guide' to ecosystem restoration (English and isiZulu versions) for use by communities and small contractors that implement restoration and ecosystem management work.
- Publish an updated series of 'indigenous plant' posters and flashcards, for distribution to members of the public, including communities and small contractors that implement restoration and ecosystem management work. This will highlight plants suitable for use in indigenous gardens and locally restored ecosystems.
- With regards to riverine ecosystems, eThekweni has completed an Transformative Riverine Management Programme that seeks to improve the condition of the city's 7400 km of rivers resulting in improved ecological infrastructure, hard infrastructure resilience and the creation of thousands of green jobs.

- The municipality's Ecological Restoration programs (for ecosystems prioritized under D'MOSS) and the stream cleaning interventions are all part of ecosystem based adaptation response to bring about infrastructure and community resilience against climate change shocks such as flooding, extreme heat and drought. Both programmes have been included in the city's Covid-19 Economic Recovery Plan as they are major contributors to a green recovery while they create a lot of jobs for the vulnerable communities.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

- Update Durban's Biodiversity Strategy (previous iteration undertaken in 2017) regarding spatial priorities for biodiversity conservation management.
- The D'MOSS plan is reviewed and updated on an annual basis in response to the continuous impact assessment and ecological assessment work that is done to evaluate the condition of the environment on the ground. The science that underpins the mapping of priority ecosystems under D'MOSS follows a Systematic Conservation Assessment approach that defines levels of acceptable change for each ecosystem type, ecosystems of conservation importance in terms of national legislation, protection status for each ecosystem type, and identifies areas where below target ecosystems can be recreated and/or restored through the Ecological Restoration programs that the city allocates budget to on an annual basis. Also key to this intervention is the land acquisition program where the city acquires environmentally important land under private ownership that due to historical zoning was assigned a zone that allows hard development. The D'MOSS map is available in GIS shapefiles as well as in HTML format for citizens to be able to engage with D'MOSS and identify if the properties

they are interested in purchasing are included in the D'MOSS plan. The D'MOSS shapefile on each property is accompanied by attributes such as the type of vegetation under D'MOSS and extent in square meters.

- The municipality's Natural Resources Division runs greening programs annually to encourage citizens to green their spaces over and above Parks and Nature Reserves.
- The city's Solid Waste Departments also has annual programs that seek to eradicate dumping in open spaces by encouraging private citizens living in informal settlements and in poorer locations to "adopt a spot" and have these areas cleared of rubbish and installing gym equipment instead that will benefit the communities free of charge. This initiative results in an increase in green spaces.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

As 60% of the city's ecological assets are in areas under traditional authority leadership governed by the Ingonyama Trust Board (ITB), the city has begun to investigate best approaches to secure conservation land in Traditional Authority areas, i.e. areas controlled by the Ingonyama Trust Board (ITB), using the iNanda Mountain grasslands and forest restoration as a pilot. The city also has a Biodiversity Stewardship Policy that allows for partnerships with traditional authorities and provides them with incentives to conserve the environment and allocate land under their control responsibly.

Publish a short paper that outlines the approaches used, progress made and learnings gained with regards to restoration at the Buffelsdraai Reforestation Project site.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

A vegetation map has been produced for the City of Durban and is regularly updated, while a number of natural capital metrics are reported on through Durban's annual State of Biodiversity report. Both

these work streams will continue to be reviewed and updated. The Durban Climate Change Strategy places a particular emphasis on the role of the natural environment in responding to the impacts of climate change, and this workflow will continue to raise awareness of the City's adaptation work.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

While tools and projects are already being implemented that promote public-private partnerships under the banner of biodiversity conservation (e.g. Special Rating Areas), there is a need to increase the scale of these interventions, and where necessary to identify new tools to address governance challenges (e.g. biodiversity stewardship in traditional authority areas). Durban's Biodiversity Strategy will provide an overview of the tools that will be rolled out and those to be piloted.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The city over the past 15 years has invested about R300 million annually on various programs that improve the environment both from capital and operational expenditures. These programs include land acquisition for ecologically important land parcels currently under private ownership, investment into Special Rating Areas where private landowners contribute dedicated rates for keeping the green space in their areas free of alien vegetation, city wide alien invasive species removal, fire control of alien invasives, reforestation, recreation of habitats and citywide stream cleaning. In the next MTEF the city has committed R800 million in ecosystem based adaptation projects in addition to Parks and Natural Area revitalization (figure unknown).

Freetown

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The Freetown City Council (FCC) strategically divided the 'Freetown the Tree Town' program into two phases:

- Phase 1-Urban Greening Program for Hazard and Disaster Risk Reduction (2020) which planted, tracked and is currently growing approximately 250,000 trees in 48 planting areas in the upper catchments of vulnerable communities.
- Phase 2- Climate Ready Cities (2021-2022) aims to enhance community engagement, participation, and impact particularly in vulnerable communities through planting approximately 700,000 trees in 2021 and 2022. The Urban Greening Program focuses on harnessing strategic partnerships to establish and implement a comprehensive community-based planting and growing, stewardship, and monitoring and evaluation model. It also provides opportunities to tie wider / co-benefit outcomes pending the greening approach; examples include: job creation for short term, disaster risk reduction (landslide events) & water quality / security improvements for longer term.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

The FCC has worked very closely with a Technical Team to build a Phase 2 Urban Greening Model which maps greening opportunities, include planting locations, species mix / biodiversity profile against specific land-use typologies to guide planting and growing of the first target of 300,000 indigenous trees and additional supportive shrub and grass vegetation to be planted in the upcoming 2021 implementation cycle. The FCC has agreed with the World Bank and the Ministry of Finance to focus on the following key objectives under the RUSLP Urban Greening Program for Phase 2 implementation of the #FreetownTheTreeTownCampaign to commence in July 2021.

Key Objectives:

- Target Green Infrastructure Under Phase 2: Plant, grow and track 300,000 trees and additional supportive shrub and grass vegetation city-wide under the climate resilience approach to urban greening using nature-based solutions to mitigate climate risks.
- Target Planting Areas: Planting to take place along; (i) major and secondary roads and other critical infrastructure; (ii) around key water sources, mangroves; (iii) targeted community/ neighbourhood spaces such as community dams and existing and to be established greenspaces; and (iv) areas that are vulnerable to soil erosion.
- Community Tree Stewardship: The aim is to harness the momentum of Phase 1 and the awareness raising that was built about trees with local community members to create more ownership and sustainability for trees and green infrastructure. An opportunity exists for inclusive jobs for experienced community members from Phase 1 to provide training to other communities.

- Tree Mapping, Tracking & Monitoring: A critical component of Phase 2 planting and growing operations is to map existing trees and build a forest inventory for Freetown, measure the volume of land restored, and measure GHG reductions (carbon capture) because of trees planted and grown under the Campaign.
- Urban Forestry Management Policy Formulation: The aim is to strengthen Council capacity to support and manage the urban forestry sector in Freetown and the Western Area Peninsula by establishing an Urban Forestry Strategy and Action Plan, and governance structure which will manage tree planting, growing and operational maintenance of the Freetown Urban Forest.

Currently, there is no official funding for the additional 400,000 trees of the forecasted goal to plant 700,000 trees. The FCC will continue to work closely with the Technical Team to achieve the second tree planting and growing target of 400,000 trees in 2022.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

The FCC is establishing a sustainable financing mechanism by leveraging potential carbon offsets resulting from the Urban Greening Program and offering these offsets to corporate and institutional partners to invest in the city's pathway to climate resilience. Through the #FreetownTheTreeTownCampaign, communities are provided with monetary incentives to plant trees and a tree trading market is established through carbon offsets sold to institutional and corporate partners which fund additional reforestation. Further carbon offset financing will be achieved through offsets identified from additional green infrastructure and nature-based solutions linked to identifying the co-benefits of nature-based solutions and community co-management of the urban forests which are integrated within the tree trading market. This initiative poses a unique opportunity to use market forces to drive climate action at the community level, with multiple benefits achievable against the city's environmental and public health indicators.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Freetown will undertake a comprehensive inventory of natural trees and vegetation in conjunction with the building of our Freetown Urban Forestry Strategy and Action Plan. This will be built on a platform of community tree and canopy mappers linked to our existing Community Tree Growing Teams and Tree Tracker Platform. This process will be conducted over 2021 and 2022. A pilot exercise was conducted in 2020.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The #FreetownTheTreeTownCampaign focuses on harnessing strategic partnerships with the Ministry of the Environment [Forestry Division, Environmental Protection Agency and National Protected Area Authority], The Ministry of Water Resources and the National Water Resources Management Agency, Guma Valley Water Co., The Ministry of Lands, Housing and Country Planning, the Sierra Leone Roads Authority and community-based organizations at Catchment-level who will work directly with communities to establish and implement a comprehensive community-based planting and growing, stewardship, and monitoring and evaluation models. The nature of decentralization in Sierra Leone is such that all of the above Ministries, Departments and Agencies (MDAs) have mandated authority over spaces for greening in the city of Freetown that is not delegated authority to the city itself. Hence, this requires strategic coordination with central Government MDAs to design and implement natural solutions that are sustainable. A critical piece to this, however, is the ability of the city to attract resources directly and sustainably to fund urban solutions which are rarely funded as an allocation to local councils through central Government.

Other supportive actions you may want to highlight

Through the Freetown Community Climate Action Ambassador engagement process the city is engaging vulnerable communities in Climate Risk mapping based on 3 Stages and 10 Processes of Community-led Climate Action and Adaptation where equitable greening is a critical driver to climate resilience.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The World Bank and the Global Environment Facility (GEF) have directly financed USD\$ 1.8 million for the Urban Greening Program [#FreetownTheTreeTownCampaign], which has been leveraged to support Freetown to mobilize for an additional USD\$ 1 million from Bloomberg for the same program.

Also, as a critical pipeline funding for urban greening, Freetown has been named one of 50 Champion Cities in the Bloomberg Global Mayors Challenge based on our #FreetownTheTreeTownCampaign and should we move to the next round of 15 the City will be awarded US\$ 1 million to fund our greening initiatives and meet our obligations under the C40 Nature Declaration over the period of 2022-24.

Additional Resources

<https://www.worldbank.org/en/topic/disasterriskmanagement/brief/sierra-leone-multi-city-hazard-review-and-risk-assessment>

<https://blogs.worldbank.org/sustainablecities/freetownthetreetown-campaign-using-digital-tools-encourage-tree-cultivation>



Athens

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In 2021 we will be releasing our updated Climate Action Plan, a large part of which focuses on making our city greener and more resilient to heat, droughts and flash floods. A significant communication plan is going to take place around the launch of our CAP this fall, including a series of stakeholder workshops.

For developing support and wide community engagement in designing our nature targets we are also depending on synergies with different existing programs of the City of Athens that reach out into the city for significant collaborations such as SynAthina, Athens Partnership, ADDMA as well as specific Green Deal Horizon 2020 European Programs that we've just landed: Arsinoe and ReachOut.

Finally, in early July, the City of Athens is launching its collaboration with the Atlantic Council's Extreme Heat Resilience Alliance which focuses on a nature-based response for keeping the city cool and protecting the health and wellbeing of our most vulnerable populations. In July we will be announcing an interim Chief Heat Officer, and we will be putting together a Task Force (internal and external to the municipality) that will move this effort forward.

Regarding monitoring and assessing, we have set metrics for our CAP goals and we will be setting metrics for our Heat reduction targets as well. We don't currently have the process for monitoring set up, but it is a recognized step that we will be setting.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

We recently commissioned a high-resolution heat map that depicts the average summer temperatures of the last 5 consecutive years in every building block of the city. We are also currently in the process of creating a tree map for the national census for 2021 (which takes place every 10 years), and it will give us demographic and socio-economic data and is estimated to produce results in 2022.

What we have been using up to now is a gap analysis and its map created in 2017. We have a basic line understanding of where our vulnerability and risks are. This is to a large extent leading the city's decision to focus most on new green areas in the 3rd district, i.e. the west part of Athens which is the most vulnerable to heat (Elaionas).

We are also focusing on a neighbourhood level, creating pocket parks wherever that is possible as well as creating green corridors in districts that are either very densely built or have low socio-economic indexes.

In general, greening Athens, a densely built and inhabited city is a challenge that we need to turn into a solution.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

This Declaration is going to "push the green envelope forward" and make our city more green and more resilient to climate change, i.e. extreme heat.

We are currently finalizing the technical plans for a Nature Capital Finance Facility loan that is part of a 55m European Investment Bank loan anchored on our Resilience Strategy and particularly on its Green Pillar and the Climate Adaptation actions. Through the Athens Partnership initiative "Adopt your City," the City of Athens is addressing citizens, small and large companies, foundations, organizations and anyone who is interested to "adopt" a street, a pathway, an abandoned lot, a park, a square, a playground and make it greener. This program promotes the collaboration between citizens and the corporate world, the public and private sector. We have also launched the "Adopt a tree" awarded initiative for community engagement which has been running the last 2 years in the city. We are also currently launching a partnership with the Atlantic Council establishing Athens as the City Champion for Heat Action in Europe and supporting the city on four pillars: policy, education, financing and implementation regarding the mitigation of heat and the protection of the most vulnerable populations.

These are three initiatives among many others. We believe that Athens can assume a leadership role in dealing with heat, one of the most dangerous climate change related risks. Bringing nature into the city is pivotal.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

We are currently in the process of pulling together resources in order to complete, in the next 2-3 years, a comprehensive baseline vegetation inventory and a natural capital accounting. We believe that this will also guide our decisions regarding the track that we should be following for our 2030 Urban Nature targets, in order to best build our city's resilience and protect our communities from climate risks.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

As mentioned above, we are currently in the process of implementing a series of inclusive frameworks that are increasing and enhancing natural solutions around the city. We are eager to continue on this path and share/learn from other cities solutions and opportunities that will maximize and capitalize on our efforts.

Other supportive actions you may want to highlight

We are now starting to engage with a series of European programs [Horizon 2020 New Deal] and international collaborations [C40 Cool Cities, R-Cities CoP on Heat, Atlantic Council Extreme Heat Resilience Alliance] that will enhance our efforts in bringing nature into the city with a focus on equity regarding accessibility to green spaces.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

EIB loan, European Programs, Municipal Funds, Public Private Partnerships.

Barcelona

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The Green and Biodiversity Plan 2013-2020 proposed an approach to increase and naturalize the various green spaces in the city. Within the framework of the plan, the city established during COP21 a commitment to increase urban green space by 160 ha, equivalent to 1 m² of green per inhabitant by 2030. Throughout these years, the Green Infrastructure Promotion Program approved a government measure that established different accounting mechanisms for increasing urban green spaces.

In July 2021, the Natura 2021-2030 Plan was initially presented, which is the evolved version of the Green and Biodiversity Plan, and aims to generate, expand, conserve and protect the green and biodiversity of the city. It is also expected to grow green spaces through (1) the development of green connectors within the metropolitan area, (2) the promotion of urban transformation with a green fabric (superblock, green axes) and (3) the commitment to green roofs where there is less space.

One of the components of the Nature Plan and on which the city has been working for a few years is the “Mans al verd” program, which involves working collaboratively with citizens to co-manage disused land, tree pits and new community green spaces.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Part of the diagnostic work of the Nature Plan is based on analyzing the presence of urban greenery in the different neighborhoods and districts of the city. The increase in green space was a commitment of the mayor at COP21, it is included in the Climate Plan and also it is in the Nature Plan and in the green infrastructure government measure.

The increase in green spaces works as a structure to strengthen biodiversity in the city and to promote greater environmental services, among them: thermoregulation, regulation of the water cycle, generation of shade, among many other services. The approximation is made through various analyses where the amount of “real” greenspaces, that is, biologically active, is considered. This parameter is analyzed from different perspectives, the % of the city surface area (i.e. parks, gardens, etc.), the % of coverage (using the NDVI index) and the accessibility to these spaces within 300m . These analyses allow us to detect the areas where there is greater difficulty in accessing green areas and establish strategies to improve these parameters.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

The city of Barcelona has put different mechanisms in place to promote and finance the implementation of urban greenery through:

- Participatory budgets
- Commitment to municipal investment plans
- Participation processes in urban transformation projects
- Green roof competitions to subsidize 75% of the cost.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Barcelona has an ecological map that is made from a land cover map. In July 2020 it presented a strategy for the naturalization of spaces in order to improve biodiversity in the city and to be able to recover gardening systems that favor a lower intensity of management and handling and favor naturalized plant strata.

Another initiative to highlight is BioBlitzBcn, a collaborative and festive nature discovery event, where, during a 24-hour period, all organisms in a given area are identified. It constitutes a space for training, knowledge and citizen participation. Its main objective is to identify the maximum number of species that is possible in a given place, in order to carry out an annual biological inventory.

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The City has begun to establish through urban regulations, for example in the Vallcarca MPGM or in modifications of the general plan that are now being carried out, criteria that favor the implementation of green roofs or green dividing walls so that the building contributes to provide vegetation to the city. On the other hand, in most large urban transformation projects, the increase in vegetation is a fundamental objective. A mechanism for monitoring the increase in vegetation has been established in urban transformation projects.

Additional Resources

<https://www.icgc.cat/Descarregues/Mapes-en-format-d-imatge/Cobertes-del-sol>

<https://opendata-ajuntament.barcelona.cat/data/es/dataset/cobertura-vegetal-ndvi>



Berlin



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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

Make our nature goals public:

Berlin has had an urban landscape strategy (“Strategie Stadtlandschaft”) since 2011. Its aim is to safeguard and expand Berlin’s open and green spaces and to prepare them for new challenges such as climate change. With the funds made available for its implementation, it was possible, for example, to launch the so-called urban tree campaign (for planting new urban trees) and the mixed forest program (for adapting Berlin’s forests to climate change) and to support other reference projects. Information (in German) is available [here](#).

Most recently, the Berlin Senate developed the Charter for Urban Green (“Charta Stadtgrün”), which was adopted by the Senate and the Council of Mayors in May and June 2021, respectively. The Charter for Berlin’s Urban Green formulates goals, tasks and measures for the protection of Berlin’s urban green spaces, especially with regard to the growing population. Among other things, it formulates the goal that every citizen should be able to reach a green space within 500 meters of their homes. For recreation, each resident should have 6 m² of recreational space close to the home and 7 m² close to the settlement, as well as 1 m² of playground space. Together with the Charter, a 2030 action programme was adopted, which defines the necessary projects and measures. The Charter was adopted together with the urban community in a broad-based participation process. The implementation of the Charter is evaluated every 2 years and the action programme is updated accordingly. Information (in German) is available [here](#).

In addition, there is the Landscape Programme for Berlin. This is the green sectoral planning for the overall spatial planning. The 2016 landscape programme, including the species protection programme, consists of the general requirements and measures for achieving the goals and principles of nature conservation and landscape management in the

state of Berlin. In accordance with the requirements of the German Federal Nature Conservation Act (“Bundesnaturschutzgesetz”) and the Berlin Nature Conservation Act, the programme includes an analysis and assessment of the state of nature and landscape and the development goals for nature and landscape. The landscape programme including the species protection programme is a strategic, city-wide planning instrument for integrative environmental risk reduction. Information (in German) is available [here](#).

The Berlin Energy and Climate Protection Programme 2030 (“BEK 2030 – Berliner Energie- und Klimaschutzprogramm 2030”) has been in place since 2018 to transform Berlin into a climate-neutral city. It was developed on the basis of scientific recommendations with broad public participation and adopted by the Berlin House of Representatives in January 2018. It follows an integrated approach and contains around 100 measures in the areas of climate protection and adaptation to the consequences of climate change, each for an initial implementation period until 2021. In the area of adaptation, the BEK 2030 provides, among other things, for the safeguarding of climatic relief areas and the creation of further green and open spaces. Information is available [here](#).

In the area of adaptation, the 2011 Urban Development Plan on Climate (“StEP Klima – Stadtentwicklungsplan Klima”) should also be mentioned. It is used as a planning instrument as a basis for consideration and for district urban land use planning and thus ensures the integration of the topic of adaptation. It was specifically supplemented by the StEP Klima and makes the heat-adapted and water-sensitive city guiding themes in urban land use planning. The plan contains bundles of measures and strategies for seven common building structure and area types in Berlin, for example dense perimeter block development, new multi-story residential construction as well as streets and squares. Key strategies to combat urban heat include ventilation, shading, increasing back radiation and cooling through evaporation (e.g. through trees, urban wetlands, vegetation and soils). This concerns public and private open spaces as well as roofs and facades. Information (in German) is available [here](#).

In addition, a Water Master Plan is nearing completion, the aim of which is to secure the drinking water supply, water protection and an adapted wastewater disposal system for Berlin and the surrounding area, even under changing future conditions. This also includes the field of action “Urban Green” (“Stadtgrün”), which includes measures for decentralised rainwater management.

Develop support and skills building programmes for green jobs:

- The following measures, among others, are collected under the Charta Stadtgrün:
- Deploying park managers, urban nature rangers and forest rangers in recreation focal points
- Strengthening measures for nature experience and environmental education through programmes such as nature guides, species finders for biodiversity, advice for nature experience spaces, green learning sites
- Further training for gardeners, landscape architects, park managers and nature guides should be increased.

Develop a process for involving vulnerable and marginalized communities in design, implementation and monitoring of our nature targets:

The Charter for Urban Green (“Charta Stadtgrün”) was developed in a broad participation process with the urban society. Among other things, the charter and the action programme provide for the following measures to involve the (disadvantaged) urban population:

- Maintaining the supply of allotment garden plots for the population
- Preparation, implementation and evaluation of pilot projects for the integration of open space for general use and community gardens in allotment gardens.
- Realisation of parks near housing and settlements, play landscapes, nature experience areas, sports fields and neighbourhood gardens in the large new building quarters parallel to the building development.
- Launch “Rooting Community Gardening in the City” programme
- Supporting citizens’ initiatives that are committed to the Urban Green
- The 1000 Green Roofs Programme – “GründachPLUS” - offers the possibility of promoting green roofs, primarily on existing buildings, but also innovative building greenings as a so-called Green Roof LAB

Other notable projects include:

- **Participation in the EU innovation project EdiCitNet (September 2018- August 2023):** Co-development and implementation of different Edible City Solutions (special form of nature based solutions) in two real labs/community gardens in socially disadvantaged neighbourhoods. Development of a strategy to strengthen socially disadvantaged neighbourhoods through solutions for the so-called Edible City.
- **Urban renewal programme “Social Cohesion”:** The overarching goal of the programme is to strengthen socially disadvantaged neighbourhoods. From 2021 onwards, stronger integration of the topics of climate protection and climate adaptation in funding programmes (integrated strategies, construction measures, public relations, socio-integrative projects).
- **Berlin has had an urban landscape strategy (“Strategie Stadtlandschaft”) since 2011.** Its aim is to safeguard and expand the substance of Berlin’s open and green spaces and to prepare them for new challenges such as climate change. With the funds made available for its implementation, it was possible, for example, to launch the so-called urban tree campaign (for planting new urban trees) and the mixed forest program (for adapting Berlin’s forests to climate change) and to support other reference projects.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs

A corresponding analysis is already being carried out in Berlin with the supply analysis of green spaces. The Senate is developing maps showing the supply of public green spaces close to residential areas. They form a basis for the landscape programme and for further planning. Based on the guideline values for green space provision in Berlin, the recreational function is assessed by means of accessibility area size, and a statement is made on green space provision. When considering the existing situation, a distinction is made between green spaces close to homes and those close to settlements, with the allocation to the respective open space type being based on the size of the area. The analysis is publicly available and can be found [here](#) (in German).

