Urban Nature Declaration

Planned Actions to Deliver Commitments
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.

### Significant actions

- **Develop new inclusive governance frameworks, practices and programmes** (1) to mandate or incentivize the conservation of key biodiversity 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 Isandla 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.

### 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).

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.
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.

**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 toward 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 1b 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$ 18 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 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


We are currently finalizing the technical plans for a Nature Capital Finance Facility loan that is part of a $5m 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.

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 (Eliaonas).

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.

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.
Take 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 Green and Biodiversity Plan 2011–2020 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 360 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 2020 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 30 m. 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.

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 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
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 $100 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 neighbourhods 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-incremental 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 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](https://www.berlin.de/kl/ka/berliner-stadtlandschaft/berliner-stadtlandschaft-strategie/).

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 1m² 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](https://www.berlin.de/kl/ka/berliner-stadtlandschaft/berliner-stadtlandschaft-strategie/).

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 (“Bundesa-Rutschturschutzgesetz”) 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](https://www.berlin.de/kl/ka/berliner-stadtlandschaft/berliner-stadtlandschaft-strategie/).

The Berlin Energy and Climate Protection Programme 2030 („BEK 2030 – Berliner Energie- und Klimaschutzpro gramm 2030“) has been in place since 2017 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 2020. 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 BERK 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](https://www.berlin.de/kl/ka/berliner-stadtlandschaft/berliner-stadtlandschaft-strategie/).

In the area of adaptation, the 2016 Urban Development Plan on Climate (“SIP Klima – Stadtentwicklungskonzept 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 SIEN 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 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 neighbourhods 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-incremental 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 to launch the so-called urban tree campaign (for planting new urban trees) and the mixed forest programme (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 con-sidering 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](https://www.berlin.de/kl/ka/berliner-stadtlandschaft/berliner-stadtlandschaft-strategie/) (in German).
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 dis-tribution of near-natural and cultivated biotopes. All forest and woodland areas, Natura 2000-sites, nature con-servation 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. The areas were then assigned to different biotope classes (1-12). The existing areas are described in detail on the basis of their habi-tat, 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 parame-ters 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 2012; 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 area-as 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 com-missioned by the Senate Department for the Environment, Transport and Climate Protection to research the social value of the Tempelhofer Feld.

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 36,400,000 € 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/grundachplus/
- https://www.berlin.de/sen/uvk/umwelt/stadtgruen/
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 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 2012 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.

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.

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 Copenhageners 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

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Additional Resources

Biofactor Tool

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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 hydronic 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.

**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 experience in nature-based and climate-smart 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-based 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.

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 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 Israel 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.

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
Take 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 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.

- 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.

Conduct a gap analysis and mapping of where new green spaces to be upgraded to respond to local needs.

- In 2021 that identifies areas of the city that have inadequate access to public open spaces and the lowest areas of green cover so that action to increase nature based solutions can be prioritised in these areas.

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

- The green cover map of London was published in 2013. 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.

Significantly accelerate action to address governance barriers to implementation, and mobilise 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.

- 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.

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.

- 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 and space as part of the CLEVER Cities project, and share learning from the project with other housing providers by 2023.

- Complete a 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.

- 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 3 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 to plant c.7000 new street trees in areas of lowest tree canopy cover by 2024.

- 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 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.

- Significantly accelerate action to address governance barriers to implementation, and mobilise 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.

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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 2023/24 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 3600 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://data.london.gov.uk/dataset/climate-risk-mapping)
- [https://www.greentoggether.co.uk/](https://www.greentoggether.co.uk/)
- [https://apps.london.gov.uk/green-infrastructure/](https://apps.london.gov.uk/green-infrastructure/)
- [https://www.london.gov.uk/what-we-do/funding/future-neighbourhoods-2030](https://www.london.gov.uk/what-we-do/funding/future-neighbourhoods-2030)
- [https://apps.london.gov.uk/green-cover/](https://apps.london.gov.uk/green-cover/)
- [https://clevercities.eu/](https://clevercities.eu/)
- [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/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/urban-greening-biodiversity-net-gain-design-guide)
More in detail:

- An environmental transition process initiated through 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 participatory process through which citizens and stakeholders 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 green roof and walls, with 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 30m satellite derived daytime LST images corresponding to the summer months (J une, J uly 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 503 “Green and blue infrastructures and Municipal ecological network” of the Services Plan of the PGT Milan 2030 (City Masterplan) - for the identification of areas for the implementation of natural infrastructures.