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In order to remove structural obstacles, the Charter or the Programme of Action provides for the following measures among others:

- Establishment of a task force for the accelerated designation of protected areas planned according to the land-scape programme with the target perspective 2030.
- Adequate equipment of the districts and the senate administrations to draw up and implement sub-area land-scape and open space concepts as a basis for the open space quality offensive and strategic land development and to ensure the implementation of the eco-account (“Ökokonto”).

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

In Berlin, the following inventories exist and are being continued:

- **Biotope mapping:** Between 2011 and 2013, all undeveloped areas in Berlin were recorded or mapped as so-called biotopes. Berlin has created an essential basis for urban and regional planning, landscape planning and for the nature-compatible development of land uses such as forestry through knowledge of the features and spatial distribution of near-natural and cultivated biotopes. All forest and woodland areas, Natura-2000-sites, nature conservation areas and other areas of particular conservation value in Berlin were mapped by terrestrial biotope mapping (inspection of the areas). The unwooded landscapes were covered by aerial photo biotope type mapping; biotopes of special protection or value located there were checked by terrestrial mapping. The areas were then assigned to different biotope classes (1-12). The existing areas are described in detail on the basis of their habitat, flora and fauna features as well as threats and impairments. In addition, information on maintenance and biotope conservation is given. The citywide biotope type mapping is updated approximately every 10 years (high effort). Areas with more valuable natural “features” are mapped more frequently (e.g. nature conservation areas).

- **Climate change impact monitoring:** In order to be able to take concrete measures for climate protection and adaptation, it is necessary to have precise knowledge of the current state of the climate and the environment and to know how individual parameters have changed over the past decades. For this reason, the Berlin Energy Transition Act (“EWG Bln – Berliner Energiewendegesetz,”) made the establishment and implementation of climate impact monitoring mandatory. Among other things, climate impacts on the environment are presented with so-called impact indicators.
- **Berlin eco-account (“Berliner Ökokonto”):** According to the German Building Code, unavoidable interventions in nature and landscape must be compensated. The German federal states have to set up eco-accounts for this purpose. The Senate approved the first Berlin eco-account project in December 2019; first measures have already been implemented. The basis for working with the eco-account is provided by the city-wide compensation concept (“GAK – Gesamtstädtische Ausgleichskonzeption”). The GAK identifies areas in the city where there is an increased need for action in terms of nature and landscape. If negative environmental impacts need to be compensated, the GAK helps to find suitable areas for compensation. It is important that the upgrading of these areas can benefit as many protected goods as possible, e.g. that they are simultaneously effective for soil and water, animals and plants, and also offer better recreational opportunities for people.
- **Project “Social Value of Tempelhofer Feld - Capturing Qualities and Making Them Visible”:** The former airfield “Tempelhofer Feld” is a unique place in its dimension, size, history and variety of possibilities. The interplay of large nature conservation areas and recreational spaces amidst the density of the city is unique. As an urban natural space, the field offers a combination of different ecological services. It is at the same time an urban open space for sports, leisure, education, culture and creativity. It also acts as a space for social encounters and democratic negotiation. The “Tempelhofer Feld” has a special value, especially with regard to environmental justice, which is reinforced in the current situation of the COVID-19 pandemic. The Helmholtz Centre for Environmental Research was commissioned by the Senate Department for the Environment, Transport and Climate Protection to research the social value of the Tempelhofer Feld.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The Charter for Urban Green (“Charta Stadtgrün”) provides for the following measures in this area:

- Incentive programmes to activate green potential on private land (public relations, advisory services, guidelines, competitions, development of instruments for funding).
- Introduction of an open space design plan to ensure and promote appropriate greening and design of building plots.
- Campaign to promote biodiversity on private land: public relations, guidance, cooperation with owners, competitions, citizen science projects, networks, etc.
- Dialogue campaign “Together we are park” (initiative for respect and appreciation in Berlin’s urban green spaces).

Other supportive actions you may want to highlight

All objectives and measures in the strategies and plans listed above.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

Funds of around 16,400,000 € are available for the implementation of the Urban Landscape Strategy in 2021. In addition, there are other comprehensive funds such as those from the districts for the maintenance and upkeep of green spaces, from the Berliner Forsten (Berlin forestry office) for the Berlin forests, and from the Senate for the implementation of the Berlin Energy and Climate Protection Programme 2030 (BEK 2030).

Additional Resources

<https://www.ibb-business-team.de/gruendachplus/>

<https://www.berlin.de/sen/uvk/natur-und-gruen/landschaftsplanung/strategie-stadtlandschaft/>

https://www.berlin.de/senuvk/umwelt/stadtgruen/tempelhofer_feld/download/studie/THF_studie.pdf



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Copenhagen

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The City of Copenhagen makes its nature goals public in strategic documents such as the Municipal Master Plan. As part of the Area Renewal projects the city will involve citizens in preparing Neighbourhood Plans. Involving citizens, including vulnerable and marginalized communities, is integrated in all of the City of Copenhagen's planning processes. The City also provides funding for citizens who have initiated local initiatives to increase green spaces and biodiversity.

As part of the job-creation programme the city is conducting a programme for nature-management for people outside the work-force.

There is also a need for an upgrade in skills for new types of green maintenance both for existing employees and for future employees in the city. The city is working with the national education system, e.g. the Forest and Landscape College at University of Copenhagen, to ensure the relevant competences in our workforce.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

As part of the Climate Adaptation Plan and the Area Plan the administration will continue to prepare annual reports to the City Council with status and gap analyses for the green areas and possibilities for new green areas.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

As part of the Climate Adaptation Plan and the Area Plan for Green Areas, the administration will continue to prepare reports to the City Council giving a status and gap analysis for the green areas and present possibilities for new green areas. The analysis presented by the administration will be included in the annual city budget negotiations.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The City's Area Plan for Green Areas will entail a baseline for natural vegetation inventory and when appropriate include a natural capital accounting on a case by case approach. The city has previously conducted case studies according to natural accounting principles to raise awareness.

The city's strategy for biological diversity, 'A Place for Nature,' was adopted in 2011 and aimed to highlight biodiversity considerations in day-to-day planning, including local plans and the Municipal Master Plan. The plan is expected to be complemented by a new biodiversity strategy which will be prepared together with the Danish Society for Nature Conservation. This will aim to ensure that existing nature areas in the city must be better protected and the greenery must be better integrated in the form of new nature areas in urban areas.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

In connection with the preparation of a biodiversity strategy, there will be citizen involvement, including the private sector, e.g. the social housing sector, residents and businesses. The City provides the possibility for funding for citizens who initiate local initiatives to increase green spaces and biodiversity. The Biodiversity Fund in Copenhagen supports projects in Copenhagen that encourage Copenhagengers to create more and better urban nature. The ambition is to ensure green breathing spaces for insects, birds and small animals and thus help to reverse the decline in species diversity. Examples of projects that are eligible for funding:

- Lawns that are transformed into flower meadows
- Plants and seeds to establish beds surrounding street trees
- Flower boxes placed at sidewalks and areas with asphalt
- Lectures in housing associations and schools on how to increase the quality of nature in a specific area
- Partnership trees (municipality pays for the tree, which citizen groups plant and tend to)

Other supportive actions you may want to highlight

As part of the implementation of the cloudburst management plan the city is prioritising spaces that are located in low income areas and are lacking good quality public green spaces.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

Financial resources to fulfil the necessary requirements are usually obtained in the yearly city budget negotiations.

Additional Resources

[Biofactor Tool](#)



© Biofactor Tool

Haifa



Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The Municipality is developing and carrying out programs to train residents in the practice of urban agriculture, green roofs and communal gardens. Some of the plans take into account residents of neighborhoods with a low socioeconomic status. Another task currently underway is mapping vulnerable populations in the city, in cooperation with the Ministry of Labor, Social Affairs, Social Services and the municipal Welfare Department. This mapping will also support and assist in preparing appropriate training programs for these populations in required neighborhoods, as well as preparing vulnerable populations to cope with climate change. The city is also developing and implementing a training program in the education system for students and teaching staff to address climate change, urban agriculture, green roofs, urban heat islands and sustainable nutrition. This is a direct initiative by the mayor, who conducts training in person, both in schools and on the hydroponic green roof built on the city's Resident Service Center, realising the importance she attaches to spreading her vision of nurturing and preserving urban nature and dealing with the climate crisis.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

The Municipality has at its disposal a number of mapping measures for urban nature and open spaces. Some have been executed and some are planned:

- **Municipal tree survey:** The Haifa 2030 Authority is beginning to conduct a survey in which it will examine the inventory of urban trees. The survey will include locating the trees, their species, size, condition, the need for care, safety and more.

- **Mapping green areas in the city:** As part of promoting the goals of a climate change preparedness program, we intend to map all the green areas in the city. Under the mapping program, the deployment of green areas and their benefits in terms of urban heat islands will be examined.
- **Mapping values of open spaces:** We are beginning to work on mapping open spaces and their values from various aspects.
- **Urban nature survey:** Surveys have been conducted that determined the ecological values of various areas of the city. These unique sites are embedded in the urban planning system.
- **Marine nature:** The sea has importance and a significant place in the life of the city, and contains a variety of marine habitats, both sandy and rocky. Some of these areas are protected as nature reserves.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

The Haifa Municipality is currently assembling a preparatory program for dealing with climate issues. In this framework, we will publish the Authority's goals regarding urban nature. The objectives will touch on topics such as maintaining open areas, thickening urban forestland, reducing urban heat islands, inculcating surface water runoff, and so on. The program is being promoted in cooperation with government ministries (the ministries of Energy, Environmental Protection and Housing) and as a result, we look forward to cooperating with the central government regarding the removal of barriers and recognition of promotion opportunities as part of a national project.

Moreover, in order to obtain funding for projects, we intend to operate in a number of fields:

- The Fund for the Protection of Open Spaces (under the Israel Land Authority): Submitting to public appeals calling for project financing.
- Self-budgeting: The local authority places promoting environmental and climate issues at the head of its priorities. Therefore, in accordance with existing measures and priorities, budgets will be allocated to realize the mayor's vision in environmental aspects.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The completion of knowledge regarding the values of the existing natural areas in the city is being conducted, and will be conducted later in a number of channels:

- Urban nature survey: Conducted in 2012, the survey included species inventories in every open natural area within the city limits. The findings are integrated into the urban planning processes and are used to manage urban nature.
- The open spaces values survey is scheduled to take place in the coming year, in cooperation with the University of Haifa.

Urban nature is a major resource in Haifa. Therefore, many explanatory actions are being taken. Recently, the Authority initiated two new channels of community advocacy:

- Urban Nature Conference and Green Roofs: Open to the public and professionals from the city and beyond, the conference - initiated by the Haifa 2030 Administration in cooperation with leading lecturers and professionals in the field - was held in June 2021 and addressed the design of a nature-biased landscape, surface water runoff solutions, green roofs, marine ecology and more.
- A unique urban study curriculum that deals with the environmental challenges facing the city of Haifa, including reference to the city's unique urban nature. The program will connect students in different age groups with natural resources, and emphasize education from the experience of researching what exists.

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The Authority is working on refreshing practices and programs in order to promote issues related to urban nature and the percolation of surface water runoff.

- Incentives and regulation policy for the construction of green roofs: Work is currently being done to examine the possibility of supporting the construction of green roofs throughout the city and encouraging their establishment in both private and public buildings. This work is led by the Haifa 2030 Authority in cooperation with the legal service and the Israeli Green Building Council. As part of this work, we are examining the possibility of incentivizing this activity, and ways to arrange the issue in regulatory terms are being examined.
- Master plan for surface runoff: As part of promoting a climate change preparedness program, the need for a master plan for surface water runoff is being examined. The Authority's spirit is one of finding nature-based solutions. The plan will include reference to privately-held areas as well as solutions to be implemented in the public sphere.
- Preventing the spread of invasive species: Due to the intensive interface between the city's urban nature and built-up areas, instructions have been prepared regarding the use of plant species in hazardous areas. This is in order to prevent the spread of invasive species to the natural areas.

Other supportive actions you may want to highlight

The Municipality has a number of urban nature programs:

- **Master Plan for Wadis:** A program aimed at making green wadis (dry valleys or ravines except for the rainy season) accessible to the city's residents while preserving the unique habitats and character of all ecological values.
- **Urban Forestry Program:** Aims to increase the city's inventory of trees in the public sphere. As part of this plan, thousands of trees will be added each year to the city's streets, gardens, parks and courtyards of public buildings. The plan is to provide cool shady spaces for residents, reduce urban heat islands, lower air pollution and contribute to the city's appearance.
- **Green Roofs:** As noted, the Authority is promoting the issue of green roofs for expanding green land cover and exploiting the fifth façade. Recently, potential roof mapping has been carried out for development as a green roof on community buildings in the city center. All the community buildings in the city were mapped in cooperation with a landscape architect, engineering and community planning, and a number of buildings have been identified on which living roofs will be built and maintained by residents, for their mental and health wellbeing.

Demonstration of green roofs on municipal buildings: Two green roofs have been erected on the roofs of municipal buildings, one agricultural and the other in cooperation between the Authority and the University of Haifa and municipal entities. The hydroponic-technique, agricultural roof is maintained by members of the local community, who have been trained to do so.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

Examples of sources of funding for operations planned by the Authority:

- **Master Plan for Wadis:** An appeal has been made to the Israel Land Authority's Open Spaces Foundation for funding for the implementation of the plan in Wadi Siah.
- **Urban Forestry Plan:** The municipal tree survey and implementing the forestry plan by planting throughout the city will be partly funded by the government's scenic compensation budget.
- **Green Roofs:** The mayor has allocated a budget for a strategic plan for green roofs, as well as implementing the first roofs as case studies.

Additional Resources

http://natureisrael.org/cms_uploads/PDF%20files%20of%20reports/urban_nature.pdf



London

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

- In 2021-2022 and 2022-2023, prioritise projects funded through the Green New Deal and Mayoral grant programmes to improve green spaces and increase climate resilience in areas identified as of the highest climate vulnerability through our climate risk mapping. These programmes include the Grow Back Greener community grants programme, the Green and Resilient Spaces Programme, and the Green and Healthy Streets programme with Transport for London. In addition to targeting areas at highest climate risk/vulnerability, funding criteria will promote green skills development and encourage community engagement as part of projects delivered.
- Support the development of a Centre for Excellence for parks in London including a focus on improving skills in the greenspace sector to support better management of greenspaces, improving access and resilience by 2023.
- Deliver the CLEVER Cities programme and Greener Together pilot programme, working with communities to test and share best practice approaches to addressing environmental inequality linked to social and racial injustice, and share learning by 2023.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

- Publish a spatial Greenness Index in 2021 that identifies areas of the city that have inadequate access to public open space and the lowest areas of green cover so that action to increase nature based solutions can be prioritised in these areas.

- By 2022, upgrade the data and functionality of the Green Infrastructure Focus Map so that it is even easier for communities, boroughs and other landowners to understand and use environmental and social information to plan and design new greening that responds to local needs.
- Work with London boroughs and other partners to deliver more detailed climate risk mapping to inform nature based adaptation interventions by end of 2022

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

We will develop and test mechanisms that help secure funding for management of existing and creation of new nature based solutions, and develop new policy approaches to support better management and investment in nature based solutions, including:

- Supporting 2-4 neighbourhoods to become exemplar models of how to tackle the climate and ecological emergencies, whilst addressing London's health and social inequalities by funding the development of Future Neighbourhood 2030 strategies and sharing learning from the project. Funding awarded in 2021, learning shared by 2023.
- Publishing new planning guidance for London boroughs on developing green infrastructure strategies as part of their statutory Local Plan making process Consultation draft and consultation events delivered in 2021-22, final draft published in 2022.
- Investigating and reporting on the feasibility of pan-London Nature Based Solutions (nature based solutions) credits and potential scope of investible nature based solutions options by 2022.

- Strategic Sustainable Urban Drainage Systems (SuDS) Optimisation to unlock flood funding - SuDS mapping and modelling to identify the benefits of multiple strategic SuDS schemes in managing flooding and delivering wider co-benefits. Learning shared by the end of 2022.
- Establish a Centre of Excellence for London's green spaces to increase support for the enhancement, improved management and funding of green space by 2022.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

- The green cover map of London was published in 2019. The City will re-run this by 2024.
- Publish a map of Sites of Importance for Nature Conservation which should be protected in accordance with the Mayor's London Plan on the London Datastore by 2021.
- Build on the work already completed to produce a Natural Capital Account for London by publishing new evidence on the economic benefits of street greening by 2021.
- Complete a SuDS projects map for London with a plan to keep the map up to date by end of 2021.

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- Support skills building and new green jobs to develop the green economy through the development of a Green Skills Academy by 2024.
- Deliver community co-designed nature based solutions interventions that support the regeneration of Thamesmead area of London, improve economic opportunities for residents as part of the CLEVER Cities project, and share learning from the project with other housing providers by 2023.

- Support local communities across London to improve and create green spaces and increase climate resilience through a Mayoral grant programme which prioritises projects located in areas of poor access to green space and high climate risk, as well as those that offer training and green skills development opportunities. Projects completed by 2023.
- Work with the Department for Health and Thames Water, we will support up to 100 schools in London that are most at risk of surface water flooding and high climate risk to reduce this risk through the delivery of new nature based solutions, climate adaptation plans and an education programme that promotes nature based solutions by 2023.
- Support 10-12 large-scale exemplar projects to deliver innovative enhancements to green and blue spaces, and the wider public realm, to strengthen climate resilience, increase biodiversity, improve accessibility, build green skills and help reduce health inequalities with projects completed by 2024.
- Work with Transport for London through the Green New Deal's Green and Healthy Streets Programme, support up to 15 permanent exemplar street improvement projects that increase opportunities for active travel alongside increased climate resilience and urban greening by 2024.
- Coordinate and support London boroughs councils to plant c.7000 new street trees in areas of lowest tree canopy cover by 2024.

Other supportive actions you may want to highlight

London's green recovery: The London Recovery Board, chaired jointly by the Mayor of London, oversees the capital's recovery from the COVID-19 pandemic. It seeks to build back better and make London a greener, fairer and safer place to live and work. In his first term, the Mayor has made huge strides in increasing and protecting our city's green spaces and secured London's status as the world's first National Park City. However, in the face of the ongoing climate and ecological emergencies there is a need to go much further and faster. Accelerating the delivery of a cleaner, greener London is one of the Recovery Board's five core aims. As part of the recovery programme, the Green New Deal Mission aims to tackle the climate and ecological emergencies and improve air quality by doubling the size of London's green economy to accelerate job creation for all. In the Mayor's budget for 2021/22 over £20m has been committed to support the delivery of this Mission. The four overarching objectives of the Green New Deal Mission are to:

- improve London's natural environment, improve air quality and tackle the climate and ecological emergency;
- promote and incentivise activities that sustain and grow London's green economy;
- prioritise interventions reducing health inequalities and social injustices;
- engage Londoners and businesses in the journey to become a zero pollution and greener city.

Planning policy: The Mayor's London Plan is the strategic development framework for London. It includes a number of green Infrastructure and climate adaptation policies that together ensure that new development increases the climate resilience and overall green cover of London. Key policies include: The protection of the greenbelt and Metropolitan Open Land;

- The protection of over 1600 sites of importance for nature conservation and a requirement for developments to provide biodiversity gains;
- A requirement for all major developments to provide a set standard of new greening, measured by an Urban Greening Factor;
- A SuDS hierarchy that requires developers to take a green-over-grey nature based solutions approach to surface water management.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The Mayor's Green New Deal Fund

Additional Resources

<https://data.london.gov.uk/dataset/climate-risk-mapping>

<https://www.greenertogether.co.uk/>

<https://apps.london.gov.uk/green-infrastructure/>

<https://www.london.gov.uk/what-we-do/funding/future-neighbourhoods-2030>

<https://apps.london.gov.uk/green-cover/>

<https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/green-infrastructure/natural-capital-account-london?source=vanityurl>

<https://clevercities.eu/london/>

<https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/london-plan-2021>

<https://www.london.gov.uk/what-we-do/urban-greening-biodiversity-net-gain-design-guide>

<https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/london-plan-guidance-and-spgs/urban-greening-factor-ugf-guidance-pre-consultation-draft>



Milan

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The city makes its green objectives public and involves citizens in many different ways. The two main strategic pillars in order to reach the goal are the Air and Climate Action Plan – Piano Aria Clima PAC, and the Piano di Governo del Territorio – PGT, that include strategies and action in order to bring back nature into the city and make Milan more green, sustainable and resilient.

More in detail:

- An environmental transition process initiated through the creation of the Environmental Transition Department, to implement a new transversal model of energy, climate and naturalistic policies and practices, to be implemented through the recently adopted Air and Climate Action Plan, which establishes the city's objectives for 2030. The Plan involved the city's stakeholders and citizens through a specific participatory process through which citizens and stakeholder have been able to comment and revise the plan.
- In terms of green jobs, the municipality of Milan is also working on the elaboration of an assessment of the impacts of the Air and Climate Action Plan. The goal is to identify the main socio-economic benefits from the implementation of the actions provided by the Plan, such as the creation of jobs by gender and age.
- The analysis will highlight the possible creation of jobs connected and generated by the Guidelines for adaptation to climate change, including the implementing urban greening.
- Impact verification and Partnership file, for example the CLEVER Cities project, involving the row for green roofs and walls has a work package dedicated to the economic benefits of nature based solutions.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

The identification of opportunities and needs for the creation of new urban green spaces can both use some territorial analysis already developed by the Municipality of Milan and as well new opportunities the Municipality will develop in the next years, aimed at identifying local problems and strengths, such as:

- Vulnerability analysis, within the project, “Towards Climate-proof Landscapes (Verso Paesaggi a prova di clima)” funded by Fondazione Cariplo that, in 2020, elaborated an urban-scale analysis consisting of mapping of vulnerability and exposure of the territory and citizens to climate-related risks.
- Land Surface Temperature map - NOA and Bloomberg Associates. The map was developed from a five-year time series (2013-2017) of 100m satellite derived daytime LST images corresponding to the summer months (June, July and August), and identifies the hottest areas of the city.
- Land Surface Temperature maps elaborated in 2020 through the “ClimaMi project” financed by Fondazione Cariplo.

Other opportunities for the future implementation of urban green areas have been identified starting from the following tools:

- Table S03 “Green and blue infrastructures and Municipal ecological network” of the Services Plan of the PGT Milano 2030 (City Masterplan) - for the identification of areas for the implementation of natural infrastructures.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

Regulations and projects aimed at facilitating the implementation of green infrastructures and nature based solutions :

- ART. 10 “Environmental Sustainability and Urban Resilience” of the PGT Rules Plan - defines new sustainability standards, both for new construction and for requalification of existing assets. The article regulates the achievement of a RIC climate impact reduction index - seen as the ratio between green surfaces and the territorial surface of the intervention, diversified according to the type of areas on which the intervention is made, and accessible through a catalog of solutions including the different permeable surfaces - green or semi-paved - on the ground, green roofs and walls, basement roofs, etc.
- Projects that are not able to reach those standards can monetize the difference and that money will contribute to the creation of the Metropolitan Park of Milan – Forestami program.
- Art. 8 “Identification and regulation of existing and new localized services” of the PGT Services Plan, which recognizes and identifies existing ecosystem services and opportunities to increase the amount of green areas within the city thanks to the contribution of the private sector.
- Fondo ForestaMi - The Forestami Fund is functional to the implementation of the “Forestami” Urban Forestry Project and collects resources from individuals, companies, and organizations, to support interventions aimed at planting trees in order to slow down global warming, reduce energy consumption, clean up particulate matter from the air and improve the well-being of citizens. The Fund collects the contributions of anyone who shares its aims and makes available for their use, both through direct disbursements to specific initiatives consistent with the Project, and through calls for entries promoted by actors promoting and managing the project.
- Annual Planting Plan - The Planting Plan represents the governing instrument that regulates and sets objectives for the planting of trees for each agronomic season, from November to March. The 2019-2020 agronomic period saw the planting of over 20,000 new trees for the Municipality and the goal of 100,000 by March in the municipalities of the Metropolitan City, confirming the growing trend of recent years (+ 122% in three years).

- New Climate Adaptation call of the Ecological Transition Ministry as an Experimental program of interventions for adaptation to climate change in urban areas (DECRETO DIRETTORIALE N. 117 DEL 15 aprile 2021). Deadline 6/09/2021, that will close in September and through which the Municipality can obtain the reimbursement for specific adaptation projects related to green and permeable areas.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Existing strategic opportunities:

- The Municipality of Milan has developed the “Geoportale del Verde”, an inventory that maps all the arboreal and shrub species present on public land, constantly updated by the competent authorities. The map is interactive and allows users to know the type of plant, the age, height, circumference, environmental and economic benefit for each specimen type of plant.
- Some pilot projects related to biodiversity support (project “Una comunità verde per la biodiversità” with Fondazione Oikos, funded by Fondazione Cariplo) as well as the Life Project VEG-GAP contribute to the description of vegetation and the inventory of the natural capital of the city, at different scales, providing the opportunity to verify the urban roofs on the ground.
- Bilancio Ambientale Comune di Milano – Environmental accounting for the Municipality of Milan aims at collecting data, info, analysis, indicators related to environmental strategies and policies in order to evaluate and monitor impacts.
- Osservatorio VAS PGT – Observatory for the environmental strategic evaluation for the PGT – to evaluate the achievement of the goals set within the Plan and their environmental impact of the city (number of trees, amount of green areas, amount of permeable areas, permeability index, forestation areas, green element within buildings, etc.)

Acquisition of new data:

- The Mol with ESA will contribute to the description of land use and urban surface.
- The new LIDAR flight, which will be carried out in the coming months throughout the Milan area, will make new detailed satellite data available to the Administration, allowing the City to obtain valuable information.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

- ART.10 “Environmental Sustainability and Urban Resilience” of the PGT Rules Plan – defines new sustainability standards, both for new construction and for regeneration of existing assets. The article regulates the achievement of the RIC, a climate impact reduction index, understood as the ratio between green surfaces and the territorial surface of the intervention, diversified according to the type of areas on which it is intervened, and reachable through a catalog of solutions including the different permeable surfaces – green or semi-paved – on the grounds, green roofs and walls, basement roofs, etc.
- Giardini Condivisi – The “Shared Gardens” project, approved by the Municipality of Milan in 2012, represents an innovative way of recovering and managing abandoned and/or degraded public areas for which direct and immediate intervention by the Municipal Administration is not possible. These areas, through a concerted redevelopment process, are returned and made usable to citizens, with the aim not only of making aesthetic improvements, but also and above all launching moments of shared design, construction and maintenance, creating a sense of responsibility and belonging to the instilling community.
- ‘Cura e adotta il verde pubblico’ (Care and adopt public green) - The initiative “care and adopt public green”, making use of partnerships with stakeholders, was born with the intention of improving the quality and maintenance of the city’s green heritage. Through this tool it is possible to take care of furnishings and equipment, spaces intended for public green in front of shops, condominiums and public places, squares and urban flower beds. The sponsorship and partnership opportunities are divided into three types, ranging from the simple direct intervention of citizens without specific monetary investments, to the actual financing of ad hoc projects.

- On the same lines as the initiative described above, the Municipality has launched the Technical Sponsorship of urban spaces to stimulate the private sector to realize interventions regarding the execution of works, supplies, and services for the regeneration and requalification of urban areas. The approved interventions must have high naturalistic and environmental value, including where possible natural and green elements.
- Linee Guida Spazio Pubblico – Guidelines for public space in order to set precise indications both for private sector and for the Municipality to plan, design and implement public spaces, considering as well green and depaving projects.

Other supportive actions you may want to highlight

The Air and Climate Action Plan, and the actions it includes, promote an equitable approach in regards to the actions taken to adapt to climate change, including nature based solutions.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

- INTERNAL RESOURCES – BILANCIO COMUNALE
- MONETIZATIONS AND PLANNING FEES COMING FROM THE PGT
- FORESTAMI FUND

Additional Resources

<https://geoportale.comune.milano.it/sit/patrimonio-del-verde/>



Paris

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The objectives in terms of urban nature are public and made available on the website of the city of Paris: Biodiversity plans, sustainable food, Paris rain. The sustainable food plan promotes support for the development of the agricultural sector near water supply points.

An approach is underway which aims to identify the levers to facilitate the integration of climate migrants as actors of socio-ecological transition.

Several directorates commonly use inclusive action as a means of involving stakeholders (residents, traders). The design of the gardens is based on consultation with local residents and neighborhood councils and can take different forms, ranging from simple consultation to co-construction workshops or participatory projects. Exploratory walks are also a way to agree with these same interlocutors what needs to be improved.

The participatory budget and the permits to revegetate give local residents the opportunity to intervene on the trees and contribute to the densification of nature in the city.

The climate agora or climate volunteers are also devices that citizens can use to help shape climate directions. The city of Paris has a “Boost emploi” program around sustainable agriculture (training center for future farmers + installation assistance fund. It has also developed support projects for sustainable tourism. Through SOLIDEV, the city of Paris is helping to create green jobs abroad.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

A “wear and tear” table is kept up to date with notes for each garden of the main elements constituting them. These scores are weighted according to their respective share in a fictitious budget for the complete renovation of each green space. This table guides us in identifying the priorities for the rehabilitation of our gardens.

A study by APUR 2020 identified the potential for full-ground revegetation in the Parisian territory. The criteria taken into account include:

- the morphology and history, and in particular the legacy of the Alphanth walks,
- the development and reinforcement of urban biodiversity corridors,
- thermal comfort and reduction of the heat island effect,
- reduction of areas where there is a lack of vegetation,
- opportunities for projects initiated on the outskirts of Paris, the Boulevard Périphérique and the green belt, the banks of the Seine, bicycle routes and underground infrastructures.
- A map has been drawn up which specifies the sites where reinforcements are necessary and technically possible. This made it possible to achieve the objective of mandating 100 hectares of waterproofing with revegetation in public spaces, and also to the creation of an atlas of the streets to be revegetated in each arrondissement.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

- The roadmaps of elected officials are working towards better accounting for vegetation and nature.
- The climate budget is an ex-post review exercise of the so-called operational expenditure of the city of Paris. It allows you to learn more about how this expenditure fits in with the major objectives pursued, particularly in terms of climate and resilience. By bringing to light the points of vulnerability, this approach allows the city to strive for full and complete satisfaction of the objectives.
- The climate agora is a mechanism that enables citizens to become contributors. In this sense, it is one of the mechanisms that facilitate more inclusive governance.

The city of Paris is in the process of creating a carbon offset operator. Without assuming its future operating modalities, it will be able to finance mitigation or adaptation projects. It could therefore be used to further develop the place of nature in the city. Some green spaces benefit from funding outside the city budget but are still accessible to the public. These include:

- Gardens financed directly by public or private development operations carried out by the developer.
- Private gardens on which the city agrees to openings to the public by participating in the maintenance.
- European fund (feder), water agency or Ile de France region type subsidies which compensate for work linked to ambitions (biodiversity, rainwater management, the objective of creating green spaces).
- Participatory budget: 25% of the investment budget of the City of Paris is decided in a participatory manner during this term (until 2026): the participatory budget offers the possibility to all Parisians to propose projects which, if they are voted on, will be carried out or financed by the City. This ambition concerns all types of investment and in particular the development of public space, the renovation or the creation of facilities. The participatory budget makes it possible to carry out large-scale projects, which can easily be set up and quickly. This approach affects all public policies, foremost among them to an ecological transition.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The Paris biodiversity plan has quantified objectives for 2024 and 2030.

The Singapore index was calculated for the first time in 2015 and updated in 2020. The study of the vulnerabilities and robustness of the Parisian territory will be published this summer (2021). It shows that the erosion of biodiversity is a major source of vulnerability for the Parisian territory and makes action that focuses on greening even more necessary.

The inventory of urban biodiversity reservoirs has been carried out. The “nature trails” and the 2020 Paris Atlas of Nature have been published for the general public.

An “Open Data” approach has also made it possible to make information available to the general public. Trees, green spaces and CETTIA databases (Ile de France naturalist database with the obligation of the service provider to supply it when Paris orders a study.) are valuable resources for assessing urban nature.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The “Paris Climate Action” charter encourages the economic sector to take part in reducing emissions and adapting to climate change. The Paris Climate Action charter could eventually integrate issues related to biodiversity.

The Parisian Climate Agency administers an “Eco-renovate Paris” program, the purpose of which is to support the implementation of more virtuous heating solutions. The programs on which the APC relies can be as much about design as they are retrofitting, with special arrangements for vulnerable communities.

The Parisian construction pact constitutes a collection of principles to ensure that the building sector rapidly uptakes the requirements to reduce the carbon footprint and promote biodiversity (bio-sourced materials, reuse of existing, reduction of site waste,

minimum surface area of green spaces, etc.). The building ecological transition committee (Côté Bâti) ensures that it supports stakeholders in the sector in this direction. An enrichment of the parts relating to biodiversity is currently being prepared.

The 2016 modification of the Local Urban Plan introduced innovations favorable to biodiversity: biotope coefficient, obligation to revegetate for roofs of more than 100 square meters; if the roof is dedicated to urban agriculture, possibility of exemption from the maximum authorized height. An assessment of compensation in the event of felling has been carried out which tends to show that overcompensation has been made in the event of felled trees. The 2023 local bioclimatic urban plan should lead to further improvements.

The establishment of the climate academy is helping to move in this direction. In particular, the recruitment of civic services and apprentices constitutes one of the pillars in order to bring young people into the jobs of ecological transition. If the target audience is mainly young people, apprenticeship programs could be set up for the over 25s as part of professional retraining.

Other supportive actions you may want to highlight

- Every Parisian has an outdoor green space within a 7-minute walk. All Parisians have access to a green space within 15 minutes (i.e. the value of 1km) during the day, this observation can also extend to almost the entire territory at night.
- A network of shared gardens, a green thumb charter and the permit to revegetate bring nature closer to residents while making them actors in the transformation of their neighborhood.

Accessibility plan for the environment and public spaces: public space accessibility plan provides for making all of the gardens accessible to people with disabilities. Currently, 55% of the gardens are fully accessible.

- Ensure that unequal access to green spaces is avoided with a solution targeting age and gender: The issue of gender in public space is an emerging topic that is starting to be taken into account. New equipment is therefore increasingly designed to ensure that it promotes equal access. Apparatuses are placed near the play areas to encourage use by those accompanying them, who are often mothers. Benches designed for seniors have higher seats and armrests for ease of use by people with reduced mobility.

- Conception and health: Consideration of the impact on health has been the subject of great attention in the design and maintenance procedures for green spaces. Some of these considerations include the presence of toxic and allergenic plants (and the creation of a Pollinarium Sentinelle), the Parisian Environmental Health Plan which reconciles biodiversity and health, and the abandonment of the use of phytosanitary products in maintenance.
- Oasis courtyards and streets to schools: The center of Paris has only 5.8 square meters of green space per inhabitant. The City has identified a deposit represented by the network of 656 schools and 115 high schools managed by the city. The majority of Parisians live within 200 meters of a school, and schoolyards cover 73 hectares. The OASIS project seeks to transform schoolyards into public gardens so that all residents can benefit from access to these green and fresh spaces outside of school hours. The project took a co-creation approach to involve students and local residents in the design of their gardens. The first ten schoolyard transformations are underway.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

In addition to the points already mentioned in section 1-3 (“accelerate considerably ...”), DEVE’s investment budget has a dedicated budget to meet commitments. Green bonds have also enabled the city of Paris to raise funds that could be directed towards the achievement of these commitments.

Additional Resources

<https://www.apur.org/fr/nos-travaux/espaces-publics-vegetaliser-paris>

<https://www.apur.org/fr/nos-travaux/orientations-espaces-publics-vegetalises-paris>

c40.box.com/s/k3oowybybxtg5rzzxqncv0c0dbjgzteh

<https://www.paris.fr/pages/un-nouveau-plan-biodiversite-pour-paris-5594>

<https://cdn.paris.fr/paris/2021/03/11/Od339e2fc-c589b14e3bd0bde8240e709.pdf>

<https://cdn.paris.fr/presse/2021/03/01/d23bb56949787e1db4c44e25278b62a0.pdf>

<https://cooperative-oasis.org/>



Rome

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

Public Gardening Courses: Roma Capitale, through the reconstitution of the School of Gardeners, will be able to directly organize public Gardening Courses. They will be aimed at all age groups, even without any gardening skills. The theoretical course can be integrated with classroom seminars and guided tours, application lessons, with a demonstrative nature, at points of interest of the Environmental Protection Department of Rome Capital.

The program will address issues concerning the life, cultivation and maintenance of plants and gardens. Teachers will be environmental officials with a degree of experience and with a proven track record.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Census update: Roma Capitale constantly monitors its green heritage through the establishment of a fully digitized green cadastre in open source format and freely available to all citizens, which will also contain the tree census updated annually. Within two years, it will update the census and monitoring for the efficient management of public parks as well as for the planning of actions, through a survey software with GIS and Database system (R3Trees).

The recent, "Regulation of public and private green areas and of the urban landscape of Rome Capital," approved with Resolution of the Capitoline Assembly no. 17/2021 has regulated and institutionalized these two lines of action.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

- Access to investments and resources will be accelerated and facilitated by the recent approval of the Action Plan for Sustainable Energy and Climate whose actions include climate adaptation projects through green areas.
- Roma Capitale will participate and conclude European Projects for the development of governance and nature based solutions.
- The Roma Capitale Soil Permeability Plan will be adopted within two years.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Roma Capitale has formalized its support for the Multi Actor Forest Information Service (MAFIS) project. The project, funded by the European Space Agency, provides for the development of a new satellite monitoring service of natural forests and green areas of cities, with the aim of evaluating the current situation, in terms of extension of vegetated areas and classification. of the species present, and use this information for a possible planning of urban green development, as well as to develop a study on urban heat islands. Its use and initial monitoring is expected within 5 years.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

Increase the form of voluntary participation of citizens in the management of greenery through the adoption of green areas, the stipulation of collaboration agreements as well as sponsorships. To date, 126 adoptions of green areas are active.

Promote the development of urban gardens and shared gardens.

Promote and increase environmental awareness projects in schools.

Promote and increase participatory afforestation through the "Participatory Budget" making all citizens participate in the choices of definition and sharing of urban forestation.

Encourage the construction of green roofs and walls on buildings: these actions are included in the SECAP.

SUSTAINABLE URBAN FORESTING: through a replacement plan and a forestation program. The following are expected: 20,000 trees to be replaced and 1,000,000 new trees by 2030, 2 million new trees by 2050.

Reduction of waterproofing in the Roma Capitale area, through the SOIL4LIFE project, Roma Capitale will propose and implement possible operational and long-term solutions to counter the problem of the growing waterproofing of soils through specific governance actions, such as:

- Recognition of the best techniques / solutions to increase the permeability of the soil both in already urbanized areas and in areas where the General Town Plan of Rome provides for new buildings
- Preparation of a Municipal Plan for Soil Permeability: a series of interventions that the Municipal Administration will undertake to progressively reduce the problem of soil sealing in the city including: selection and mapping of priority areas on which to intervene with de-sealing projects, and Managed Aquifer Recharge (MAR) pilot projects to increase the recharge of aquifers; Restoration of existing and disused irrigation systems in the green areas of Rome and their management systems; Analysis and monitoring of the environmental effects related to re-permeabilization on air quality
- Addresses for the modification of the future New Building Regulations of Roma Capitale

Other supportive actions you may want to highlight

Establishment of the CONSULTA DEL GREEN AND URBAN LANDSCAPE made up of representatives of associations, committees, bodies and professional orders and by the technicians of the Environmental Protection Department with consultancy, control, support and guidance tasks regarding the political choices concerning the green. This Consultation was established by art. 4 paragraph 3 of the Regulation of public private green and urban landscape.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

Direct funds from the body for the maintenance and care of existing greenery and for participatory urban forestry works.

National funds (e.g. for urban forestry projects and development of adaptation actions)
European funds such as LIFE programs (e.g. SOIL4LIFE)

Additional Resources

<https://www.comune.roma.it/web/it/scheda-servizi.page?contentId=INF76968>

<https://eo4society.esa.int/projects/mafis/>

Rotterdam

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The city's green ambitions plan, "Rotterdam goes green," has already been published (a.o. adding 20ha by 2022, 12,5mln Euros committed) and the Biodiversity Implementation Plan was published in December 2020. This includes subsidies for citizens to use indigenous plants.

Vulnerable groups such as the elderly and youth are targeted through the Play & Recreation Vision that is aimed at offering an opportunity to all to play and exercise in green areas. In collaboration with the Weatherwise programme, community gardens are established in old and stony areas of the city. In addition, Rotterdammers are invited to support the monitoring process; and coaches and municipal gardeners support citizens in the greening of their own roof or garden.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

This gap analysis has already been executed and the city knows which streets lack trees or other types of green. The city is currently updating its 2016 Nature Map that presents existing green, ecological gems and further opportunities for connecting and improving green areas.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

The city provides subsidies to citizens and private owners to create green roofs, depave their gardens and enhance biodiversity. The city provides easy access to information through various websites and greening campaigns (a.o. depaving/greening championships, Opzoomer greenification/beautification campaigns etc).

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The Biodiversity Implementation Agenda includes the action to monitor types and species of urban greening which also includes a baseline study. This will increase awareness both internally and externally on how to change the design and maintenance of urban green.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

Such programmes already exist and are already cross linked. That said, the Biodiversity programme is relatively new and the city will continuously seek opportunities to link this to other municipal programmes. For example, the Weatherwise and Biodiversity programmes are collaboratively seeking to adjust municipal design standards to incorporate nature-based solutions to improve biodiversity and climate resilience at the same time.

Other supportive actions you may want to highlight

Continue existing programmes to promote accessibility of green spaces for playing and sports.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

- 12,5 million Euros to add 20ha of green by 2022 + 3,5 million Euro to strengthen ecological connections.
- Weatherwise programme: 13,5 million Euros until and including 2022 to improve climate resilience, including 500kE/yr for subsidies (green roofs; depaving and greening of gardens; and enhancing biodiversity)

Additional Resources

[Rotterdam goes green](#)

[Biodiversity Implementation Plan](#)

[Weatherwise programme](#)

[2016 Nature Map](#)

<https://www.opzoomerme.nl/>



© Biodiversity Implementation Plan



Stockholm

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

In urban and park development projects, the City of Stockholm arranges dialogue activities with the inhabitants, as a tool for increased public participation in the city planning process.

The City performs regular surveys to the residents of the city, including experiences of their local environment and neighbourhood. These issues are also included in the City's work with Agenda 2030. Link to information about the Citizens surveys: <https://miljobarometern.stockholm.se/stockholmarna/medborgarenkat/>

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Areas with proposed improvements of the ecological infrastructure are pointed out in the Stockholm City Plan (Översiktsplan).

A more detailed mapping identifying improvement needs of green infrastructure is in progress. The time schedule for this differs from different City Districts in Stockholm. The first is planned to be finished in summer 2022, and the last one in the fall of 2023.

Updated mapping of the existing ecological infrastructure is planned, and a method is being developed during 2021.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

Stockholm has an Environmental program for 2020-2023 and an Action plan for Biodiversity that are being implemented. We are now producing City District Action Plans for Biodiversity to pin-point what can be done in each specific city district to enhance biodiversity.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The City has a Biotope Database that has been updated this year, with maps that cover all land biotopes and shorelines in the municipality. The ecological (or green) infrastructure of the City has been mapped, as well as habitat networks for prioritized species. The City also has maps of ecosystem services.

The City has developed a cloudburst model that predicts run-off and flooded areas from a 100-year rain event, and Local cloudburst plans will be produced for the most vulnerable parts of the city. The City is implementing an Action plan for Climate adaptation, with focus on cloudbursts and heatwaves. Nature based solutions will be an important part of this plan.