- 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 30,000 by March in the municipalities of the Metropolitan City, confirming the growing trend of recent years (+ 12% 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. D EL 30 aprile 2019). 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.

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 strategies to rework rules and governance mechanisms for delivering urban nature solutions.

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

- ART. 11 “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.

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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 “Geopartale 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 - Environment 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 it possible to provide 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.

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/
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 involved in participatory projects. Exploratory walks are also a way to agree with these same interlocutors what needs to be improved.

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The climate agora or climate volunteers are also involved in participatory projects. Exploratory walks are also a way to agree with these same interlocutors what needs to be improved.
Other supportive actions you may want to highlight

1. 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 3km) during the day, this observation can also extend to almost the entire territory at night.

2. 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.

3. 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.

4. 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 Sentinel), the Parisian Environmental Health Plan which reconciles biodiversity and health, and the abandonment of the use of phytosanitary products in maintenance.

5. 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 35 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-vegetalisers-paris
https://www.apur.org/fr/nos-travaux/orientations-espace-publics-vegetalisers-paris
https://c40.box.com/s/k3owvbybx3ta5rzx9v0c0dbjgztw
https://cdn.paris.fr/paris/2021/03/11/0d339e2fc-fc589b3e/1bd0bde8240e709.pdf
https://cdn.paris.fr/presse/202103/03/d31b365949787e1b4c44e25278b62a0.pdf
https://cooperaive-oasis.org/
Take 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 Roma 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 extent 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 of 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 100,000 new trees by 2030, 2 million new trees by 2050.

Reduction of waterproofing in the Roma Capitale area, within 5 years.

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Examples of financial resources available to deliver the commitment (can be for all or one of the main 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/
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, 12.5mn 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 greennification/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.

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.

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.

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/
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/-stadstveckling/omraden/stockholm-ffokus/stockholmenv/omraden/historisk/ensamrad/klarlagdforstadsutveckling/ga--gynteaktoberffor-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 Djurgårdsstaden, the new Slussen and Stockholm’s future sewage treatment plant to name a few.
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 pathways of achieving the Sustainable Development Goals and lessons 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’s 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 overlayed 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 incentivise 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 changing 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 plan and re-establish nature sites annually by providing trees to residents who meet the necessary criteria and are in need ofeshading.

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/Forms/%D7%9A%D7%9C%D7%90%202012.pdf
Urban Nature Declaration

Statement.

To provide the framework to address issues related to this, participatory tables in these neighborhoods, where neighborhoods. Likewise, the IVC team carries out to achieve changes in habits in the residents of popular neighborhoods. 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 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 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 orgánica,” 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 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.

Since 2019, the City has had the Undersecretariat for Urban Green Infrastructure and Sustainable Development Policies (SSP/IVUDES), 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).

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 configuration of apple lungs.

In addition, the GCBA has the Arbolado Master Plan (2031) and the Arbolado Census (2017-2018) of the General Directorate of Green Spaces and Trees.

Some associated indicators are: Number of trees planted 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.

In order for the benefits of vegetation to reach the entire city, plantations are carried out in recovered spaces, and these are organized in vulnerable neighborhoods. Some associated indicators are: Number of people benefited by orchards in popular neighborhoods, nursery and gastronomic centers, percentage / number of popular neighborhoods with orchards, Number of people benefited by orchards in popular neighborhoods.

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 to 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.

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.

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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 programs (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.
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.
Resources through international cooperation

Additional Resources

https://www.buenosaires.gob.ar/planes/planeamiento/noticias/informe-de-cobertura-vegetal-un-relevamiento-de-la-superficie-de-masa-vegetal
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 its frameworks. For mitigation, the city proposes to link both households and productive units, especially of the vulnerable population, to productive and commercialization processes, which increases 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.

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 implementation strategies to promote private sector participation.

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. The City to follow up on this goal.

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 recognizing funding and governance mechanisms for delivering urban nature 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.

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.

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 13 million trees were identified in the public space; each tree has sub-meter 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 ODA 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 353 hectares to increase the supply of environmental and ecosystem services;
3. Implement the environmental management plan for 310 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 39 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.
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

http://sigau.jbb.gov.co/SigauBB/VisorPublico/VisorPublico
https://oab.ambientebogota.gov.co/
https://bogota.gov.co/node/35546
http://www.ambientebogota.gov.co/web/sda/proyectos-de-inversion
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 to the electronic address), 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.