The City has also developed a Green Space Index which is a requirement for all development projects on the City's own land. Link: <https://vaxer.stockholm/globalassets/omraden/-stadsutvecklingsomraden/skarholmen-fokus-skarholmen/direktanvisning/gyf---gronyfefaktor-for-kvartersmark.pdf>

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The city is involved in various research projects with multidisciplinary and/or expert participants from universities, businesses and local authorities. These projects deal with, for example, storm water treatment, cloudbursts, heat wave effects, nature based solutions, green infrastructure and the use of excess material from new subway tunnels. An inspirational manual on how to enhance biodiversity in your garden or residential area will be available for the public.

Other supportive actions you may want to highlight

According to the City's guidelines for good access to parks and nature qualities, all inhabitants shall have a green space suitable for staying within 200 metres from where they live.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The city's sustainability goals are an important part of all urban development and the city's environmental and climate work is integrated into ordinary processes. Urban planning must take into account the effects of a changed climate and the impact on the environment, such as stormwater management, the impact on natural values, green space compensation, etc. Therefore, the largest part of the financing takes place within the framework of each project. Major projects are Norra Djurgårdstaden, the new Slussen and Stockholm's future sewage treatment plant to name a few.

In addition to the city's ordinary processes, there are specific funds set aside in the city's budget in order to achieve the city's environmental and climate goals. For the period 2019-2022, SEK 200 million per year is set aside for climate investments with the aim of accelerating the municipal group's efforts to increase climate adaptation and reduce climate impact.

For a number of years, SEK 20 million has also been set aside annually for efforts to achieve good water status and finance the development of the local action programs for water bodies. In addition to these multi-year funds, there are also annual funds set aside for nature reserves, biodiversity and the development of the urban environment.

Additional Resources

<https://vaxer.stockholm/besok-oss/medborgardialog-och-samrad/>

<https://vaxer.stockholm/besok-oss/medborgardialog-och-samrad/dialog-och-samrad-i-stadsbyggnad/>

<https://vaxer.stockholm/aktuellt/?page-21-28765=0#page-21-28765>

<http://dialog.spacescape.se/stockholmlek/>

[Stockholm City Plan](#)

[Stockholm Miljöbarometer](#)

[Biotope map](#)



Tel Aviv

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

In 2012, the city conducted an ecological survey which in 2016 was regulated and recognized 52 Urban Nature sites. By 2020, the city had 67 UNS and it is in the process of dedicating another one. These sites are used for community engagement events, attended by thousands of residents every year. Furthermore, in the last few years, the city distributed local plants and seeds to around 400 private building courtyards. Community engagement with nature is widespread and accessible across the city, through the UNS and the 54 community gardens. In the coming years, through the Tel Aviv Yafo climate mitigation plan, green jobs will be promoted to residents, with training in gardening, rehabilitation, and construction. The shade index for tree canopy will also be developed (as a part of our Urban Forest Plan) as an indicator for planting plans. Distribution of planting plans will take into consideration vulnerable and marginalized populations. Furthermore, we plan to establish new nature sites in these communities to increase access to green spaces, and engage residents in the construction and preservation of the urban nature sites.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

In the next two years, a gap analysis will be conducted to see where improvements are needed in regards to the eco-infrastructure. Furthermore, within the next two years, we will develop a set of indicators to monitor and evaluate the city's ecological system. The municipality is currently working to strengthen the public realm infrastructure. The focus is to assist urban planners to better ensure the proximity and accessibility for different plans the city needs to produce. This allows us to produce a gap analysis by understanding the city's ecological stock, what is lacking and what needs protection.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

In early 2021, a municipal ecological task group was formed through collaboration between the Environmental Authority, Beautification Department, city architect' office, and the city's ecologists. This group is set up as an administrative framework for urban nature to support and enhance climate adaptation actions. In June, a metropolitan steering committee was established, bringing together municipal entities with intergovernmental agencies and nonprofits, such as the National Nature and Park Authority and the Society for the Protection of Nature in Israel. A conference will be held in late 2021 to further institutionalize and solidify the advisory team, with the goal of creating an Urban Nature Metropolitan forum.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

An ecological survey was conducted in 2012, which measured and documented the flora and fauna of the city. Another survey will be completed within the next 5 years that will ideally be overlaid with Climate Change Risk Assessment data. Though this has not yet been confirmed, the idea is to create different layers of analysis to check sensitivities and exposures that can lead to better-informed decisions. In 2013, the drainage department conducted a survey of water permeation throughout the city. The purpose of the new survey is on one hand to improve decision-making in terms of new buildings and regulations, and on the other to better understand our ecological system status.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

In terms of regulation, the city has a mechanism for charging the removal of private trees. When a new building is in the process of approval and trees need to be removed (for construction purposes), there is a process that calculates the trees' value based on age, species, and condition. If the removal is due to decay, it will be replanted with a tree of the same environmental value. If the removal is due to new construction, the fee is paid for by the constructor and a new tree will be planted.

There are initial plans in the city to strengthen the green infrastructure in the private areas. Some of these programs have already begun, such as tree distribution for planting to private buildings. We plan for more meaningful mechanisms to be put in place in the near future, including green and blue roofs, both of which are being explored.

We are currently establishing the Climate Business Cities Alliance (CBCA), which aims to partner with the private sector to make use of nature-conscious solutions. Furthermore, the city has recognized and intends to further develop ecological corridors, encompassing private and public spaces. A pilot training and toolkit for gardening and harvesting is being developed for distribution to all city residents as a means of education and empowerment. The city also aims to plant hundreds of trees annually by providing trees to residents who meet the necessary criteria and are in need of shading.

Other supportive actions you may want to highlight

We have a multitude of other ecosystem supportive services. There are various grove areas in the city that allow local seeds and vegetation to flourish. These are green areas but are dense with vegetation and not parks. Formal and informal programs are supported and operated by the city within kindergartens, elementary, and high schools. The programs focus on beaches, ecosystems, and nature in order to foster a better appreciation of the city's environment.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The budget allocated for planting young trees increased from 300,000 NIS in 2020 to 8,000,000 NIS in 2021. Money is also allocated to support community based initiatives concerning ecosystem management. For instance, in 2021, a young activist set up harvest nests for bees with funding and infrastructural help from the government. Additionally, an annual budget is allocated for maintenance and restoration of urban nature sites. For example, 30 acres of land were rehabilitated in 2020 through collaboration between the city and the national government. The result was a new urban space' restoring over 200 local flora and fauna species and establishing a winter pond and infiltration system- a nature-based solution to contend with urban flooding

Additional Resources

<https://www.tel-aviv.gov.il/Residents/Environment/Pages/NatureSurvey.aspx>

<https://www.tel-aviv.gov.il/Forms/%D7%A1%D7%A7%D7%A8%20%D7%AA%D7%A9%D7%AA%D7%99%D7%95%D7%AA%20%D7%98%D7%91%D7%A2%20%D7%A2%D7%99%D7%A8%D7%95%D7%A0%D7%99%20%D7%9E%D7%9C%D7%90%202012.pdf>

Buenos Aires

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The urban nature goals for our city are included in the new Climate Action Plan.

Some global actions that discuss this are “Nature as a solution”, “More and better trees” and “More and better green spaces”. Likewise, other complementary actions are “Pedestrian priority” and “Meeting streets.”

In relation to programs that address the development of skills for green jobs, different workshops and training on urban gardens are promoted and contemplated in the action, “Healthy Eating.” Within this framework, there is the community garden project “La vivera organica,” where a group of women are accompanied in the cultivation and commercialization of organic food, generating sustainable employment.

An economic recovery plan to reduce the impacts of COVID-19 includes green jobs under construction by the City. The cited example of the “La Vivera Orgánica” project was prior to COVID-19 and responded to a genuine employment generation strategy for women living in a popular neighborhood

On the other hand, from the Housing Institute of the City, a program is being carried out in conjunction with the International Climate Initiative from which it seeks to provide knowledge on environmental issues and achieve changes in habits in the residents of popular neighborhoods. Likewise, the IVC team carries out participatory tables in these neighborhoods, where they convene residents in order to discuss different issues, among which are: waste, environmental health, trees, urban gardens, composting. These tables may provide the framework to address issues related to this statement.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Buenos Aires is working to deepen its gap analysis and identification of opportunities to improve existing green spaces. The City has sufficient information, which is updated periodically.

As a background, there is a map of public and private green spaces in the city and a map of vegetation cover (NDVI). According to the Vegetal Cover Report, “The City of Buenos Aires extends over an area of 203 km². 30.4 percent of this surface (equivalent to 61 km²) has vegetal cover, defined as the vegetal mass located on absorbent and non-absorbent soils, identifiable thanks to photogrammetry. “

In 2019, the General Directorate of Data, Statistics and Urban Projection finalized the Vegetal Cover Report of Buenos Aires, carried out by mapping aerial photos of the entire vegetal surface of the City, including public and private green spaces, reserves, trees and stonemasons, with the aim of creating a base tool for urban planning. From this map, we can know the absorbing surface of the City; estimate coverage; understand the relationship between green spaces with free, restricted and private access; observe its relationship with the density of the population, the morphology of each zone and the uses of the land; identify sites with a green deficit in public space and even study the conformation of apple lungs.

In addition, the GCBA has the Arbolado Master Plan (2013) and the Arbolado Census (2017-2018) of the General Directorate of Green Spaces and Trees.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

Since the end of 2019, the City has had the Undersecretariat for Urban Green Infrastructure and Sustainable Development Policies (SSPIVUDS), which acts in coordination with the different areas responsible for green spaces, trees and nature in general, integrating their actions. This area will be central to enhance the governance of the implementation of the objectives of this Declaration.

On the other hand, international and national networks will be promoted for learning and improving the identification of governance barriers and their approach, as well as the recognition of financing mechanisms for the implementation of management solutions. These actions have and will have multiple sources, the main ones being the City's own budget and international financing. Currently, green infrastructure actions are being carried out to mitigate water risk, financed by the World Bank (for example).

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Using the inventory information described above, the City periodically reviews, makes updates, and integrates it with different sources of information and makes them available in an open data format to any interested party. This in order to increase the degree of knowledge and awareness of the value of urban nature and its fundamental role in reducing the main climatic risks of our city: heat waves and floods.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

In this framework, we are currently working with various sectors and actors, establishing governance and articulation frameworks. The city is committed to continuing these spaces, strengthening them and including urban nature solutions in its approach.

Since 2019, the City Government has begun to jointly work with the private sector in order to align goals and objectives in climate matters.

On the other hand, the new City Building Code encourages the incorporation of urban nature in new buildings. Some associated indicators are: Area (m²) of intensive / extensive green roofs implemented in new and existing buildings, Area (m²) of vertical gardens / green walls / curtains implemented in new and existing buildings. All this is mentioned in the new Climate Action Plan, as well as the action referred to as “Sustainable Food,” which considers urban agriculture, healthy seasons, markets and neighborhood fairs, among other subactions. Also within this framework, community gardens in vulnerable neighborhoods are discussed. Some associated indicators are: the number of new orchards, nurseries and gastronomic centers, percentage / number of popular neighborhoods with orchards, Number of people benefited by orchards in popular neighborhoods.

In order for the benefits of vegetation to reach the entire city, plantations are carried out in recovered spaces (action “More and better trees” and indicator “Number of trees planted in recovered spaces” of the new Plan), in which active participation is open to different sectors and actors.

Likewise, in the urbanization processes of popular neighborhoods, participatory tables are held in which residents decide which areas of the neighborhood will become new entrances, which neighbors will move and to which areas. The creation of internal vegetated patios in homes is also encouraged.

Finally, in 2020, the Advisory Council for the Environment and Sustainable Development was created. It is a group made up of civil society organizations led by young people and representatives of community interest groups. The Council's function is to issue proposals in nature of non-binding recommendations that will be considered by the Secretary of the Environment for the development of public policies in environmental matters and sustainable development.

Other supportive actions you may want to highlight

It is proposed by 2025 to reach a goal of 400 meters of maximum proximity to a green space for the entire population. Associated indicator: Percentage of population with green space at a maximum distance of 400 meters.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

Own resources of the city government and resources through international cooperation

Additional Resources

<https://www.buenosaires.gob.ar/planeamiento/noticias/informe-de-cobertura-vegetal-un-relevamiento-de-la-superficie-de-masa-vegetal>



Bogota

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The Climate Action Plan - PAC - of Bogotá 2020-2050 covers within its actions the dissemination of its climate commitments to citizens, through educational and communication campaigns. The PAC considers differential and gender criteria in all its mitigation and adaptation actions, and also addresses specific measures for the inclusion and equity of vulnerable populations within the framework of its actions. For mitigation, the city proposes to link both households and productive units, especially of the vulnerable population, to productive and commercialization processes, which increase climate resilience. In this same vein, the District Secretary of the Environment will promote the green jobs program for women in agreement with UNDP and USAID, which aims to employ 5,000 women in the areas of: gardening, nursery, restoration and tree planting.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Through the Public Space Observatory, a process has been carried out to analyze public space. This process is carried out every two years and the development of the green public space indicator is found, for urban land and expansion land. The indicator is developed by UPZ (Zonal Planning Unit), at the local level, and for the city globally, in order to show the behavior of the indicators at different scales and to account for the public green areas of the city. From this map it is possible to identify the areas of the city that require interventions to improve the public green infrastructure, which is accessible to all citizens. Likewise, there is a Climate Risk Assessment, which included the analysis of urban heat islands, and identified the areas of the city that need to increase their area in green areas to reduce the effects

of climate change. This analysis will be updated periodically. In turn, the Botanical Garden of Bogotá will carry out research processes for the sustainable use of plant species. This includes 26 investigations on the ecological potential and valuation of the ecosystem service of carbon storage and flow, 26 investigations on connectivity aspects of ecology and 13 investigations on the flora of Bogotá DC.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

In the implementation of the Climate Action Plan, Bogotá proposes institutional articulation in Bogotá, the region, nation and international level, which seeks to strengthen coordination for climate management and promote the establishment of common strategies for the mobilization of resources, exchange of experiences, formulation of projects, creation of networks and implementation of measures that help meet the City's climate goals. Likewise, within the action of governance, citizen, community and business participation for climate action, it is established to facilitate alliances between public, private, academic, civil society and organizations for compliance in mitigation and adaptation actions, as well as, design and implement strategies to promote private sector participation.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The City has carried out a census of urban trees in which more than 1.3 million trees were identified in the public space; each tree has sub-metric georeferencing and 53 variables on its size and phytosanitary status; The Information System for the Management of Urban Trees (SIGAU) has been created to permanently record the data obtained in it so that management and maintenance can be given.

On the other hand, the City, through the District Secretary for the Environment, has the Bogota Environmental Observatory (OAB), a tool that allows knowing the state and quality of the City's environment through environmental indicators. The work of the SDA is aimed at various actions, among others:

1. Recovery of protected areas of the Entre Nubes District Ecological Park, to avoid current and future processes of illegal occupation;
2. Develop conservation strategies in 153 hectares to increase the supply of environmental and ecosystem services;
3. Implement the environmental management plan for 100 hectares of the Thomas Van der Hammen reserve consisting of carrying out ecological restoration processes and entering into conservation agreements with the community that inhabits the reserve;
4. Execution of ecological restoration, rehabilitation or recovery actions with a goal of 370 new hectares intervened for their ecological recovery and the planting of 450,000 new plant individuals;
5. Maintenance of 590 hectares prioritized in restoration processes is carried out;
6. The proposal for the implementation of four ecological connectivity projects for the conservation of biodiversity and the offer of ecosystem services is under development;
7. Administration and management activities are developed for 19 declared protected areas (mountain ecological parks, wetlands and other areas of environmental interest) and
8. A program for monitoring, evaluation and monitoring of biodiversity in protected areas and of environmental interest in Bogotá DC

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The Climate Action Plan has incorporated environmental guidelines and determinants of eco-urbanism and sustainable construction. It is expected that the PAC will influence the implementation of new infrastructure projects carried out in the city, based on criteria of nature-based solutions, which in addition to contributing to the reduction of current and future hydroclimatic risks, increase adaptive capacity and generate co-benefits.

The Institute of Urban Development will incorporate within the specifications of the contracts the obligation to generate a proposal for design and environmental innovation, considering new materials (permeable, ecological and / or capable of use), activities and / or sustainable construction practices, as well as ecological connectivity criteria for the project. It is important to highlight that, from the conception of the projects, environmental innovation initiatives should be considered. This obligation will be in force as of the year 2023. Currently, the Carrera Séptima Green Corridor project already has this contractual obligation incorporated, this will be the first pilot in the city with this product. Which will allow the City to follow up on this goal.

Other supportive actions you may want to highlight

As was pointed out in conversation with Rebecca Ilunga, from C40, here are the considerations of the City regarding the 10-year commitment of the Declaration, specifically of pathway 1, on which we want to focus. As detailed below, we have a very preliminary baseline of 20.48% of green and permeable spaces in the urban and expansion area, and which will still be complemented with data on tree cover and urban agriculture, absent from this first calculation. However, the city still does not have a consolidated ten-year goal for the relevant district entities, so we do not yet know if achieving a coverage of between 30 and 40% is within our possibilities. Considering the above, we want to sign the Declaration of Urban Nature, with the exception that we want to develop a dialogue hand in hand with C40 experts in the weeks after the signing, to determine a reasonable ten-year goal in terms of total coverage of green and permeable areas. Although this commitment will foreseeably be close to the 30% goal set out in the Declaration, we hope that the figure agreed upon in this process will arise from the capacities and needs of the local context.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The financial resources available to meet the two-year goals are defined in the investment projects of the District Secretary for the Environment, namely; 7710 "Control of the factors of deterioration of urban trees and flora in Bogotá", 7794 "Strengthening of sectoral environmental management, eco-urbanism and climate change in DC", 7811 "Implementation of comprehensive strategies that lead to the conservation of areas with high ecosystem value in Bogotá" 7814 "Strengthening of the administration and monitoring of protected areas and others of environmental interest to reduce the vulnerability of ecosystems to natural and anthropic alterations in Bogotá" 7780 "Contributions of environmental vision to the construction of the rural district territory in Bogotá"; in the same sense, the Botanical Garden of Bogotá has provided resources for the next two years in accordance with its investment projects 7679 "research for the conservation of ecosystems and flora in the region and Bogotá" and 7677 "improvement, planning and management of the vegetation cover of the Capital District and the City Region to green Bogotá. The previous investment projects account for resources destined to fulfill the commitments described for two and five years; for ten-year urban coverage commitments, there are also district resources already identified, although they are not expected to be sufficient to cover the required budget.

Additional Resources

<https://www.jbb.gov.co/index.php/productos-y-servicios/sigau>

<http://sigau.jbb.gov.co/SigauJBB/VisorPublico/VisorPublico>

<https://oab.ambientebogota.gov.co/>

<https://bogota.gov.co/node/35546>

<http://www.ambientebogota.gov.co/web/sda/proyectos-de-inversion>





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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The Municipal Plan for Mitigation and Adaptation to Climate Change was developed from November 2018 to December 2020 and was approved by the municipal decree No. 1670, of December 16, 2020, with the commitment to establish a multisectoral governance structure for the implementation and monitoring of PlanClima in the form of a Unit, Committee, Management Group, Working Group, or similar. This entity will act under the shared coordination of the Municipal Secretariat for the Environment and the Institute for Research and Urban Planning of Curitiba.

It will be up to the structure of governance to detail the actions prioritized in PlanClima; manage the actions; monitor the implementation of actions; evaluate and monitor actions and results; organize a specific database on the topic; liaise with the Curitiba Forum on Climate Change, with other municipalities in the Metropolitan Region of Curitiba, with other government bodies and bodies and with other agents of society with interest and potential to act on the subject of climate change; strengthen PlanClima's transparency and social control; coordinate the process of structuring the Municipal Policy on Mitigation and Adaptation to Climate Change PlanClima established as a priority action "Implementing actions for the recovery, maintenance, conservation, preservation and expansion of the city's green areas, aiming at increasing the carbon stock and adaptation based on ecosystems".

Within the Government's Plan for the 2021-2024 administration, the parks and squares department has 1,141 (one thousand one hundred and forty-one) public places under its responsibility. For maintenance and conservation, the department has 24 (twenty-four) contracts with the approximate monthly value of R\$ 1,935,000.00 (one million, nine hundred and thirty-five thousand reais).

To assess the quality of services provided in the maintenance of conservation units, in order to improve the infrastructure of these public facilities and the accessibility of these spaces, the urban maintenance indicator was created and established by the Department of Parks and Squares of the Municipal Secretariat for the Environment. According to the established standard, Curitiba intends to reach 90% maintenance in the city's conservation units by the end of 2024.

Another action taken by the city is the "Plan for the Planet" initiative, a challenge which involved the planting of 100,000 trees in one year ([link](#)), in which citizens can purchase a seedling of a native species for free and plant it in the city of Curitiba, under the guidance of the Municipal Secretariat for the Environment. The planting of seedlings contributes to the maintenance of afforestation on roads, public spaces, and facilities. It also contributes to the restoration of native vegetation in understory and riparian forests on both private and public land.

After reaching the project goal one month ahead of schedule (August 2020), Curitiba sets a new goal of planting 200,000 trees by 2024. As the seedlings are produced and delivered by the city, guidance is given by the Municipal Environment on where to plant the seedlings.

The city has carried out studies on the amount of carbon stored in the forests where enrichment is needed. However, planting is encouraged in any public or private place, respecting the proper management with the surrounding natural and urban environment.

In order to carry out the monitoring of these actions, the Municipal Secretariat also committed to preparing an Urban Afforestation Plan. This plan includes the updating of the city's arboreal census and the development of a tool to manage afforestation, by contracting a company specialized in information technology.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

As a technical basis for the preparation of PlanClima, the Climate Risk Assessment was developed as part of the C40 Network of Cities' Technical Assistance Program for Latin America. This study helped to identify emerging risks and stressors even amidst the great uncertainties associated with the effects of the ongoing climate emergency.

With regard to heat waves, the main factor that defines the degree of threat is the distance from vegetated areas, since it is known that massive forests have effects on the microclimate and reduce the effects of the urban heat island.

Within Curitiba's urban planning system, there are sectoral and regional plans, which present comprehensive diagnostics at the territorial level that support decision makers on where there are gaps and opportunities for improving existing green spaces.

The Municipality of Curitiba, through a partnership between the Municipal Secretariat for the Environment and civil society organizations (focused on biodiversity conservation) have carried out the inventory of sinks in the municipality, which assesses the carbon stock and balance in massive forests and in the city's afforestation.

The survey carried out in 2008 and completed in 2009 in the massive forests present in 14 parks in the city of Curitiba (SPVS, 2009) represent a unique situation compared to other Brazilian cities. The results achieved traced a projection of the carbon stock in natural areas for the municipality, which is unprecedented in Brazil. With a view to seeking an understanding of the dynamics of carbon increment, new measurements were planned at periodic intervals.

At the end of 2018, the Municipality of Curitiba signed a Collaboration Agreement with SPVS to carry out actions to conserve biodiversity in the Municipality of Curitiba, reducing vulnerability and providing increased resilience to extreme weather events through protection and restoration of natural areas of Curitiba. Among the actions planned is to quantify the increase in carbon in native areas of Curitiba, submitted to carbon stock assessments in 2009 and 2011.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

Along with the approval of the Climate Change Mitigation and Adaptation Plan - PlanClima, through municipal decree No. 1670/2020, a commitment was established by the Municipality to establish the internal and external governance structure of Curitiba to manage the implementation of the plan whose priority action is "Implementing actions for the recovery, maintenance, conservation, preservation and expansion of the city's green areas, aiming at increasing the carbon stock and adaptation based on ecosystems".

The Pluriannual Plan, usually referred to by the nickname PPA, is a mayor's initiative law approved by city councilors (municipal law 15.131/2017). This norm puts on paper the municipality's medium-term planning and establishes strategies, guidelines and goals for the next four years. The Budget Guidelines Law (LDO), Municipal Law 15.669/2020, defines the municipality's goals and priorities, as well as the rules for the preparation, organization and execution of the budget for the following year. The proposed law must come from the mayor and is debated, analyzed and voted on annually by councilors. The LDO usually makes adjustments to the Pluriannual Plan and, therefore, establishes the link between this medium-term strategic plan, with the short-term operational plan, represented by the Annual Budget Law (LOA), municipal law nº 15.798/2020. This multi-sector governance structure will be established in the form of a Unit, Committee, Management Group, Working Group, or similar, which will act under the shared coordination of the Municipal Secretariat for the Environment and the Institute for Research and Urban Planning of Curitiba.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

So far, three studies have been carried out. The survey carried out in 2008 and completed in 2009 in the massive forests present in 14 parks in the city of Curitiba (SPVS, 2009) represented a unique situation compared to other Brazilian cities. The results achieved traced a projection of the carbon stock in natural areas for the municipality, an unprecedented fact in Brazil. With an understanding of the dynamics of carbon increment, new measurements were planned at periodic intervals. The estimate of the periodic annual increment of carbon by the native forests of Curitiba was based on the increase in biomass (growth in diameter or height) of the arboreal individuals contained in the permanent plots allocated in the municipal parks, in a period of two years. The values obtained in 2008 were used as initial carbon stocks, when 39 permanent plots were installed in 15 municipal conservation units (UC). In order to obtain updated biomass values, the parameters used in the estimates of the first measurement between December 2010 and January 2011 were measured again.

At the end of 2018, the Municipality of Curitiba signed a Collaboration Agreement with SPVS to carry out actions to conserve biodiversity in the Municipality of Curitiba, reducing vulnerability and providing increased resilience to extreme weather events through protection and restoration of natural areas of Curitiba. Among the actions planned is to quantify the increase in carbon in native areas of Curitiba, submitted to carbon stock assessment in 2009 and 2011.

When it comes to water bodies, organisms known as benthic invertebrates have been shown to be an effective bioindicator to monitor the quality and health of aquatic ecosystems. Benthic invertebrates are organisms that do not have vertebrae and live in substrates in the aquatic environment, which may be soil, sand or rocks. Its life cycle, which can reach months or even more than a year, its size, its low mobility, its sensitivity to different concentrations of pollutants and the ease of sampling and identification make benthic invertebrates great bioindicators (Laboratory of Ecology of Bentos, UFMG). The analysis of the contamination of water bodies through benthic invertebrate bioindicators have the ability to portray the local and temporal conditions of the water body, since the organisms have little mobility and integrate the effects of environmental variations

in the short term. It is a relatively simple analysis to be carried out, which contributes to the diagnosis of water quality in water bodies and the taking of actions for their decontamination (United States Environmental Protection Agency, 1999).

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

Law No. 7833, of 1991, defined the principle that the conservation of natural heritage is one of the essential conditions for the quality of life in our city. Among other advances, the law incorporates environmental licensing into the municipality's attributions, integrating it with permit concessions. It created the Municipal System of Conservation Units, considering the importance of ecological, landscape and leisure aspects of these spaces for the balance between the natural and urban environment. It recognized the importance of preserving the valley bottoms, curbing the occupation of these areas as they are part of the natural dynamics of rivers. It guaranteed the participation of civil society in the governance of municipal public policy and created the Municipal Environment Council.

However, we cannot ignore the importance of aligning and adapting municipal legislation. Since the approval of Law No. 7,833/1991, several federal laws have been enacted, such as the 1997 Water Resources Law; Environmental Crimes Act 1998; Environmental Education Act 1999; National System of Conservation Units 2000; City Statute 2001; Sanitation Law 2007; Climate Change Act 2009; Solid Waste Act 2010; Forest Code 2012; and Metropolis Statute 2015.

Climate change, which has brought challenges for cities that need to take measures to increase their resilience and reduce greenhouse gas emissions, is being incorporated into this update of the city's environmental protection law. In addition, this new policy seeks to reaffirm the relevance of biodiversity conservation as part of the city's green infrastructure. The project proposes the elaboration of a specific policy for the theme to be used as a resilience strategy, since it is a bioindicator of the desirable environmental condition. Animal protection, in turn, has been mobilizing society to guarantee the right to life, freedom and dignified care for animals. Thus, this bill, in response to this demand, establishes guidelines for the creation of a specific policy.

The Sectoral Plan for Environmental Development and Biodiversity Conservation is under review, which has a 10-year coverage (2031) and the following objectives in relation to green areas and Conservation Units:

- The recovery, maintenance, conservation and preservation of native forests occurring in the Municipality.
- Expansion of the municipality's native forest coverage area, protected by the Municipal System of Conservation Units.
- The interconnection between native forest fragments, seeking to allow the displacement of urban fauna, its use as shelter, feeding and reproduction area.
- Expansion of existing forest cover in municipal public spaces.
- Expansion of forest cover on the city's streets.
- Expand the Municipal System of Conservation Units - SMUC
- Improve the maintenance of existing conservation units and those to be implemented
- Define social use policy for Conservation Units
- Implement the management and monitoring of the Municipality's Conservation Units
- Consolidate municipal legislation regarding Conservation Units, with an emphasis on regulation of use and partnerships

Other supportive actions you may want to highlight

Currently, Curitiba is adopting the Biodiversity Index for Cities (City Biodiversity Index - CBI), also known as the Singapore Index. The index is intended to serve as a self-assessment tool for local governments to gauge conservation efforts in the urban context, in addition to helping assess progress in reducing biodiversity loss, serving as material for the development of public policies in favor of conservation. It is currently recognized as the reference index of biodiversity by the Convention on Biological Diversity (CBD) of the United Nations. So far, 36 local governments in the world have already submitted to the CBI and 11 are in the process of submission. Curitiba is the only Brazilian city that participated in this process from the beginning. The result for Curitiba in 2010 was 80 points (86.96%). A new assessment of the CBI was completed in 2020. With the change in the methodology for assessing the CBI. Due to the change, it is impossible to

compare the results obtained. However, the native biodiversity in the city is highlighted in this new assessment, with the identification of 142 species of birds, 554 species of butterflies, 288 species of bees, 55 species of herpetofauna and 3,389 plant species in the municipality. Additionally, it was concluded that 19.62% of the municipal territory is protected by conservation units.

The Jardins de Mel project aims to promote native stingless bees, responsible for the pollination of around 90% of Brazilian plants. The five species used are: guaraipe (Melipona bicolor), manduri (Melipona marginata), mandaçaia (Melipona quadrifasciata), jatai (Tetragonisca angustula) and mirim (Plebeia sp.). Bees live in rational breeding boxes, placed inside a coating that guarantees greater protection and welfare from insects. There are more than 50 locations in the city with boxes that house colonies of native social bees without stingers, integrating the Honey Gardens project and composing the pollen paths between the green areas in the city.

Urban Farm is an unprecedented space in Brazil dedicated to education for sustainable agricultural practices in cities. In an area of 4,435 m², next to the Cajuru Regional Market, Fazenda Urbana brings together the most modern methods of planting healthy foods, without pesticides. There are more than 60 organic agricultural varieties cultivated, with the production of fruits, vegetables and greens, as well as herbs, spices, teas and non-conventional food plants (PANCS).

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

- Municipal budget
- National and international financing
- Public-private partnerships

As mentioned in this same document, the Municipality, through the Municipal Secretariat for the Environment, establishes an agreement/partnership with non-governmental civil society organizations that provide environmental services aimed at the conservation of nature and natural areas.

Additional Resources

[Projeto 100 Mil Árvores](#)

Guadalajara

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The planting and consolidation of 70 green corridors

- Generation of 5 shaded spaces in public spaces through landscaping interventions.
- Planting of 67,000 trees, to reach more than 1 million in the city.
- 2 courses to train gardeners and tree technicians with the correct techniques for caring for, managing trees and promoting new jobs.
- Consolidation of the urban garden program in alliance with DIF Guadalajara and Inmujeres, to reach 15 in operation.
- Planting of 50 pollinating gardens.
- 400 workshops through multimedia platforms on caring for trees and gardens, for citizens.

The city of Guadalajara has the “Guadalajara, Fresh City” Program, which has the 2020 Woodland Comprehensive Management Program, which has the purpose of caring for and increasing green areas and reducing the risks for city residents during the storm of rain. This is done through a comprehensive maintenance of trees such as pruning, demolition of dry specimens or at risk of falling. It is important to highlight that each removed specimen is replaced by a new tree from the region, in order to guarantee the continuity of environmental services. Meanwhile, the City’s nursery cares for and produces native trees, which seeks to give continuity to the plantation of endemic trees.

Known for being the tree city of the world, Guadalajara has the 2020 Planting Program which has the goal of planting more than 18 thousand trees at different points. To reach the goal, in 3 years, of having 70 green corridors, the City is prioritising the connection between urban forests and parks, which will include the Connecting with Wings Program for the addition of pollinating gardens, which will have species of pollinating plants. During the 2018-2021 administration, the goal of planting more than 55,000 trees will be reached.

Another program is creating urban gardens to create spaces for coexistence and meeting so that the people of the city can get involved in agricultural work and preservation of the environment. We will continue working hand in hand with DIF Guadalajara and Inmujeres, implementing urban gardens in the care centers, managing to provide food to be used in the public kitchen of this institution.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

- Georeferencing of all green areas that the municipality has, information that will serve to make a plan to increase these spaces, in all areas of the city, especially in those with a shortage of trees and / or heat islands.
- 60% of a characterization of green public spaces.
- Physical tree census of 25% of the territory.
- Generation of new green areas with the construction of 40 pocket parks.

The city of Guadalajara in 2018, through LIDAR technology (<https://visorurbano.com/lidar>) carried out the Census of Trees of the City of those located in Parks, Gardens, public roads and in some blocks. In addition to these results, physical tree censuses are carried out in the city, which are integrated into georeferencing. Likewise, based on the information on land use planning, the geomatics area of the Environment Directorate, in coordination with the Public Space Projects Directorate, is carrying out a georeferencing of the green areas that the municipality has. This information will serve to carry out a plan to increase green areas in all areas of the city, especially those with a scarcity of trees and / or heat islands. Similarly, a characterization of the current green public spaces will be carried out

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

- Mitigation and compensation measures for new real estate projects focused on green areas.
- Permanent communication route through Social Networks of the “Good Citizen” focused on raising awareness of the importance of caring for the environment
- Each year, neighbours and the government will be involved in the 100 parks program.
- Participation in the metropolitan Environmental Tables, positioning the trees as a fundamental and patrimonial element of the City.

The municipality of Guadalajara is made up of 13 managements through which we have a closer and more organized contact with citizens to participate in events and join the environmental care campaigns. An example of this are the plantations carried out each year in the rainy season, since they are carried out hand in hand with the citizens and summoning the neighbors.

On the other hand, since 2020, we have been operating the 100 parks program, which includes public spaces of the municipality. In addition to generating new green spaces, the program improves and takes care of the current spaces as well. Another governance exercise will be to carry out the Municipal Development Plan, putting sustainability as one of the transversal axes.

There is ongoing collaboration with IMEPLAN, with whom, in alliance with C40, the Metropolitan Climate Action Plan (PACmetro) has been carried out, which will dictate the lines of action to be followed to mitigate climate change. This document was produced with the participation of the government, academia and non-governmental organizations.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

- Georeferencing of all the new green areas of the municipality - information that will serve to make a plan to increase these spaces, in all areas of the city, especially in areas with a scarcity of trees and/ or heat islands.
- 100% characterization of green public spaces

- Physical tree census of 50% of the territory.
- It will intervene with the greening of the area of 100% of the parks together with neighbors and the government in the 100 parks program.
- Construction of 80 Pocket Parks, converting paved spaces into permeable spaces and 80 parklets.

In this regard, as mentioned above, the City has LiDAR technology, which carried out a digital tree census, this system and the information obtained are freely accessible.

In a physical way, in different areas of the city tree censuses are carried out, in which a survey of the phytosanitary conditions in which each individual is found is made.

Furthermore, as every year maintenance activities and pruning of risky trees are carried out, as well as reforestations, the figures are duly integrated into the numerology on the city’s trees.

Regarding green areas, there is a land use map which marks their location in a public way, likewise, in coordination with the Directorate of Public Spaces, this information will be updated each time there is the addition of a green space in the City.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

- Sustainability as a transversal axis of the Metropolitan Development Program.
- Development and implementation of a local Certification of green building, with benefits for the citizen and the City.
- Total accounting of the ecosystem services generated by the trees of the municipality.
- Training for students and teachers to implement a garden in each school.

Other supportive actions you may want to highlight

Join the green corridors with the efforts made in terms of sustainable and scalable mobility at the metropolitan level.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The city of Guadalajara has a tree compensation formula based on Art 21 of the Municipality's Green Areas and Forest Resources Regulation, through which resources are obtained for the development of green areas; Likewise, there is an annual budget for parks and gardens for the implementation and maintenance of green areas.

In addition, through the Judgment for the execution of urban projects, the City obliges the promoter to make compensation for the impact of his project and among the measures is the delivery of a certain amount of plants and trees, depending on the magnitude of the growth.

Additional Resources

<https://visorurbano.com/lidar>

[100 Parks Program](#)

[Metropolitan Development Program](#)

[Municipality's Green Areas and Forest Resources Regulation](#)



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Lima



Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The nature goals are made public through the Local Climate Change Plan of the province of Lima 2021-2030 (PLCC Lima). There is an ecosystem and urban green strategy including indicators for actions with measurable goals.

Among the actions in ecosystems we have:

- Develop the Master Plan of the Regional Conservation Area (ACR) “Lomas de Lima System” to ensure the conservation of 5 coastal hills (Lomas de Amancaes, Lomas de Villa María, Lomas de Ancón, Lomas de Carabayllo I and Lomas de Carabayllo two).
- Increase trees in Metropolitan Lima through the implementation of the tree planting program “Trees for Lima,” including the systems established by the Metropolitan Program and the Citizen Program.
- Implement green corridors along bicycle lanes and areas with high traffic for cyclists and pedestrians to promote the use of sustainable mobility, and generate shaded spaces from heat waves.
- Count the trees in Metropolitan Lima with an integrated system of district inventory of three-year urban trees, to be able to monitor them and ensure the availability of water for irrigation.
- Conserve the avifauna of the province of Lima by conducting ornithological studies in zonal clubs and metropolitan parks in order to establish birdwatching routes in the city.
- Conserve and protect the wetlands of Lima through the preparation of technical studies.
- Improve the Management of green areas through the development of manuals for Urban and Peri-urban Forestry and Green Areas as instruments to improve their design, management and

conservation, including the development of methodologies for economic valuation. It will be reviewed and updated every 5 years.

- Prepare an Ordinance that recognizes an Environmental Conservation Area in the province of Lima.
- Prepare the Ordinance that establishes measures to strengthen the conservation of ecosystems in the province of Lima.
- Develop the Comprehensive Green Areas Management Plan for the Province of Lima.
- Recover, protect and monitor the water infrastructure in the Villa Pantanos Special Regulatory Zone (ZRE PV), including control activities in the ZRE PV.
- Implement ecotourism as a source of economic income for the conservation of the Pantanos de Villa Metropolitan Ecological Area, taking as input the scientific information generated in environmental, biological and hydrological monitoring, environmental education and environmental surveillance.
- Network of Environmental Monitoring of Ecosystems and Natural Infrastructure.
- Implement hydrometeorological sensors in these ecosystems and natural infrastructures, to monitor their dynamics for the purpose of their development, sustainability and measurement of associated ecosystem services. Through specific agreements with district municipalities.
- Among others.

Likewise, these goals will be made public through the portal of the Metropolitan Environmental Information System (SMIA), a platform that facilitates the systematization, access, dissemination and distribution of environmental information, in order to establish and guarantee an exchange of information for decision-making and environmental management processes in the jurisdictional scope of the province of Lima. Platform link: <http://smia.munlima.gob.pe/>

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Lima will have an inventory of green areas of the 43 district municipalities by 2023.

Likewise, through the Biodiversity and Ecosystems map of the SMIA portal (https://sit.icl.gob.pe/biodiversidad_smia/), the places where new green areas and opportunities for improvement of existing spaces are needed will be identified and published.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

Within the framework of the implementation of the Metropolitan Environmental Management System, the operation and sustainability of the Metropolitan Environmental Commission (CAMET) and its Metropolitan Technical Group for Ecosystem Management and Conservation will ensure participation is open to all stakeholders of the public, private sector, academia and civil society who are involved in the management of green areas. They will be able to work in an articulated way through technical proposals and joint interventions since it is one of the priority issues for the city. The MML will promote multi-stakeholder spaces so that municipalities can present their projects and find financing mechanisms. It will also coordinate with the Ministry of the Environment (MINAM) and the Ministry of Economy and Finance (MEF) to train municipalities on financing mechanisms.

In order to address governance barriers the MML:

- Will continue to promote spaces for participation where vulnerable groups are included.
- Prepare management instruments that go through participatory processes where contributions are received from vulnerable groups, civil society and other stakeholders.
- With transparency, disseminate information through the SMIA Portal or other means.
- Reduce climate injustice in the city through the Climate Governance measures of the PLCC.

- Continue to attend environmental complaints about logging, severe pruning, risk of tree fall, and impact on the green areas of the city; through the environmental complaints portal of theMML: <https://aplicativos.munlima.gob.pe/extranet/denuncias-ambientales/>
- Report the actions of the MML in environmental matters publicly through CAMET and the Metropolitan Technical Group for Management and Conservation of Ecosystems.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

- Implement new or improved green public spaces and green urban landscapes, in the areas with the greatest impact for the most vulnerable people to achieve at least 50% of the 2030 goal.
- Commitment to 2030 is to reach 5.2 m2 / hab, the city commits to reach 50% by 2026.
- A Base Inventory of Natural Vegetation will be developed which will include an inventory of general surface and species richness.
- An inventory of hill and wetland species will be developed.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The Metropolitan Environmental Commission (CAMET), created by Ordinance No. 2256, promotes dialogue and agreement between actors at the local level of the public & private sectors, academia and civil society, which have been summoned by the Services Management to the City and Environmental Management.

In this framework, the permanent functioning of CAMET as the main governance space of the city is being ensured. Likewise, through CAMET's Environmental Governance and Citizenship Technical Group, the creation of new spaces, methodologies and mechanisms for participation and coordination will be promoted. This ensures that the private sector actors will act as part of their social responsibility and in compliance with the Objectives of Sustainable Development to contribute effectively to the management of the green areas of the city.

In the same way, the involvement of professional associations (Colegio de Arquitectos del Perú and Colegio de Ingenieros del Perú), NGOs and academia will be highlighted for their support and their expertise in: natural solutions in our urban form, buildings and design of infrastructures that offer direct human, and ecosystem and climate services in order to achieve the goals by 2030.

Likewise, incentives such as public recognition, certifications, etc. will be established for the actors who contribute to the management of green areas and nature-based solutions.

In addition, the implementation of the Municipal Environmental Commissions (CAM) of the districts of the province of Lima will continue to be promoted, thus seeking replicability and articulation with CAMET.

Other supportive actions you may want to highlight

Pantanos de Villa - Inclusion

Implementation of the park of the senses in the Cercado de Lima district, a public space that seeks to improve the quality of life of more than 5,000 residents. It has a green area of more than 15 thousand m², which will benefit residents of the area and surrounding roads. We have remodeled this public

space to make it totally inclusive, which includes games and tactile floors for people with disabilities and access ramps for older adults.

Within the framework of article 44 of Ordinance No. 2256, which updates the Metropolitan Management System Environment (SMGA) of the province of Lima, through the Metropolitan Technical Group for Environmental Governance and Citizenship of CAMET, criteria have been designed to measure inclusive participation in the design and implementation of public policies on environmental matters, taking into account the Gender approach.

Increase green areas in the city: conditions of equality between women and men), intergenerational (boys, girls and young people), intercultural (indigenous communities, among others), and the participation of citizens with disabilities. In this sense, annual goals will be established and compliance with equality in access to green spaces will be evaluated within the framework of the implementation of the SMGA. Maintenance of parks and increase the number of parks in the province of Lima.

One of the actions in the Lima PLCC in this matter is to improve the Huiracocha, Cápac Yupanqui and Huayna Cápac Zonal Parks with the construction of wastewater treatment plants, modernized irrigation, public lighting with solar panels and LED lights.

It is also planned to improve 12 parks in Cercado de Lima.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

For the development of the support action for the improvement of 12 parks in fenced off Lima; the budget comes from the municipality's own resources. For the implementation of the actions, most of them are framed within the Institutional Operational Plan (POI) and the Institutional Strategic Plan 2020-2023 - Year 2020 specifically within the OEI.03. Implement sustainable environmental management and the conservation of ecosystems in the province of Lima.

Additional Resources

<http://smia.munlima.gob.pe/nosotros#:~:text=El%20Sistema%20Metropolitano%20de%20Informaci%C3%B3n,en%20la%20provincia%20de%20Lima.>

https://sit.icl.gob.pe/biodiversidad_smia/



Medellin

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The goals, programs, projects and indicators in matters of nature and renaturation will be established in the Renaturalization Plan currently being developed by the Ministry of the Environment. The idea is to finish it this year (2021). But it all depends on hiring professionals who are part of the team to finish the 5 components that are part of the plan. If we have the technical team, the idea is to be able to finish the plan this year (2021).