The Municipal Plan for Mitigation and Adaptation to Climate Change was developed from November 2011 to December 2020 and was approved by the municipal decree No. 370, of December 31, 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 in 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 131 (one hundred and thirty-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).
Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link cross-sectoral 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 defines 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. 7833/1991 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 2013; Sanitation Law 2007; Climate Change Act 2005; Solid Waste Act 2010; Forest Code 2012; and Metropolis Statute 2012.

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 city to be used. 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 32 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 guapix (Melipona bicolor), manduri (Melipona marginata), manaca (Melipona quadrifasciata), jatã (Tetragonisca angustula) and mirim (Plebeia sp.). Bees live in natural 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 Caju 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 groups in the 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, implementing urban gardens in the care centers, managing to provide food to be used in the public kitchen of this institution.

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:
- Georeferenciating 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 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 13 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 20 Df 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:
- Georeferenciating 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

Guadalajara has the 2020 Planting Program which has the goal of planting more than 55,000 species of pollinating plants. During the 2018-2021 the addition of pollinating gardens, which will have

- 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 in 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 IMPLAN, 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.

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

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:
- Georeferenciating 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 censures 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.
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

Xo Parks Program

Metropolitan Development Program

Municipality’s Green Areas and Forest Resources Regulation

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Among the actions in ecosystems we have:

- 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.

Similarly, these goals will be made public through the portal of the Metropolitan Environmental Management 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/

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.

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.
Develop new inclusive governance frameworks, practices and programmes (1) to mandate or incentivize both the private sector (residents, businesses and institutions) and link across 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.

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%2C%20en%20la%20provincia%20de%20Lima.
https://sit.icl.gob.pe/biodiversidad_smia/

Urban Nature Declaration

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 12 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 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 Huïracocha, 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
The Quito Climate Change Action Plan (PACQ) is a roadmap that has the vision of achieving carbon neutrality and being resilient to extreme climate risks, by the year 2050, which contemplates a Nature-based Solutions (NbS) approach. The goals of the plan which align with this commitment include:

- Reduce greenhouse gas emissions by 30% by 2030, 50% by 2040, and net neutrality by 2050.
- Reduce climate vulnerability conditions and increase the adaptive capacities of urban and rural areas.
- Have an informed citizenry that is sensitive to climate change and promote local climate governance.

By 2022, it is planned to carry out a participatory process to strengthen climate change capacities with community actors.

Additionally, the city will develop a guide or general guidelines for Nature-based Solutions (NbS) until 2023 whose focus will be on 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.

Through co-creation and co-design practices, the NbS guide will be developed together with community actors (neighborhood: San Enrique de Velasco), institutions (Municipality of the Metropolitan District of Quito), academics (Universities located in Quito) and civil society (Organizations such as Grupo Faro, FONAG, FFLA, PMA, among others).

Other supportive actions you may want to highlight

One of the objectives of the PACQ in adaptation is to increase investments in adaptation projects and nature-based solutions by 25% by 2030. The indicator of this policy is to increase the budget allocated annually for the various projects/programs/adaptation initiatives and nature-based solutions. Co-creation and co-design of the NbS Plan will be a priority.

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

It is necessary to link the actions of this Declaration with the activities planned in the Annual Operating Plans of the institutions in order to ensure their development and compliance.

Additional Resources

http://geoportal.quito.gob.ec/smiq/
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 (2023). 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 (2023).

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 Latin America to participate in this project and it does so as a follower city. Its development is under the 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 grey 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:

- 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.
- Developing a prioritization model for the spatialization of potentially critical areas of the city, which will need to be incorporate natural solutions, 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 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.

The Renaturalization Plan currently being developed by the Department of Planning, in order to review the instruments that would allow the City to begin to evaluate the species we have and even more, to enjoy stable resources for the benefit of the public. 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 Ministry of Physical Infrastructure has a Siro, a portal system where the report is presented 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.

Conduct a gap analysis and mapping of where new green areas are 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, 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 Ministry of Physical Infrastructure has a Siro, a portal system where the report is presented 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.

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.

3. QUALIFICATION OF PUBLIC SPACE - OPPORTUNITIES TO IMPROVE GREEN SPACES
   The Ministry of Physical Infrastructure has a Siro portal system where the report is presented 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.