The Medellín Renaturing Plan 2020-2030, was born from the Urban GreenUP project of International Cooperation of the European Commission. Its purpose is to generate methodologies to green cities, mitigate the effects of climate change, improve air quality, water management and green to increase the sustainability of our cities through innovative nature-based solutions (nature based solutions). Medellín is the only city in Latin America to participate in this project and it does so as a follower city. Its development is under the control of the Secretary of the Environment of the Mayor's Office of Medellín.

Renaturation is a process of space transformation based on SbN nature-based solutions, implanted in green, blue and gray infrastructures, to strengthen, among other things, the ecological structure.

The Renaturalization Plan seeks to be a supportive instrument for the city to preserve, generate, restore, and be able to sustainably use its urban and rural green spaces. It should function as a channel to generate synergies between existing plans and projects.

It proposes to develop an institutional management model by:

- Identifying actors, defining functions, roles and competencies for green management,
- Developing a prioritization model for the spatialization of potentially critical areas of the city, which will need to be incorporate natural solutions,

- Developing a financial strategy to determine the economic instruments with greater viability in the long term, which allow the generation, maintenance and recovery of green spaces.

The plan will establish a monitoring and follow-up system for implementing nature-based solutions and a participation strategy through co-creation processes with private actors, institutions, citizens and academics.

The contributions of this project establish a route to act on urban greenery addressing major city challenges and framed in Agreement 47 of 2015 to maintain, conserve, generate and monitor green.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

To carry out this action, we work with the Protocolized Map 12 of the POT - Projected public space for recreation and meeting. There are some projects that are currently being developed associated with the generation of green areas:

1. CREEK ECOPARKS - GREEN ZONES GENERATION

This is based on the ecological and environmental point of view associated with the creek eco parks. An example of this is the project in collaboration with the Secretary of the Environment and the Administrative Department of Planning, in order to review areas in the Ana Diaz and La Hueso streams to retake potential areas for the generation of green areas of public space in the stream retreats and to consolidate creek eco parks as established by the POT.

2. ANALYSIS OF FRAGMENTATION AND POSSIBILITIES OF IMPROVING AND GENERATING GREEN CORRIDORS IN THE ECOLOGICAL CONNECTIVITY NETWORK

- Agreement of new corridors and validation in conjunction with DAP.

- Definition of terminology to be used, guaranteeing the concordance between the POT language, the Urban Forestry Manual and the AMVA Functional Ecological Connectivity Study.
- Justify and plan the strategy to be implemented to maintain, conserve, enrich and value ecological corridors in forest terms.
- Work with biologists to ensure the diversification of actions to be implemented in the corridors.
- Develop a strategy for entering information into the SIB database.
- Propose inventory and monitoring of birds and the management of invasive birds.
- Definition of actors or co-managers. This will be developed in detail with the regulation of Agreement 41 of 2015 "By means of which the" ECOLOGICAL CORRIDORS FOR AVIFAUNA "program is institutionalized in the Municipality of Medellín"

3. QUALIFICATION OF PUBLIC SPACE - OPPORTUNITIES TO IMPROVE GREEN SPACES

The Ministry of Physical Infrastructure has a Siro portal system where the resume is shown with the inventory of the public space associated with the parks, roads and roundabout to qualitatively evaluate, this information allows analysis to identify if there is a possibility of areas to generate new green areas and qualify existing ones.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

The Renaturation Plan has two components. One is the financial strategy: its objective is to determine the most appropriate instruments, through which stable and sufficient long-term resources can be generated that allow the generation, maintenance and recovery of green spaces and the implementation of nature based solutions.

This financial strategy becomes important as the budget for green financing increases, it becomes a challenge for municipal administrations, since the greatest resources come from current income, which may limit the objective of increasing this type of space, and even more, to enjoy stable resources for their maintenance and qualification. Therefore, a review of the instruments that would allow the City to increase the green areas within the municipality,

as well as those that would contribute to their maintenance, is necessary in order to specify a proposal where different tools are articulated (from public resources and private) that allow creating synergies around the common goal of increasing and maintaining green spaces.

Another of its components is the management model to work on governance issues: The purpose is to consolidate a proposal for an organizational structure for the implementation of the Medellín 2030 Renaturation Plan. For this plan, it is necessary to consolidate the mapping of actors and management instances of the green in the city, based on which to propose a scheme or model of institutional organization and operation for the implementation of the Plan.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

When approaching a reference natural vegetation inventory for the city of Medellín, we will have to take into account all the existing vegetation of the city which has a high budget and a robust technical team are required to generate it (which we currently do not have). But, currently, we can work on the accounting of natural capital, with the following inventories:

1. SAU Urban Tree System: since 2011 an Inventory has been made of the trees that are planted in the different public works projects. It is possible to begin to evaluate the species we have and evaluate some of the associated ecosystem services.
2. Inventory of green areas, urban and rural areas: with this input, natural capital can be evaluated to some extent, analyzing the different elements of green infrastructure and their co-benefits.
3. From the component of the monitoring and follow-up system that is framed in the Renaturalization Plan: the goal of this administration is to implement various typologies of Nature-Based Solutions in various projects that are part of the "Medellín Futuro" Development Plan. on the ECOCIUDAD line. The purpose is to carry out a minimum monitoring in two years to evaluate the co-benefits specifying which Ecosystem Services the nature based solutions can be associated with.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

To work on all these issues the City has:

- Sustainable construction policies of the Metropolitan Area and its 5 associated guides.
- Decree 113 of 2017. Public space manual that regulates in detail the standard for the components and constituent elements of public space in the municipal territory.
- Decree 895 of 2018. Urban Forestry Manual for Medellín - Management, Planning and Management of Green Infrastructure.
- Work is being done on the regulation of Agreement 41 of 2015 "ECOLOGICAL CORRIDORS FOR AVIFAUNA", Agreement 47 of 2015 "MAINTAIN, CONSERVE, GENERATE AND MONITOR THE GREEN ZONES", Agreement 46 of 2015 "By means of which the" Strategy integral for the management of Climate Change and Climate Variability in the Municipality of Medellín "This regulatory framework needs to be reviewed to mainstream these instruments and facilitate the regulatory framework so that we can apply them through nature based solutions.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

There is no budget for the Implementation of the Renaturation Plan and most of the actions indicated here. The City has no resources. To date, no obtaining of resources has been contemplated. In the current Development Plan - Medellín Futuro 2020-2023 there is no budget for the Renaturalization Plan. The idea is to see if during its implementation resources can be obtained through alliances and cooperation. The idea is that through the regulation of Agreement 47, generating the norm, this issue can be further mobilized.

For the implementation of nature based solutions in strategic city projects, there is the "Medellín Futuro" Development Plan in the ECOCIUDAD Line. With this plan, there is a budget, strategic projects such as: Metro de la 80, Parques del Rio norte, Cycle Ruta Norte Sur, development of SbN topologies such as green walls, green facades, eco-gardens, and it highlights the "Green Infrastructure maintenance" program with "Green Corridors" project.

Additional Resources

<https://www.urbangreenup.eu/cities/followers/medellin.kl>

<https://www.medellin.gov.co/irj/portal/medellin?NavigationTarget=contenido/8896-Atlas---Planos-Protocolizados-POT>

<https://www.medellin.gov.co/sau/>

<https://www.medellin.gov.co/irj/portal/medellin?NavigationTarget=contenido/6899-Plan-de-Desarrollo-2020---2023--Gaceta-oficial---Medellin-Futuro>



Rio De Janeiro

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

On June 6, 2021, Rio de Janeiro published its Sustainable Development and Climate Action Plan - PDS, an instrument that materializes and updates a collectively constructed city vision that presents projections and scenarios that should support public policies within the scope of municipality until 2050. Among the commitments established, it is worth highlighting the maintenance of 3,400 hectares already reforested and the consolidation of another 1,206 hectares of Atlantic Forest.

In addition to climate ambitions, the PDS seeks to reduce income inequalities through the creation and formalization of jobs with a positive impact on the environment. The goal is that 40% of jobs in the city will be green by 2030. Hortas Cariocas, an existing program that hires people from nearby communities to produce organic food, is a good example of green jobs that should be encouraged and expanded in the coming years. By 2030, food production through the program will be doubled, ensuring food security, green income and environmental education in the territories that most need it.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

The Sustainable Development and Climate Action Plan of the City of Rio de Janeiro established sustainability corridors. Among them, the green corridors stand out, which are priority areas for the expansion of green infrastructure through actions of reforestation, urban afforestation, creation, protection and connection of conservation units, encouragement to the maintenance and expansion of agricultural areas, as well as areas greens of relevant scenic and historical interest, with a view to their proper maintenance and conservation.

The Green Corridors are structured according to three main axes: Urban Afforestation, Connection between Fragments of Native Vegetation and Cultural Heritage of Humanity.

For its definition, different databases were used, among which: green area indices; surface temperature studies; comparison between land use bases of different years, classification of treetops from orthophotos and location of urban parks and areas relevant from the landscape point of view.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

On June 6, 2021, the City of Rio de Janeiro established the Rio de Janeiro Forum on Climate Change and Sustainable Development, which is a consultative body that aims to integrate organized civil society into the city's climate governance structure.

The Sustainable Development and Climate Action Plan itself provides for the implementation of the Municipal Planning, Sustainability and Resilience System, which should have mechanisms for its integration with the instruments that govern the municipal budget. Another goal of the PDS establishes that in 2030 a minimum annual investment of 350 million reais is reached, with resources collected from the application of urban and environmental instruments, for the sustainable development of the City and for the implementation of structuring projects.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The Sustainable Development and Climate Action Plan also provides for:

- Until 2022: Promote the updating and publication of the list of endangered fauna and flora in the municipality every five years, through a partnership with research and teaching institutions, evaluating the conservation status of the species based on the Union standard International for Nature Conservation - IUCN;
- Until 2022: Define Action Plans to be prepared annually for endangered species of fauna and flora, prioritizing endemic species in the municipality, as well as the procedures for implementation and evaluation, in line with the National Plan for the Conservation of Endangered Species - Pro-Species, providing the participation of different segments of society to enhance efforts and results;
- By 2022: Establish a fire prevention and control program in natural environments;
- Until 2026: Create and manage databases on fauna and flora with information systems aimed at supporting the planning of actions for the conservation and preservation of endangered species;
- Until 2026: Define priority areas in the municipality for the control of invasive alien species and implement a program in partnership with educational and research institutions, and with other spheres of government;
- Until 2026: Identify the priority natural areas of the municipality for the reintroduction, translocation and population reinforcement of native wild fauna, as well as for the enrichment of the flora, considering the different ecosystems that make up the Atlantic Forest biome in the city.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The digital platform Participa.Rio aims to ensure an opportunity for the participation and engagement of the population of Rio de Janeiro in city planning, as well as bringing knowledge and information about the actions and plans developed by the city hall.

The platform is an important instrument for consolidating the process of citizen participation in the construction of city planning. It admits the hosting of different participation campaigns, consolidating itself as a tool with great potential for the promotion of popular participation, guaranteeing transparency and improving the dissemination of the City's planning actions. Strengthening the culture of participation in short, medium and long-term plans is fundamental to building a city with better quality of life for its citizens.

The PDS establishes that in 2030 up to 50% of the suggestions or prioritizations of the population received through Participa.Rio are incorporated into the city's planning and that 100% of the research is analyzed and disseminated through the transparency channel. The PDS also foresees the establishment of the Rio Cidade Educadora Program for the engagement and awareness for the Preservation of the City and Healthy Living to be started in 2021. This consists in the creation of a territory that bets on education as a tool for social transformation, mobilizing and articulating local education agents in the proposition and development of knowledge and values from different instances and municipal services, with citizen education resulting in action and social interaction in the city's public spaces.

As an example of the population's engagement in the development of natural solutions in urban form, we can mention the City Hall's Reforestation Program, which has existed for 34 years and is the largest of its kind in Latin America. The program works with its own methodology, which seeks mainly to use labor from local communities and environmental education activities and which is based on instruments such as the Municipal Atlantic Forest Plan and the Master Plan for Urban Tree Planting. As mentioned above, the PDS foresees that 3,400 hectares already reforested will be maintained through the program and another 1,206 hectares of Atlantic Forest will be consolidated.

Another goal of the PDS to be highlighted is that by 2030, the City of Rio de Janeiro will build nature-based solutions to the challenges of urban space. Thus, 300 km of roads and public spaces will be revitalized, with sustainable urban drainage and extensive afforestation, integrating mobility with the need for infrastructure that is resilient to climate change.

Additional Resources

<https://participario-pcrj.hub.arcgis.com/>

Salvador



Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

Salvador made its goals public in relation to nature in the Mitigation and Adaptation to Climate Change Plan (PMAMC), with the objective of reaching 36m² of green area by 2032 and the goal of expanding universal access to green areas. No criteria revolving around equity were created for this goal in the PMAMC. We can think of seeking this equity with the projects and this declaration, but at PMAMC there is not.

In the next two years, the city proposes to:

1. Empower vulnerable populations for subsistence crops and income generation and encourage urban agriculture, which is already being developed with support from GIZ. The idea is that this will increase food security (which was greatly affected during the pandemic, especially in the most vulnerable communities) and help generate income for these communities and populations, which were financially affected by the social restriction measures imposed by COVID.
2. Create and implement an Environmental and Climate Education program - which has already been created and is being implemented in vulnerable communities by the Civil Defense of Salvador (CODESAL) and which will be implemented in Schools by CODESAL and SECIS.
3. Creation of 2 new parks and new green spaces in the city, prioritizing areas of greater social vulnerability.
4. Expand urban afforestation and plant plantations with communities.
5. Encourage sustainable construction through and encourage the adoption in buildings and public works - a project is also already underway with support from GIZ.

6. Preparation of the Law establishing the Climate Change Policy, which establishes mechanisms for governance and monitoring and participation of society in the goals and policies of the PMAMC, which include goals in relation to nature.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

The city, through SECIS, will map existing green areas in the city, identifying gaps and places where it is necessary to plant trees and create new green spaces in the next two years, as indicated in the Strategic Planning 2021-2024. This mapping will be revised every 4 years.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

SECIS is starting the process of reviewing the Green IPTU, an instrument that encourages sustainable constructions and EbE by granting up to 10% discount on IPTU and Onerous Grant. With the review, the city government aims to increase adherence to the program and make more businesses adopt sustainability and EbA actions and practices. In addition, SECIS is also drafting a law to determine the use of EbA in municipal public works.

The City Government also intends to create and implement a Payment Program for Environmental Services with a plan to encourage the environmental protection and preservation of natural resources.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

As mentioned, the City, through SECIS, will map the existing green areas creating a kind of inventory of green areas. This inventory/mapping will be revised every 4 years, and the idea is that it will be available online to all citizens through a website.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The City Hall, through SECIS, has an initiative to encourage residential, commercial, mixed or institutional real estate projects to carry out and contemplate sustainability actions and practices in their constructions called IPTU Verde. For this, it offers discounts of up to 10% of the IPTU, according to your score in the program criteria.

In addition, the City Government carried out some studies and projects to include AbE and SBN in public works, and now aims to make a bill to make the use of these solutions mandatory in public works.

The city hall also has programs such as Disk Mata Atlântica, Caravana da Mata Atlântica, community gardens and Horta em Casa, which encourages the population to plant/develop gardens in their homes and communities in order to expand afforestation and green spaces in the city.

Finally, the City Hall is launching the booklet "Green and Ecosystem-based Solutions in Buildings" to expand the knowledge of people and builders about natural solutions that they can adopt in their homes and construction.

Other supportive actions you may want to highlight

An example of this is addressing equal access to green spaces.

The City Hall has the goals of:

- Reach 36m² of green area/inhabitant by 2032
- Expand universal access to green areas by 2032, providing universal access to safe, inclusive, accessible and green public spaces, in particular for women and children, the elderly and people with disabilities
- By 2032, double the agricultural productivity and income of small food producers in the city through sustainable urban agriculture

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The City has its own budget resources to develop urban afforestation programs, Disk Mata Atlântica, Caravana da Mata Atlântica, Community Gardens and Horta em Casa. The green IPTU is within the Law No. 8474, of October 2, 2013, which grants in its art. 5th discount of up to 10% (ten percent) of the IPTU value to owners of residential and non-residential properties that adopt measures that encourage the protection, preservation and recovery of the environment. So, the resource for its execution is a fiscal waiver of the Urban Property Tax of Salvador, being within the regulatory guidelines of the city. Similarly, we intend to modify land use policies and building codes to expand and encourage the use of nature-based solutions in the city, including urban agriculture.

Additional Resources

<http://iptuverde.salvador.ba.gov.br/>

http://sustentabilidade.salvador.ba.gov.br/wp-content/uploads/2020-/12/PMAMC_Ebook_ingles.pdf

Austin

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

The City of Austin's mission is to manage the urban and natural ecosystems in a coordinated and sustainable manner through continued public investment in green infrastructure, incentivize and/or require private investment in green infrastructure, maximize ecosystem function and services provided by green infrastructure on city-owned land, and improve inter-departmental collaboration and coordination in the management of city-owned lands.

Continue to make our nature goals public and update progress towards green space goals via various departmental plans and public indicator dashboards (Imagine Austin & SD23).

Continue to grow the Austin Civilian Conservation Corps and Equitable Green Jobs Grant programs and look to implement more of the green jobs recommendations outlined in the proposed Austin Climate Equity Plan (ACEP).

Low income communities and communities of color were centered in the ACEP update process and that co-creation with communities is expected to continue with the implementation of those recommendations.

Continue to work with marginalized communities impacted by the Urban Heat Island effect to capture lived experience to ground-truth heat mapping and inform municipal investments.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

A Green Infrastructure Strengths & Gaps Assessment and supporting atlas of maps was recently completed. This report looks at the topics of conservation, access, and systems through the lenses of connectivity, biodiversity, resilience, climate change, health, equity, and smart development. Staff will use that information to identify areas of success to grow and areas of weakness to improve related to the quantity and quality of green spaces across the city.

Additionally, departments such as Parks & Recreation, Watershed Protection, and the Forestry Division are incorporating social equity and equitable access into their recent and upcoming planning efforts. The draft Austin Climate Equity Plan, pending Council adoption this Fall, seeks to break down silos and remove barriers to local climate action, including nature-based solutions. The work to implement the climate plan recommendations will continue in the coming years. After the finalization of the Green Infrastructure Strengths & Gaps Assessment noted in the previous section, the next steps will seek pathways to implementation.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

The Austin Climate Equity Plan seeks to break down silos and remove barriers to local climate action, including nature-based solutions. The work to implement the climate plan recommendations will continue in the coming years.

Green Infrastructure Strengths & Gaps Assessment noted in the previous section, I seeks pathways for process improvements and implementation.

Additionally, City staff are represented in the Biophilic Cities Network, a global networking and information sharing group around urban nature. Staff are also currently serving the group's Funding Biophilic Urbanism Working Group, which will address and provide recommendations around ways to fund and implement urban nature solutions.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The City of Austin is currently inventorying green assets via the Green Infrastructure Strengths & Gaps Assessment and is raising awareness around the value of urban nature via many public platforms including the Green Infrastructure Storymap and the Imagine Austin Indicators Dashboard and many other programs across the city.

The inclusion of Natural Systems in the Austin Climate Equity Plan showcases the important role that nature-based solutions play in climate resilience, mitigation and adaptation. A baseline estimate of the increase in carbon sequestration that could be realized via natural systems was done as a part of that process.

The city currently has information around the natural capital of our tree canopy via the My City's Trees platform. Additional natural capital accounting could be created in future, and likely would be a valuable exercise that could be useful for many departments.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The City actively collaborates with external stakeholders, both public and private entities, through a variety of programs and initiatives that seek to incorporate green elements into the urban form and fabric.

Existing Programs: Green Streets, Great Streets (developer partnering/matching), Connecting Children to Nature (CCCN), multiple programs by the Parks & Recreation Department, Watershed Protection Dept, and Forestry Division promoting native landscapes, habitat and tree planting on private property, Public Works Neighborhood Partnering Program, Urban Forestry Grants, Bright Green Futures Grants.

Existing Regulations for private Development: Tree Preservation and Planting requirements, Parkland Dedication requirements, Environmental Criteria Manual and Subchapter E code requirements, Planned Unit Development (PUD) environmental and parkland superiority requirements, Green Building Policy for City Assets (including Public Private Partnerships).

Additionally, Functional Green is a proposed commercial development code tool for meeting a standard of ecological function on constrained sites, such as urban sites with a high percentage building area and low percentage pervious area (>80% impervious cover). It is the hope to have this adopted and being used by / applied to urban developments and redevelopments soon.

Other supportive actions you may want to highlight

The Office of Sustainability coordinates efforts across multiple internal and external stakeholders to showcase the multi-benefits and value of urban nature for industries that have not traditionally been involved in these kinds of conversations, such as economic development and public health. This link often reveals additional sources of funding.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

Financial resources include: existing departmental budgets that continue the work they are already doing to support these commitments, Tree Mitigation funds collected on a regular basis through fees collected from private development projects, City Forest Credits program created to provide carbon offsets and funding for City, County, and community-based tree-planting, grant opportunities (especially in partnership with local universities and community groups), potential future city budget allocations funding climate plan actions, and other nature based solutions and/or green infrastructure.

As the city is rapidly growing, requiring implementation of green infrastructure and other urban nature projects with new development is a major opportunity, via P3's, City CIP, and private redevelopment that must adhere to the requirements and regulations noted above.

Additional Resources

[Austin Civilian Conservation Corps and Equitable Green Jobs Grant programs \(ACCC\)](#)

[Green Stormwater Infrastructure: A Catalog of Infrastructure, Initiatives, and Next Steps](#)

[The City of Austin Green Infrastructure overview](#)

[Biophilic Cities Network](#)

[Imagine Austin Green Infrastructure Priority Program](#)

[Natural Systems in the Austin Climate Equity Plan](#)

[Great Streets | Green Streets](#)

[Connecting Children to Nature](#)

[Functional Green](#)

[Austin Climate Vulnerability Mapping](#)

[Austin Heat Mapping](#)

[Google Labs Tree Canopy](#)



Los Angeles

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

- **Public goals:** Maintaining and strengthening LA's urban ecosystem is a critical component to the city's sustainability plan - LA's Green New Deal. The 17 milestones and 51 urban ecosystems initiatives made publicly available in LA's Green New Deal are reported on annually and championed publicly by the City. In addition, the City will share the C40 Urban Nature commitment on social media, in public presentations, and with the LA City Council to further promote the City's pledge to this work.
- **Green jobs:** Support green career pathways programs such as Hire LA's Youth, LA College Promise, LA Rise, LADWP and City Plants "green collar" jobs partnerships with local nonprofits, LA Cleantech Incubator APC Fellowship Workforce Development Program, and many others.
- **Public engagement:** Work with the City Council to establish a Climate Emergency Commission that will work on amplifying the voices of underserved communities and engage them in the development of climate action plans. Launch a Community Taylor Yard Equity Strategy around the centerpiece Taylor Yard project site for L.A. River restoration that will engage the community in identifying potential effects of the open space investment and recommend actions to address them.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

- In 2022, complete LA's integrated citywide park and street tree inventory, including identifying locations available for tree planting.
- Develop a citywide wildlife connectivity layer to existing mapping to help identify opportunities

to create new wildlife corridors, enhance existing connections, mitigate pinch points, and direct greening.

- Initiate critical components of LA's first ever Urban Forest Management Plan, such as public outreach to identify goals for the maintenance and expansion of a healthy, sustainable, and equitable urban forest.
- In 2022, the Department of Recreation and Parks will create a dashboard tracking capital project expenditures and investment for the department. Projects reflected on the dashboard include new green infrastructure projects.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

- Develop a set of land use regulations for public and private property via a Wildlife Ordinance.
- Conduct an Urban Forest Financing Study to identify costs, benefits, and funding strategies for a comprehensive urban forest program.
- Pursue federal, state, local, and philanthropic grants to fund projects and programs related to trees, biodiversity, river revitalization, and green space.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

- Natural Vegetation Inventory:
Complete the LA's integrated citywide park and street tree inventory.

Continue to assess and update LA's City Biodiversity Index mapping.

Support updating the Loyola Marymount University Tree Canopy Map.

- Natural Capital Accounting: Assess existing accounting such as the LA integrated citywide street tree and parks inventory and collaborate with C40 on a common framework for cities that could potentially be applied to LA.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

- Form the Climate Emergency Commission, convene Climate Emergency Assemblies, and Update LA's Protected Tree Ordinance to enhance protections and removal mitigations for protected tree and shrub species
- Identify existing funding and prioritize funding for parks in areas of LA that are park-deficient through a cross-departmental Park Equity working group.
- Develop and implement the Wildlife Ordinance as part of the Department of City Planning Wildlife Pilot Study and assess its application to other areas of ecological significance within LA.

Other supportive actions you may want to highlight

Ensure proportion of Angelenos living within 1/2 mile of a park or open space is at least 65% by 2025; 74% by 2035; and 100% by 2050

- Develop 30 additional parks by 2025.
- Establish 25 joint-use parks in underserved communities by 2025.
- Implement the Cool Neighborhood program, combining nature-based solutions with cool pavement to mitigate the urban heat island effect.
- Pilot 10 cool neighborhoods by 2025 in vulnerable communities incorporating urban greening like shade trees in public right-of-way.

- Engage the public in supporting urban nature and biodiversity.
- Encourage public participation in the National Wildlife Federation Community Wildlife Habitat program, which engages the public in creating wildlife habitats.
- Host the annual bioblitz as part of the City Nature Challenge and encourage public participation using the community science apps.
- Track and share publicly indicator species as part of the LA City Biodiversity Index.
- Host monthly "Lunch and Learn" webinars with City Forest Officer Rachel Malarich.
- Engage the public and key stakeholders, including the City Forest Advisory Committee, in developing policies for the Urban Forest Management Plan.
- Host an annual Tree Summit that's open to the public to educate and engage them in urban forestry.
- Through extensive community and stakeholder engagement, develop the Taylor Yard Equity Strategy.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

In support our urban nature goals, LA will continue to apply for and utilize funds from a variety of sources including:

- CalFire California Climate Investments/Urban and Community Forestry grants
- California Natural Resources Agency grants
- TCC/Strategic Growth Council grants
- Measure A: Los Angeles County Safe, Clean Neighborhood Parks and Beaches Measure
- Measure W: Safe, Clean Water Regional program
- Park Fees (Quimby Funds)

New Orleans

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

Utilize existing grant funding to develop a robust blue/green infrastructure workforce training pipeline that prepares high school youth, and provides opportunity for youth and adults who are people of color and people with low incomes, for high-wage jobs in the city's growing water management sector. Advance public-private partnership with local non-profits, namely SOUL, to expand green spaces and tree canopies citywide. Further engage with the City's Climate Action Equity Task Force to fund and implement community-driven, nature-based projects. We continue to work with this group to determine and prioritize projects they would like to fund with grant dollars allocated to us & them.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

The City's Department of Parks & Parkways funded a tree inventory in 2019 of trees in public spaces such as neutral grounds and parks. The City's Master Plan, "The Plan for the 21st Century," sets a goal of 50% citywide tree canopy coverage by the year 2030. The City's Parks Department in coordination with local non-profit SOUL and the City's Department of Public Works are utilizing these initiatives to inform an upcoming Comprehensive Reforestation Plan. The City will also seek to engage with Google's tree canopy pilot to better understand existing green space. Tree canopy coverage has not been determined but could be part of the City's potential work with Google.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

In 2010, the City set a goal in its master plan to increase the tree canopy to cover 50% of the city by 2030. Now in 2021, 11 years later, City officials signed an agreement with SOUL, a local non-profit, as part of a public-private partnership to develop a \$140,000 reforestation plan. The agreement signed was to inform and develop an upcoming Comprehensive Reforestation Plan. The City will continue to form partnerships with organizations seeking to promote tree planting and expand access to green spaces, with an emphasis on native species and an equitable distribution of green space.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The City will determine an appropriate partnership and methodology to complete a baseline natural vegetation inventory in coordination with our Hazard Mitigation Administrator, Department of Parks and Parkways, and the Office of Resilience and Sustainability.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

Continue to explore potential stormwater fees to ensure the private sector and tax-exempt properties contribute to green infrastructure funding citywide. Engage residents in resilience decision-making through the Climate Action Equity Project. The Climate Action Equity project is an existing mechanism for resident engagement with pre-selected community members and resident climate experts. We have an existing agreement/grant with them that allows for public engagement meetings in each Council district.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

- \$5M JPMorgan Chase Advancing Cities grant to boost job creation and new businesses in water management and other environmental sectors.
- \$141 million through the National Disaster Resilience Competition from the Department of Housing and Urban Development to create the city's first-ever resilience district.
- Various funding available through FEMA's Hazard Mitigation Grant Program (HMGP) for green infrastructure/stormwater management projects.

Additional Resources

<https://www.gnof.org/taking-steps-together-on-equity-climate-change-a-report-by-and-for-new-orleanians/>

<https://www.nola.gov/getattachment/Parks-and-Parkways/Trees/Total-Tree-Inventory-Summary-Report-updated.pdf/?lang=en-US>



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San Francisco

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

On April 18, 2018, the San Francisco Board of Supervisors unanimously passed the San Francisco Biodiversity Policy, a “resolution establishing local biodiversity as a citywide priority, with a framework for interagency collaboration for nature-based initiatives.” The forthcoming 2021 San Francisco Climate Action Plan (CAP) has six chapters/sectors, including a comprehensive Healthy Ecosystems (HE) chapter that lists 7 strategies and 32 actions, all devoted to nature-based solutions for climate resilience, biodiversity, and carbon sequestration. The HE chapter represents the most complete articulation by the City of San Francisco of its nature goals to date. The CAP underwent significant stakeholder and public vetting and will be completed by the end of 2021, when the final plan will be made public. The whole CAP has been subjected to a thorough racial equity analysis, as part of City Departments’ compliance with direction from the Office of Racial Equity. Thus, the actions reflect a deep commitment to equity and justice, including for workforce development among vulnerable populations. The CAP is accompanied by a Racial Equity analysis that includes principles and actions to be followed in the implementation of the CAP.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

San Francisco was the first US city to achieve 100% of the population living within a 10-minute walk of open space. While this metric is a strong proxy for equal access, considerations to ensure equitable access (acres/population) to high quality open space continue to drive decisions in planning, acquisition, development, renovation, and expansion of green spaces. San Francisco has created and

deployed several different analytical tools to guide the development of new open space through an equity lens. The Recreation and Parks Department has developed a set of equity metrics to measure the allocation of recreation and park services and resources in order to identify gaps, mitigate deficiencies, and maximize equitable resource allocation decisions. For example, about 20% of census tracts are identified as “disadvantaged” residents (due to poverty, health outcomes, non-white racial identity, etc.) yet 78% of capital budget is allocated to parks in those areas. This equitable allocation of resources recognizes and mitigates historical bias. Evaluations of park quality show nearly identical scores, with parks inside disadvantaged areas scoring 92.4% while parks outside this area score 91.6%. This shows current operational balance in allocating new plantings, maintenance and repair, and special features.

In Central SOMA, one of the greyest neighborhoods in the city, the new plan for development provides substantial development fee funding for new open spaces. The State of California uses very strict criteria for its funding, so that CalFire grants for urban forestry can only be spent in environmental justice communities. The San Francisco Department of Environment created an Unprotected Lands GIS that will help prioritize land preservation and conservation action, and the Urban Forestry Council has created a more San Francisco-nuanced map for prioritizing tree planting in high need areas throughout the city. The Planning Department is creating an environmental justice framework for the City’s General Plan, including a more updated mapping tool that is more nuanced than the California Environmental Protection Agency’s EnviroScreen tool. The implementation of the Climate Action Plan will optimize use of these various tools in order to bring nature and greening to everyone to be able to connect to nature every day.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

San Francisco funds nature and greening work across several different land-owning departments, as well as through the City’s Capital Plan and through state and federal grants. In general, however, nature-related funding is insufficient to keep pace with the ongoing degradation of our city’s biodiversity and for the restoration of local ecosystems for plants, wildlife and carbon sequestration. Implementation of the Healthy Ecosystems Chapter of our CAP will require a significant increase in funding across multiple City departments for us to accomplish our goals. We have an existing Biodiversity Interagency Working Group, and the City recently allocated \$300K to study and build a funding process for the Climate Action Plan.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

The Climate Action Plan has an action devoted to creating a Carbon Sequestration and Ecosystem Restoration Strategy, a key component of which will be to establish a baseline inventory of natural vegetation and urban forestry cover citywide.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The CAP harbors many actions devoted to creating policies and programs that bring biodiversity with greening and ecosystem services into the built environment through our Strategy 6: Maximize greening and integration of local biodiversity into the built environment.

Other supportive actions you may want to highlight

Example actions include:

- Incorporate carbon sequestration and biodiversity conservation findings into a Carbon Sequestration and Ecosystem Restoration Strategy for City land and watershed management, consistent with agencies’ existing plans and policies.
- Establish an inter-jurisdictional working group comprised of the American Indian community, federal and state parks agencies, and local non-profits, educational and research institutions, dedicated to nature-based solutions, focused on resilience and biodiversity conservation.
- Maximize, where woody vegetation is appropriate, planting coast live oak and other native trees and arborescent shrubs throughout the entire public realm.
- Create a City-managed and -dedicated street tree nursery.
- Explore expansion of the City’s natural areas preservation system through land transfers and acquisitions of undeveloped/unprotected private and public lands.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

As noted above, more funding is needed for the City to be able to implement the strategies and actions in the Healthy Ecosystems chapter of the Climate Action Plan, which contains the strategies and actions that embody the implementation of the commitments of this declaration, in addition to those that have already been accomplished or that will be accomplished as a matter of course with existing resources. At least ten City departments participate in the Biodiversity Interagency Working Group, in which context (hopefully enhanced with additional funding), we will develop a process for implementation of the Healthy Ecosystems chapter of the CAP.

Additional Resources

Updated mapping tool
[Recreation and Parks Department](#)

Seattle

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

Cultivating and caring for urban nature is a core element of Seattle's environment, health and social justice commitments. These goals are publicly included in the City's Comprehensive Plan elements and several key sustainability initiatives, investment frameworks, and programs including, but not limited to: Seattle's Climate Preparedness strategy, Equity and Environment agenda, Green New Deal Executive Order, Outside Citywide program, Parks and Open Space acquisition strategies, Urban Forestry Management plan, Grow Green Stormwater Infrastructure Initiative, Green Factor development requirements, and Future of Work and Green Jobs initiatives. Seattle's urban nature targets include elements such as tree canopy goals, park accessibility, and gallons of stormwater managed through green stormwater infrastructure.

Seattle's Equity and Environment agenda outlines key environmental justice goals and priorities for the City that include but are not limited to: ensuring healthy environments for all; creating opportunities for local green careers through jobs, local economies and youth pathways to green jobs; and increasing community access and decision making in City environmental programs. Development of this agenda was a community-led process by Black, Indigenous, People of Color, immigrants, refugees, and people with low incomes. The Environmental Justice Committee was a recommendation in the Agenda that was actioned and is now in its fourth year. This body works to ensure that those most-affected by environmental inequities have opportunities to guide the City's nature and environmental targets while better connecting government to community-based solutions.

Over the next 2 years, Seattle's key commitments to advance nature goals, green jobs, and equitable engagement will include:

- Updates to Seattle's Comprehensive Plan and its many elements (including the Parks and Open Spaces Plan) including an extensive inclusive

outreach and public engagement process that will incorporate new knowledge and perspectives and further integrate urban nature and equitable engagement work across City agencies.

- Implementation of Seattle's Green New Deal Executive Order—Building off the Equity and Environment Initiative, Seattle's Green New Deal aims to create jobs and advance an equitable transition from fossil fuels to renewable energy by prioritizing investments in communities historically most harmed by economic, racial, and environmental injustices. Seattle is currently developing a Green New Deal Oversight Board that will center the expertise of Black, Indigenous, People of Color, immigrants, refugees, people with low incomes, youth, elders, and workers harmed first and worst by climate change. This board will develop recommendations for policies, programs, planning efforts, and legislation that advance a Green New Deal for Seattle.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Seattle's Outside Citywide program develops comprehensive maps of Seattle's blue-green spaces across all forms of ownership and analyzes in detail which areas of the city are better and worse served by these assets. Using this analysis combined with racial, social, and health equity considerations, the program also identifies priority neighborhoods for new blue-green space investments. The latest iteration, currently under development, will factor in climate risk factors such as sea-level rise and our recently developed heat mapping as well. Relatedly, Seattle Parks and Recreation measures gaps in access to their properties through the Parks and Open Space Plan. This analysis identifies gaps in two parallel metrics: households within a 10-minute walk to a park citywide, and households within designated Urban Villages (typically denser areas) within a 5-minute walk to a park.

Over the next 2 years, Seattle's commitment to specifically advance these efforts will include the following:

- Expand blue-green space access and blue-green infrastructure in the city, with a priority on equity considerations. Update and improve open space analyses and continue to enhance the ability of this work to identify shared priorities across departments and agencies and guide new equitable green investments. Continue to improve existing parks and nature experiences through Seattle Parks and Recreation's acquisition program purchases of new property and City nature based/nature enhanced capital improvements (i.e. green stormwater infrastructure, tree planting) prioritizing areas with the greatest disparities and urban heat island risks.
- Identify ways to evaluate the quality of existing green spaces and assess people's experience in them. This site-specific outreach and analysis will provide information about disparities in park experience and help to ensure that people do not just have access to green spaces, but that they feel welcome in them and that these public spaces provide the opportunities and benefits they seek.
- Sustain and enhance opportunities for local stewardship and enhancement of blue-green spaces and functioning through green infrastructure job corps development, support of community-led efforts, incentivizing riparian restoration, etc.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

Seattle has made significant progress to align urban nature and blue-green space access and acquisition strategies across departments, and an Interdepartmental Team (IDT) is in consideration to formalize this cooperation (including utilizing the Comprehensive Plan). Seattle also has many existing development standards and incentives to encourage the use of green roofs, green stormwater infrastructure, and open space into both public and private investments.

Over the next 2 years Seattle's commitment to specifically advance these efforts will include the following:

- Identify shared combined funding opportunities, priorities, and creative agreements to support

this work. In particular, the City of Seattle is in conversations with Seattle Public Schools to incorporate schoolyards through an expansion to the Joint Use Agreement between Schools and Seattle Parks and Recreation.

- Evaluate best practice opportunities to expand or revise development policies, standards and incentives to support creative ways to further integrate nature and nature-based infrastructure into the city's public and private developments and rights of way including rainwater capture and reuse, natural drainage systems, green roofs, food production, tree planting, etc.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Over the coming years, Seattle will work with others to further integrate mapped urban nature inventories and analyses of natural assets to inform vulnerabilities and equitable and just prioritization and investment opportunities. Elements to be considered include, but are not limited to:

- Tree canopy
- Impervious surface
- Urban heat
- Water quality
- Species health and diversity
- Carbon sequestration potential
- Natural shoreline/floodplain habitat and functioning
- Environment and public health disparities/outcomes mapping

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The City has several existing frameworks for mandating and incentivizing the inclusion of green space and green stormwater infrastructure in private development. Requirements include the Seattle Green Factor and the stormwater code's onsite stormwater management. Seattle Green Factor is a score-based code requirement that increases the amount of and improves the quality of landscaping in new development. The on-site stormwater code requirements ensure new development projects manage new or replaced impervious surfaces through distributed practices, primarily with green stormwater infrastructure, where feasible. Incentives include a host of green stormwater infrastructure incentives programs, some existing and some in development, for partner agencies or private development to go beyond code. SPU's GSI incentives programs pay for these voluntary improvements, which may include approaches like an enhancement of an existing yard to include a rain garden, or constructing centralized bioretention facilities in a former parking lot area to manage extra public and/or private runoff. Seattle also has designations in place as a Bee City and an Urban Bird Treaty City, through which City departments work with other community organizations and partners to enhance habitats in both natural areas and developed landscapes. They also create frameworks through which additional species protections can be incorporated such as bird-friendly building practices.

Over the next 2 years Seattle's commitment to specifically advance these efforts will include the following:

- Seattle will continue to work to optimize the existing programs for maximum impact.
- Launch new GSI incentives program, RainCity.

Other supportive actions you may want to highlight

Equitable access to blue-green spaces is central to Seattle's approaches and is informed by the City's race and social equity index mapping which geographically identifies priority areas for addressing racial, environmental, and public health inequities in the City.

Over the coming years, Seattle will continue to prioritize investment in these areas while also working to develop and implement strategies for preventing green gentrification.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

Parks District Funding, possibly REET funding, General Fund, Drainage and Wastewater utility funding.



Toronto

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

Toronto Biodiversity Strategy

Progress will be made towards 23 actions that enhance biodiversity and increase awareness of nature in Toronto under the themes of protect, restore, design and engage. Progress will be reported annually on the Biodiversity Strategy website.

Pollinator Protection Strategy

The Strategy identifies a set of guiding principles, six priorities and 30 actions that the City and community can take to protect our diverse native pollinator community. A total of 33 projects will receive funding to undertake pollinator stewardship activities in their community in 2021 through PollinateTO Community Grants, including 31 Neighbourhood Improvement Areas.

Ravine Strategy

Progress will be made on the 20 short, medium and long term actions identified in Toronto's Ravine Strategy that guides the management, use, enhancement and protection of 11,000 ha of ravine protected lands.

Toronto Green Standard

Toronto will update the Toronto Green Standard (TGS) to enhance performance measures for new development that benefit the environment and nature including reducing greenhouse gas emissions, reducing bird collisions with buildings and improving the survival of trees.

Toronto is certified as a Bird Friendly City under Nature Canada's Bird Friendly City Certification Program. The certification criteria are public.

Involvement of Vulnerable and Marginalized Communities in Nature Targets

As part of implementation of the Ravine Strategy, Toronto is working with Park People to ensure communities experience, celebrate and champion our one-of-a-kind ravine system. InTO the Ravines will

provide:

- Innovative public programming that shines a light on the ravines.
- Micro-grants to spur events and activities about our ravines.
- Training to establish InTO the Ravines Community Champions.

With a focus on individuals and communities that have not visited these natural areas previously, including underserved communities, Neighbourhood Improvement Areas, and racialized and BIPOC communities.

As part of developing Toronto's Green Streets program, the City of Toronto has partnered with two local Employment Social Enterprises, RAINscapeTO and Building Up, to hire and train individuals from local Neighbourhood Improvement Areas or those experiencing barriers to employment for the maintenance of bio-swales, pollinator gardens and other green spaces that are critical to increase the neighbourhoods' climate resilience and biodiversity. Over two dozen sites have been identified for maintenance as part of this pilot. Many are located in neighbourhoods, which are identified as Neighbourhood Improvement Areas and subject to flooding events.

Toronto is a partner City in the Biophilic City network and will report annually on 5 self-identified indicators to assess and evaluate Toronto's biophilic progress over time.

The Toronto Resilience Strategy includes an action to reduce the urban heat island through the installation of green infrastructure. This action is supported by Official Plan policies that promote green infrastructure as part of designing the public realm, new mixed use development and institutional areas.

In addition, the Toronto Green Standard addresses Tree Canopy, landscapes and Biodiversity, Climate Positive landscapes for new development.

Toronto uses nature "to help mitigate the effects of heat on human health due to heat waves or local heat island effects". We are setting targets for tree canopy cover at the neighbourhood scale to address tree canopy inequity, which includes access to the benefits trees provide, including carbon sequestration and shade provision.

The Policy for the Provision of Shade at Parks, Forestry and Recreation Sites from February 2007 may be relevant. The policy statement, in part, speaks to the provision of shade providing co-benefits of reducing greenhouse gas and air pollutant emission, mitigating urban heat island effect and reducing energy costs through energy savings. The policy objectives are to increase opportunities for UVR protection at PFR sites and facilities. No specific targets are mentioned. <https://www.toronto.ca/legdocs/mmis/2008/pe/bgrd/backgroundfile-10540.pdf>

Related to the above is the Shade Guidelines Summary which talks about natural shade and tree canopy density as it relates to UVR protection. <https://www.tcdsb.org/FORSTUDENTS/HealthandSafety/hotweather/Appendix-D-City-of-Toronto-Shade-Guidelines.pdf>

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

The Parkland Strategy

Parkland supply and distribution was assessed in consultation with stakeholders. Gaps were identified in park supply, size, and function. The 20-year plan will guide long-term planning for new parks and expansion and improved access to existing parks.