A new urban tree system 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 even more, to enjoy stable resources for the benefit of the public resources and private) that allow creating synergies around the common goal of increasing and maintaining green spaces.

The Renaturalization 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, and other municipalities. Justify and plan the strategy to be implemented with this input, natural capital can be evaluated to some extent, analyzing the different elements of green infrastructure and their co-benefits.

Another of its components is the management model to work on governance issues: The purpose is 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.

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.
- 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.ki
https://www.medellin.gov.co/sau/
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 educational 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 for 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.

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 10% 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 education of the population and the 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 1206 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.

Develop new inclusive governance frameworks, practices and programmes (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.

Additional Resources:
https://participarrio.pcrj.hub.arcgis.com/
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 revolve around equity were created for this goal in the PMAMC. We can think of seeking this equity with the universal access to green areas. No criteria revolving of green area by 2032 and the goal of expanding Plan (PMAMC), with the objective of reaching 36m² in the Mitigation and Adaptation to Climate Change Salvador made its goals public in relation to nature targets. 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 and plant plantations with communities.

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 action towards Declaration targets; this includes sharing new knowledge on 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 EbA 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 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.

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 20% 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/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.

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, 2003, which grants in its art. 5th discount of up to 30% (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/

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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
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 these 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, 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.

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 recognizing 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.

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.

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.
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
Conduct a gap analysis and mapping of where new monitoring of our nature targets.

• Make our nature goals public, develop support and 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.

Take 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 51urban 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.

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 recognizing 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.

Los Angeles

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.

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)

Other supportive actions you may want to highlight

Ensure proportion of Angelenos living within 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 3 cool neighborhoods by 2025 in vulnerable communities incorporating urban greening like shade trees in public right-of-way.

Host monthly “Lunch and Learn” webinars with City Forest Officer Rachel Malarch. 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.

Identify existing funding and prioritize funding for parks in areas of LA that are park-deficient through a cross-departmental Park Equity working group.

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

Take 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 2018 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 J P Morgan Chase Advancing Cities grant to boost job creation and new businesses in water management and other environmental sectors.
- $11 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

San Francisco

Take 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 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 implementation of the CAP.

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

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.

Conduct a gap analysis and mapping of where new green space can be developed. 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.

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 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
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.

**Create 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

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.
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
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:

• The signature of the C40 Urban Nature Accelerator and the commitment to follow both pathways were adopted at the August 22, 2022 City Council and were made public by press release on August 23, 2022.
• Since Montréal joined the international initiative CitiesWithNature in 2019, the City has finished gathering and started uploading documents demonstrating our numerous goals and actions regarding greening, biodiversity protection, park enhancement, etc. We should complete CitiesWithNature’s entire Nature Pathway in 2022.
• From our strategic plan Montreal 2030: Our priorities to accelerate ecological transition by nurturing nature in the city, putting biodiversity, green spaces, and the management and development of natural riverside and aquatic heritage at the heart of decision-making.
• Several other targets concerning nature in the city have been published in the Climate Plan (2020-2030) and in the Nature and Sports Plan (e.g. 5000 ha tree plantings by 2030, 10% of the land territory in protected natural environments by 2030, rehabilitating 10% km of public shoreline, etc.).
• In August 2022, the City of Montreal announced that the agglomeration of Montréal has exceeded its target of 25% canopy index for 2025 (25.3%). Therefore, the City has revised the target to 26% for 2025.
• The Urban Agriculture Strategy 2021-2026 targets a 33% increase in cultivated area, from 120 to 160 hectares.

Develop support and skills building programmes for green jobs:

• The City of Montreal supports through an annual financial contribution the activities of the Alliance de la forêt urbaine, a group of 50 organizations created in 2012 to implement the private and institutional component of the City of Montreal’s tree planting targets.
• Established by the City of Montreal and funded since then, the «Éco-quartier» program, an environmental action and education program rooted in local communities and based on the concepts of awareness, information, training and citizen participation. For example, the «Green Patrol» hires and trains 50 youth every summer to raise awareness about protection and promotion of the urban forest and procedures to follow during heatwaves.
• NGO partners of the City who, through agreements/grants, are located in large parks and provide environmental education, outdoor equipment rentals, etc.

Develop a process for involving vulnerable and marginalized communities in design:

Montreal uses intersectional gender-based analysis (GBA+) to understand the realities and discrimination experienced by the population. This information allows the city to take action to ensure equality between men and women and among women. This tool lets the city predict how the adoption of a policy, program or service will affect women and men, and helps it prevent negative effects. It also takes into account other forms of discrimination based on social class, disability, age, skin colour, ethnic origin, sexual orientation, gender identity, religion, etc.

The project QIR 2030 (Integrated and resilient neighborhoods) aims to transform living environments through an integrated, participatory and collaborative territorial approach in which a variety of concerted actors are mobilized at a local level. It is also based on territorial equity, prioritizing the most socially, economically, culturally and environmentally vulnerable sectors.

People’s vulnerabilities are taken into account in the implementation of the Climate Plan.

Engage vulnerable populations in climate planning and updates

Montréal’s Participatory Budget: process involving citizens and community organizations at three stages: 1) ideas provided by the community; 2) Development of the ideas into projects that will be done by a joint committee including representatives of civil society; 3) Projects approved are voted on by the citizens. The city allocated 75 million $ in its Ten-Year Capital Expenditures Program 2022-2031 to that process.

Implementation and monitoring of our nature targets:

• Montreal has selected 4 adaptation/resilience indicators for the annual Climate Plan progress report: Number of trees planted (with a prioritization for vulnerable areas), Percentage of land area in protected natural areas, Status of various climate hazard shown on vulnerability maps, Heat islands areas.
• Within the framework of the Nature and Sports Plan, the monitoring of internal indicators makes it possible to prioritize interventions and investments.
• The new indicators needed to monitor the two pathways will be added to the regular monitoring pathways will be added to the regular monitoring

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 order to prioritize the areas most vulnerable to heat waves for tree planting and other greening measures, Montreal is developing a map based on several important data: vulnerability assessment, urban heat islands, land use and population-based data on selected public health and social disadvantage criteria.

Update climate change vulnerability assessment (every 5 years), including heat islands map and urban canopy.

Explore integration of adaptive capacity in Montreal vulnerability assessment.

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.

• Climate test - gradual integration of greening indicators into investment projects and programs to inform decision makers
• Integration of natural infrastructures to the Ten-Year Capital Expenditures Program
• Since 2019, the city’s financial report has also included an unaided section intended to make financial information related to climate change transparent.
• Representation to include natural asset in accounting standards to the Public Sector Accounting Board

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 infrastructure and ecological inventories:

• The inventory and georeferencing of natural infrastructure is an ongoing challenge, to allow for proper management of those assets. Good IT tools to achieve this have yet to be developed.
• The quality and availability of databases depends on the type of infrastructure. The data is fairly up-to-date for public green spaces; but remains perfectible for urban trees. For other natural infrastructures such as green roofs and green road infrastructures, there is still a lot of development to do in order to have structured databases with a good tracking mechanism.

In order to prioritize the areas most vulnerable to
• The Ecosystem Management Program in the large parks provides ecosystem knowledge, ecological assessment, monitoring of components of interest, and on-the-ground intervention to protect and enhance biological diversity.

• Floristic inventories are conducted in our nature parks and parc du Mont-Royal every ten years. They pay a particular attention to plant communities, plant species at risk and invasive plant species of concern to the parks.

Natural capital accounting and climate hazard risk reduction:

• The City of Montreal has given a mandate to assess the ecosystem service value by species of newly planted and mature trees.

• Develop partnerships to inventory and quantify the ecological services provided by the various natural infrastructures in Montreal.

• Explore integration of risk analysis in Montreal vulnerability assessment.

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, natural solutions in our urban form, buildings and within public services; to increase and enhance businesses and institutions) and link cross sectors in incentivize both the private sector (residents, practices and programmes (1) to mandate or

Practices and programmes to engage residents and businesses:

• Montreal’s Office of Public Consultation has several mandates concerning the requalification and redevelopment of neighbourhoods or the creation of new parks.

• The City of Montreal annually supports the «Alliance de la forêt urbaine» which runs and promotes important programs to engage the private sector in tree planting efforts (e.g. Urban Forest Leaders Committee, Trees for My Neighbourhood program, etc.).

• In order to involve citizens in the greening of their neighbourhoods, many boroughs have developed a program to adopt a tree pit or other green spaces on the street. The citizens then take charge of the development and maintenance of the assigned space.

• Several boroughs accompany and support citizens in the realization of their green alley project («ruelles vertes»).

• The City intends to strengthen the Participatory Budget over the next few years to make it a flagship tool for public participation and citizen engagement.