Ravine Strategy - Priority Investment Areas

Priority investment areas have been identified as part of the implementation plan of the Ravine Strategy. These areas are the highest priority across 105 ravine segments because they have combined ecological health and sensitivity, planned capital work, anticipated population growth in adjacent neighbourhoods, and access to other green spaces for nearby neighbourhoods, as well as other equity factors.

The first 10 PIAs were assessed to determine the need for investment in three main categories: enhancing access; creating new boardwalks, lookouts and seating areas; improving trails and formalizing access points; protecting and restoring ecological features; creating wetlands, managing invasive species, and restoring forests; increasing resilience: stabilizing river banks from erosion.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

Ravine Strategy

Multiple City divisions, TRCA, other partner organizations, along with other levels of government are working together to address the challenges facing Toronto's ravines including park enhancements; storm damage repair and reconstruction of ravine parks; multi-use trail, cycling, pedestrian and public realm improvements; bridge state-of-good-repair work; watercourse erosion mitigation projects and channel stabilization to protect water mains and sewers and other assets.

Green Streets Governance Model & Asset Management

An interdivisional governance model has been established and will oversee the implementation of Right-of-Way Green Infrastructure: The Green Streets Steering Committee provides strategic high level oversight from 5 key divisions (Toronto Water, Parks, Forestry & Recreation, Engineering and Construction Services, City Planning and is chaired by Transportation Services) to the staff level Green Streets Working Group. Similarly, Green Street's assets are co-owned by Transportation Services, Toronto Water, and Parks Forestry and Recreation (Urban Forestry). Asset management and maintenance of Green Streets assets are primarily performed by Transportation Services, with support from Toronto Water and Parks, Forestry, and Recreation.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Strategic Forest Management Plan (2012-2022)

The existing plan will be updated, building on six strategic goals: increase canopy cover, achieve equitable distribution, increase biodiversity, increase awareness, promote stewardship, and improve monitoring.

Tree Canopy Study

Prepare for the third city-wide urban forest assessment due in 2028. Previous Tree Canopy Studies provided a snapshot of current urban forest conditions, provided information about broad changes and trends in the urban forest over time, and included information about the extent, size, class, and composition of the urban forest. The Study includes information on the amount and dollar value of several key ecosystem services provided by the urban forest.

TRCA Climate Vulnerability Assessment

Use data layers, developed by the Toronto and Region Conservation Authority for terrestrial ecosystem climate change assessments, to help identify key areas where enhancements can be made to existing natural heritage systems or where specific management actions are needed to build long-term resilience of the natural heritage system to a future climate.

Vegetation Sampling Protocol

In collaboration with the University of Toronto, continue to monitor 314 permanent ecological monitoring plots within Toronto's ravines and naturalized areas. Initial results of this project are being used to help define baseline ecological conditions and derive indicators of ecological integrity. Longer term monitoring will enable evaluation of ecosystem changes over time and will contribute to a more detailed assessment of ecological goods and services provided, including carbon sink analysis.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

Toronto is developing a Master Plan for the Toronto Island Park that includes Indigenous participation to develop an Indigenous approach to design based on land stewardship centred around recognizing the rights of landscape as a living being first and considering our responsibilities to a place now and into the future. The Master Plan is scheduled to be completed by mid 2022.

Through the Ravine Strategy, Toronto has established two new student internship programs. The Ravine Youth Team, offered in partnership with the TRCA, provides paid summer employment, along with opportunities to develop job-related and professional skills and learn about career opportunities in ravines. Toronto is leveraging existing programs and networks to promote the opportunities to youth in Neighbourhood Improvement Areas and equity-seeking groups. In 2021, Toronto will also pilot a new partnership with local non-profit LEAF to offer a free ravine-focussed mentorship and training program that will provide 20 youth with tangible skills, the chance to build connections in their communities, mentorship from LEAF staff, as well as guest lectures and networking opportunities with ravine leaders and experts through virtual training sessions, and through outdoor, hands-on ravine engagement (COVID-19 regulations permitting). This program will seek to support Toronto youth from underrepresented groups within arboriculture and urban forestry, including but not limited to women, non-binary people, Indigenous peoples, newcomers, LGBTQ+ people and racialized individuals and will prioritize the selection of youth from Neighborhood Improvement Areas.

Continue with PollinateTO Community Grants to provide funding for pollinator gardens located in Toronto.

Continue with Urban Forest Grants and Incentives - Fourteen projects received funding in support of tree planting and stewardship on private land in 2020. Over 13,000 trees and shrubs will be planted through these projects. They will engage and educate communities through planting events, educational workshops, citizen science, and youth programming. New projects will be selected for funding in 2022.

Other supportive actions you may want to highlight

- Live Green Toronto engages residents and businesses in greening our city and protecting our environment.
- The Green Line is a proposed new linear park system in an active hydro-electric corridor that will connect neighbourhoods and expand the broader open space network in midtown and west Toronto.
- The Meadoway Toronto and Region Conservation Authority (TRCA) and the Toronto and Region Conservation Foundation in partnership with the City of Toronto and Hydro One are working to transform a hydro corridor in Scarborough into a 16-kilometre stretch of urban greenspace and meadowlands that will become one of Canada's largest linear urban parks. The park will provide an east west green space connection between the Don Valley east branch and the Rouge Valley which is home to Canada's first National Urban Park.
- Working jointly with other levels of government; accessing infrastructure funds.
- Don Mouth Naturalization and Port Lands Flood Protection Project.
- Evergreen Loop Trail working with TRCA and non-profit organizations.
- Guidelines for 'Greening' Surface Parking Lots provide specific strategies and measures which developers, designers and reviewers of surface parking lots can apply to help environmental targets.
- Development of Standard Drawings, Construction Specifications and Guidelines for the Implementation of Green Infrastructure in the Right-of-Way (ROW).

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

Ravine Strategy

In 2021, the City will invest approximately \$82.5 million towards implementing Toronto's Ravine Strategy across a variety of City divisions including Park Forestry and Recreation, Transportation Services and Toronto Water as well as the Toronto and Region Conservation Authority. This estimated investment will be used to support establishment of Ravine unit for implementation of the Strategy, new and realigned Operating funding to support ravine litter picking, additional invasive species management, and new engagement and student internship programs. Direction to seek funding of other levels of government and establish a Ravine campaign to generate additional funds.

Additional Resources

- www.toronto.ca/explore-enjoy/parks-gardens-beaches/ravines-natural-parklands/biodiversity-in-the-city/
- <https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/reports-plans-policies-research/draft-pollinator-strategy/>
- <https://www.toronto.ca/services-payments/water-environment/environmental-grants-incentives/pollinateto-community-grants/>
- <https://www.toronto.ca/city-government/data-research-maps/neighbourhoods-communities/nia-profiles/>
- <https://www.toronto.ca/wp-content/uploads/2017/10/9183-TorontoRavineStrategy.pdf>
- <https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/toronto-green-standard/toronto-green-standard-version-3/mid-to-high-rise-residential-all-non-residential-version-3/>
- <https://naturecanada.ca/bfc/#aboutprogram>
- <https://parkpeople.ca/opportunity/into-the-ravines/>
- <https://parkpeople.ca/opportunity/into-the-ravines-grants/>
- parkpeople.ca/meet-our-2021-into-the-ravines-community-champions/
- <https://www.toronto.ca/services-payments/streets-parking-transportation/enhancing-our-streets-and-public-realms/green-streets/>
- <https://www.buildup.ca/>
- <https://www.tcdsb.org/FORSTUDENTS/HealthandSafety/hotweather/Appendix-D-City-of-Toronto-Shade-Guidelines.pdf>
- <https://www.toronto.ca/legdocs/mmis/2008/pe/bgrd/backgroundfile-10540.pdf>
- <https://www.toronto.ca/city-government/accountability-operations-customer-service/long-term-vision-plans-and-strategies/parkland-strategy/>
- <https://www.toronto.ca/city-government/accountability-operations-customer-service/long-term-vision-plans-and-strategies/strategic-forest-management-plan/>
- <https://www.toronto.ca/legdocs/mmis/2020/ie/bgrd/backgroundfile-141367.pdf>
- <https://www.toronto.ca/city-government/planning-development/construction-new-facilities/parks-facility-plans-strategies/toronto-island-park-master-plan/>
- <https://www.toronto.ca/services-payments/water-environment/environmental-grants-incentives/pollinateto-community-grants/>
- <https://www.toronto.ca/business-economy/partnerships-sponsorships-donations/partner-2/parks-environment/urban-forestry-grants-and-incentives/>
- <https://www.toronto.ca/business-economy/partnerships-sponsorships-donations/partner-2/parks-environment/live-green/>
- <https://themedoway.ca/>
- <https://trca.ca/conservation/green-infrastructure/don-mouth-naturalization-port-lands-flood-protection-project/>
- <https://www.evergreen.ca/blog/entry/loop-trail-connecting-and-protecting-torontos-ravines/>
- <https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/design-guidelines/greening-surface-parking-lots/>
- <https://www.toronto.ca/city-government/planning-development/construction-new-facilities/parks-facility-plans-strategies/green-line-implementation-plan/#:~:text=Approximately%20five%20kilometres%20in%20length,in%20midtown%20and%20west%20Toronto.>

Quezon City

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

- Develop more public parks & community parks.
- Start an inventory of existing green spaces and their actual current size in square meters.
- Survey easements, open spaces and other potential green spaces.
- Conduct community-based monitoring system.
- Develop and implement an information, education and communication campaign and prioritize the relocation of informal settlers in danger zones for possible conversion to green spaces.

With regard to green jobs, Strategy 5 would open opportunities for green jobs given the various actions and initiatives, both for unskilled and skilled, such as construction workers, farmers, forest management and park workers, architects, project engineers, technical consulting, geological services, environmental engineers, those engaged with surveying and mapping, conservation scientists and other related professions.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

- Conduct a gap analysis workshop with all relevant stakeholders (City Government, National Government, Private Sector, Academe, etc.). For the most vulnerable groups, as part of the City's flood and drainage management, the City is also pursuing the improvement of the state of the City's waterways and prioritize the relocation of those living in these danger zones in in-city housing units. As we clear these areas, we also plan to create linear parks and breathing spaces for our citizens.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

- Form a Technical Working Group (TWG) under the Environment Policy Management Council to monitor key indicators and milestones to ensure compliance with the Urban Nature Declaration Commitment.
- Ensure inclusive and multi-stakeholder participation in terms of planning and project implementation.

With regard to the Technical Working Groups (TWGs) to be developed for the C40 Urban Nature Declaration, we also have an Environment Policy Management Council (EPMC) created through an Executive Order to streamline policies and strategies on climate change and sustainability related programs as well as projects and activities that require interdepartmental collaboration. We have similar TWGs under the EPMC to ensure compliance to technical assistance and international commitments and declaration. A TWG for this initiative will be created through an EPMC Resolution composed of relevant Departments/Offices.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

- Conduct a Green Space Inventory and establish a Green Space GIS map/database in collaboration with various Departments and National Government Agencies.
- Formulate a Comprehensive Greening Masterplan and Green Network Plan.
- Formulate an Urban Biodiversity Strategic Action Plan.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

- Facilitate the finalization of the Green Building Code Amendment and enact ordinances on green corridors and inter-connectivity of green spaces.
- Formulate a Comprehensive Greening Masterplan and Green Network Plan.
- Formulate an Urban Biodiversity Strategic Action Plan.
- Formulate design standards for parks and green spaces.

Other supportive actions you may want to highlight

- Formulate a Comprehensive Greening Masterplan and Green Network Plan.

For our additional inputs, may we please refer you to the attached Strategy 5 – Promotion of Nature-Based Solutions to Reduce Heat and Drought Pressures as incorporated in our Enhanced Local Climate Change Action Plan 2021 - 2050. This is an integral strategy on climate change adaptation as the Enhanced LCCAP performed a qualitative assessment of the climate impacts experienced by the City in the following areas: (i) natural (ecological and environmental

stability, water sufficiency), (ii) social (human security, knowledge and capacity development), and (iii) economic (sustainable energy, infrastructure, and transport, food, and industries and services). These are based on the key climate risks identified in Quezon City (i.e., heat, cyclones and floods, and drought) and the impacts on three overarching sectors (social, natural, and economic).

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

City General Funds and possible Financial Assistance from Donors.



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Sydney

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Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

- The Greening Sydney Strategy (draft) includes our nature goals and targets. This document has just finished the community consultation process and is due for Council adoption in July 2021.
- A review and update of our Urban Forest Strategy is due by mid-2022 and our Urban Ecology Strategic Action Plan is also due for review within the next two years. During this process the City will work to develop the process for involving vulnerable and marginalized communities in the design and implementation of the targets.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

The City has completed comprehensive mapping and analysis of greening and tree canopy cover, including where greening is needed to deliver our strategic outcomes. The City also has a comprehensive asset management plan for existing green spaces that require capital work upgrades. The City measures and updates its overall canopy and greening every two years. Our individual tree asset / parks data is updated daily when inspections or work is undertaken to give ongoing insight of management or operational issues, and to respond to local needs.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

The implementation of the Greening Sydney Strategy will assist the City to address governance barriers. This includes;

- Portfolio targets - new targets for greening in parks, streets and private property will encourage and hold the various departments across Council who manage / oversee or impact greening on that land category accountable.
- Developing a new Greening Sydney Fund - where developers pay the City a compensation fee to remove trees (as a last resort) and this fund will provide monetary assistance to private property owners to green their property.
- Developing a Green Factor Score - to assist developers to provide sufficient quality and quantity of greening during the development / planning process.
- The City is also updating its planning controls to make the canopy cover targets easier to understand and implement. This has been drafted, and is ready for Council approval in late 2021, and implementation by late 2022 (subject to state government approval).

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

- The City has complete and extensive inventory on our trees and urban forest canopy cover. We are finalizing the baseline inventory on our parks and open space assets. We have baseline data on natural vegetation as part of our urban ecology program (noting the City of Sydney local government area has little natural vegetation / bushland).
- The City values these natural assets as part of its asset management program for managing and allocating funding for the maintenance and renewal of these assets.
- The City will investigate a natural capital accounting methodology as part of the Urban Forest Strategy and Urban Ecology Strategic Action Plan to assist in raising awareness of the value of nature in the City.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

As outlined above, the City is

- Developing a new Greening Sydney Fund - where developers pay the City a compensation fee to remove trees (as a last resort) and this fund will provide monetary assistance to private property owners to green their property.
- Developing a Green Factor Score - to assist developers to provide sufficient quality and quantity of greening during the development / planning process.
- Updating its planning controls to make the canopy cover targets easier to understand and implement. This has been drafted, and is ready for Council approval in late 2021, and implementation by late 2022 (subject to state government approval).

Other supportive actions you may want to highlight

The City's Greening Sydney Strategy has an overall vision to increase greening to create a cool, calm and resilient city. The Strategy outlines six directions, and 20 supporting actions.

- Direction 1 - Turn grey to green
- Direction 2 - Greening for all
- Direction 3 - Cool and calm spaces
- Direction 4 - Greener buildings
- Direction 5 - Nature in the city
- Direction 6 - Greening together

The City of Sydney will prioritise greening initiatives to address any inequities, to provide the greatest benefit, and to assist our most vulnerable communities. The Strategy outlines the benefits, opportunities and obstacles to greening in our city and how we plan to implement and provide a cool, calm, beautiful and resilient place to live, work and visit.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

The City has costed the delivery of the Greening Sydney Strategy, and has allocated sufficient resources to its implementation. This includes an increase in budget of about \$3M per annum.

Additional Resources

<https://www.cityofsydney.nsw.gov.au/strategies-action-plans/greening-sydney-strategy>

<https://storymaps.arcgis.com/stories/2118910623af422a87b521adb66a79f4>

Tokyo



Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

- We will revise the biodiversity regional strategy and plan to develop various measures based on the strategy in the future. We plan to write perspectives such as nature based solutions and green infrastructure in the biodiversity regional strategy to be formulated in the future.
- The current CAP (Zero Emission Tokyo Strategy) has a green infrastructure perspective.
- We have set the goal of “not reducing the total amount of greenery in Tokyo anymore” and implemented the following initiatives. It is a goal for the whole of Tokyo and includes private green spaces:

Operation of greening plan.

New designation and publicization of conservation areas “Expansion of about 100ha by 2050”

Promotion of participation in nature experience activities in conservation areas (Environment Bureau)

Park maintenance

Metropolitan park: 130ha new opening by 2030

Marine park: 107ha new opening by 2028

Green employment / skill acquisition program

Certification of the Tokyo Nature Guide for promoting ecotourism in Tokyo

Implementation of human resources development system “ECO-TOP program

Implementation of green volunteer leader training course

Implementation of seminars to promote greening in consideration of the ecosystem

Community involvement

Nature experience activities in conservation areas (No.39: Go to Satoyama, Conservation Area Experience Program)

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Securing existing greenery (private land)

- “Policies to protect existing greenery” based on “Comprehensive policy for securing greenery”
- Development of new parks and green spaces

City planning park / green space maintenance policy https://www.toshiseibi.metro.tokyo.lg.jp/seisaku/kaitei_koen_ryokuti/

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

Green bond: Conservation of the natural environment (promotion of greening in waterside spaces, maintenance of parks, etc.) https://www.zaimu.metro.tokyo.lg.jp/bond/tosai_ir/tosai_ir_gb.html

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Wildlife species (Red List) important for the protection of Tokyo have been formulated (mainland part has been revised in 2020, island part will be revised in the future)

https://www.kankyo.metro.tokyo.lg.jp/nature/animals_plants/red_data_book/redlist2020.html

- Existing vegetation map (mainland / island) has been formulated. Existing vegetation maps are not directly linked to the climate change risk assessment. We believe that it may be used as basic information such as confirmation of whether vegetation is changing due to climate change.

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

- Obligation

Based on the “Ordinance on the Conservation and Restoration of Nature in Tokyo”, when building a new building, extension or renovation, etc. on a site of a certain size or larger, a notification of a greening plan is obligatory and greening guidance is provided. https://www.kankyo.metro.tokyo.lg.jp/nature/green/plan_system/plan_system.html

Based on the “Ordinance on the Conservation and Restoration of Nature in Tokyo,” when developing residential land on land of a certain size or larger, the development will be regulated with the permission or consultation of the governor.

- Incentive

A system to ease the floor area ratio for a good architectural plan (urban development systems) https://www.toshiseibi.metro.tokyo.lg.jp/cpproject/intro/description_1.html

Support for park maintenance for municipalities.

Financial support for expenses related to ecosystem conservation for municipalities.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

- Establishment of the Tokyo Fund (30 billion yen)

Establishment of the Tokyo Fund Ordinance (30 billion yen) which will go towards the creation of green spaces. A fund based on the “Tokyo Fund Ordinance Full of Greenery” passed by the Tokyo Metropolitan Assembly in 2020. The “Tokyo Fund Ordinance, which is full of greenery,” is used by the Tokyo Metropolitan Government to fund the conservation and creation of green spaces in cities. (Subsidies to municipalities, etc).

- Regional environmental power revitalization project in collaboration with Tokyo’s municipalities (subsidized by municipalities).
- Flowers and greens in Tokyo.

Additional Resources

https://www.kankyo.metro.tokyo.lg.jp/nature/green/plan_system/plan_system.html

https://www.toshiseibi.metro.tokyo.lg.jp/seisaku/midori_kakuho/index.html

https://www.toshiseibi.metro.tokyo.lg.jp/seisaku/kaitei_koen_ryokuti/

https://www.toshiseibi.metro.tokyo.lg.jp/seisaku/midori_kakuho/pdf/houshin_202006_02.pdf

https://www.toshiseibi.metro.tokyo.lg.jp/seisaku/midori_kakuho/index.html

https://www.kankyo.metro.tokyo.lg.jp/nature/animals_plants/red_data_book/redlist2020.html

<http://gis.biodic.go.jp/webgis/sc-025.html?kind=vg>

https://www.toshiseibi.metro.tokyo.lg.jp/cpproject/intro/description_1.html

https://www.reiki.metro.tokyo.lg.jp/reiki/reiki_honbun/g101RG00005097.html

Mumbai

Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities in design and implementation and monitoring of our nature targets.

A ten member Climate Task Force is appointed to monitor & evaluate the targets set through the Mumbai Climate Action Plan. The climate action plan will have mitigation targets pertaining to the conservation of the present green spaces in the city along with a set target to amplify the urban forest percentage and ancillary efforts to reduce flooding in the city. The appointment of a Climate Fellow is proposed for the development of actionable programs within the city.

Conduct a gap analysis and mapping of where new greening is needed and opportunities for existing green spaces to be upgraded to respond to local needs.

Mumbai has partnered with Cities4Forest with WRI as their knowledge partner agency with whom an analysis will be conducted to form an actionable policy framework & target the enhancement of urban green areas in Mumbai that will also be addressed in the Climate Change Risk Assessment of the Climate Action Plan.

Significantly accelerate action to address governance barriers to implementation, and mobilize access to investments and resources that support the Declaration targets; this includes sharing approaches and learnings in recognising funding and governance mechanisms for delivering urban nature solutions.

All the stakeholder state departments of Government of Maharashtra are working with the Municipal Corporation of Greater Mumbai to address governance barriers by aligning their climate goals & resource sharing.

Complete a baseline natural vegetation inventory and undertake natural capital accounting to raise awareness of the associated value of urban nature with particular emphasis on climate hazard risk reduction.

Mumbai's partnership with Cities4Forest aims to protect, conserve, & promote nature based solutions. Inventory & baseline data of trees & mangroves of the entire city will be conducted to form a GHG inventory, suggest policy interventions & create a framework to amplify per capita urban green cover. Heat analysis & hotspots will be identified from the nature inventory giving us insights into the adaptation action points

Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross sectors within public services; to increase and enhance natural solutions in our urban form, buildings and infrastructure design that provide direct human, ecosystem and climate services towards achieving the 2030 target.

The state department of Environment & Climate change has put forward the 'Tree Act' which highlights the conservation of old trees & implements strict practices on felling trees in urban settlements. For mangrove protection, all the mangroves on government land are declared as 'Reserved Forest' giving them a higher protection status. The My Earth Mission engages with various stakeholders in civic bodies to ensure the implementation of various climate solutions.

Other supportive actions you may want to highlight

Urban Forest Thickets in Low Income Neighbourhoods is currently in its planning stage under the Cities4Forest initiative.

Example of financial resources available to deliver the commitment (can be for all or one of the main or supportive actions above)

BMC (city council) has a dedicated tree authority which focuses on tree plantations (dept budget estimate for 19-20 approx (13.5 million dollars)) along with state funds & national funds which will be communicated in the due course.