The City Vision emphasises on the fact that Montrealers, businesses, community, non-profit organisations and public institutions will all have to mobilize to ensure an ecological transition that lives up to their ambitions.

• Experts committee formed by the city examines the appropriateness of refining or adding certain indicators related to resilience and adaptation, and improve adaptation strategy.

• Collaborative agreement between Montreal and Regional Public Health Department: reach out quickly to those who are vulnerable to climate disruptions, green our neighbourhoods and protect natural spaces, develop public and active transportation and improve living conditions.

The City intend to strengthen the Participatory Budget over the next few years to make it a flagship tool for public participation and citizen engagement.

• The 2030 City Vision is a document that identifies the main intentions of the future Land use and Mobility Plan (PUM) to be adopted in 2023. The City Vision emphasises on the fact that Montrealers, businesses, community, non-profit organisations and public institutions will all have to mobilise to ensure an ecological transition that lives up to their ambitions.

• Amend the urban planning regulation to take into account the intensity, frequency and increasing duration of climate disruptions on its territory, including heavy rain, heat waves and floods

• Encourage greening and stimulate densification by transforming open-air parking lots

Other supportive actions you may want to highlight

Nature and Sports Plan’s major objectives:

• Development of new large parks (e.g.: the Grand parc de l’Ouest, a nature hub in eastern Montréal, Lachine’s shoreline park, etc.). This will result in increased vegetation and improved accessibility for Montrealers to green and blue spaces.

• The network or green corridors is intended to connect parks, living environments and public spaces by contributing to recreational mobility. The development of green corridors will encourage the demineralization of neighbourhoods.

Water retention component (resilient parks and green infrastructure on roads):

• Develop innovative techniques that not only protect citizens from surface flooding during heavy rainfall, but also meet citizens’ recreational needs, reduce heat islands and promote greening.

• Development of new resilient parks will create 9,000 m² of available water retention between 2022 and 2025, while the deployment of green infrastructure on the roadway will correspond to an area of 8,500 m².

Enhance land-use planning and regulation tools to favour the development of districts on a human scale and adapted to climate change:

• Amend the urban planning regulation to take into account the intensity, frequency and increasing duration of climate disruptions on its territory, including heavy rain, heat waves and floods

• Encourage greening and stimulate densification by transforming open-air parking lots

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

• The 2022-2031 Ten-year capital works program provides for investments that will total $B 5.4 billion, of which 14.6% is dedicated to Parks, green space and playgrounds.

• Financial assistance to boroughs for demineralization through the creation or repair of tree pits (up to $100,000 per year per borough)

• Provincial Government funding over the period 2022-2024 to achieve the planting and maintenance of 94,200 trees and to improve the water retention component (resilient parks and green road infrastructure)

• Federal Disaster Mitigation and Adaptation funding to rehabilitate and secure some 30 km of public shoreline using bioengineering-inspired techniques

Additional Resources:

Montreal 2030 Citiwide Strategic Plan: https://portal-m4s.s3.montreal.ca/pdf/montreal_2030_strategic_plan_vdm.pdf


Urban Nature Declaration

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 mortality and protecting and restoring ecological features; 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 natural features.

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 the 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 and Biodiversity.

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 iniquity, 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-9540.pdf]

Related to the above is the Shade Guidelines Summary which talks about natural shade and tree canopy provision as it relates to UVR protection. [https://www.tctdb.org/FORESTUDENTS/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 Toronto’s 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.
Develop new inclusion 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 centered around recognizing the rights of landscape as a living being first and considering our responsibilities to 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-focused 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 Toronto 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 east 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 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.

Additional Resources

- https://naturecanada.ca/bc-#aboutprogram
- https://parkpeople.ca/opportunity/into-the-ravines/
- https://parkpeople.ca/opportunity/into-the-ravines-grants/
- https://parkpeople.ca/meet-our-2021-into-the-ravines-community-champions/
- https://www.toronto.ca/services-payments/streets-parking-transportation/enhancing-our-streets-and-24-7-city-regim/plan-awards/
- https://www.buildtogo.ca/
management-plan/
management-plan/
Take 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.

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 lessons 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.

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- 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

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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.

The City values these natural assets as part of the City’s portfolio of natural capital. The City is able to measure its biodiversity and renewals investment, by the number of trees that are removed, and the number of new trees that are planted. The City has costed the delivery of the Greening Sydney Strategy and Urban Ecology Strategic Action Plan to assist in raising awareness of the value of nature in the City.

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 data on natural vegetation as part of our urban forest canopy cover. We are finalising 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.

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.
- 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).

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://storymaps.arcgis.com/stories/1389b6c23af422a67d524eb66a79f4

Significantly accelerate action to address governance barriers to implementation, and mobilise access to investments and resources that support the implementation of 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 (subject to state government approval).

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.
Make our nature goals public, develop support and skills building programmes for green jobs, and develop a process for involving vulnerable and marginalized communities 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 130ha 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: 130ha 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/]
  - Promotion of greening in waterside spaces, park maintenance policy
  - Promotion of participation in nature experience activities in conservation areas
  - Implementation of seminars to promote greening
  - Certification of the Tokyo Nature Guide

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 recognizing funding and governance mechanisms for delivering urban nature solutions.

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)
- 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.

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.toshibei.metro.tokyo.lg.jp/seisaku/midori_kakuho/index.html]
[https://www.toshibei.metro.tokyo.lg.jp/seisaku/midori_kakuho/index.html]
[https://www.toshibei.metro.tokyo.lg.jp/cpproject/intro/description_1.html]
[https://www.reiki.metro.tokyo.lg.jp/reiki/reiki_honbun/eco_BG00050197.html]

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.
  - Based on the “Ordinance on the Conservation and Restoration of Nature in Tokyo”, when building a new 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.toshibei.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

Support for nature employment and skill acquisition programs
- Park maintenance
  - Support for park maintenance for municipalities
  - Financial support for expenses related to ecosystem conservation for municipalities

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 recognizing funding and governance mechanisms for delivering urban nature solutions.

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[https://www.toshibei.metro.tokyo.lg.jp/cpproject/intro/description_1.html]
[https://www.reiki.metro.tokyo.lg.jp/reiki/reiki_honbun/eco_BG00050197.html]
Chennai plans to:

• Involve local communities in rejuvenation of lakes and waste lands into vibrant public spaces in Chennai. Give them the responsibility of managing lakes’ open spaces as a common resource of the neighbourhood/city.
• Create public spaces/parks/open spaces in marginalised and low income neighbourhoods.
• Conduct open space audits and prepare open space plans through participatory exercises at ward and neighbourhood levels.

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 per a study conducted by Care Earth Trust in 2018 on open spaces in Chennai, out of the 4.26 sq km of Greater Chennai Corporation (GCC) area, only 64.06 sq km (15%) accounts for green cover as against the target of 33% stipulated in National Forest Policy. The survey revealed a total of 9,041 tree species located 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.

• Promote projects that focus on the creation of parks and rejuvenation of lakes through Corporate Social Responsibility and Institutional Social Responsibility.
• Create programs which allow citizens, RWAs, CSOs to manage and maintain natural resources such as lakes, parks etc. Incentivise these programs through awards and recognition events.

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 the 3rd Master Plan for Chennai is being prepared, a number of baseline studies are being conducted. This would include mapping of green cover and audits of existing situations with respect to all types of open spaces like parks, gardens, lakes etc. An existing land use will be prepared which will document spatial extents and areas of open spaces in Chennai. The master plan will identify new open spaces to be developed in the next 20 years for the city at various scales.

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

• State Government funding and grants
• State and City level green funding
• Corporate Social Responsibility and Institutional Social Responsibility
• Fines collected from polluters

Other supportive actions you may want to highlight

• The Tamil Nadu State level Climate Action Plan mandates protection of lakes and tanks of the city through inclusive and participatory development frameworks.
• The 3rd Master Plan of Chennai which is in preparation stage will provide a holistic/inclusive plan for creation and development of accessible open spaces for the citizens of Chennai.
Delhi Nature Declaration C40

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:

- Involve youth and early career professionals as part of a 4-year Youth Fellowship Programme to work on improving research, on-ground presence and public engagement programmes under the 'Green Delhi Mission'.
- Create public spaces/parks/open spaces in marginalized and low income neighbourhoods.
- Conduct open space audits and prepare open space plans through participatory exercises at ward and neighbourhood levels.

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 draft Master Plan for Delhi (MPD) for 2041 is currently being finalised and outlines a strategy to enhance the green and blue infrastructure in the city. This would include managing a Database of Green-Blue Infrastructure as part of the Delhi Spatial Information System to map and monitor existing assets and support creation of new green and blue infrastructure towards improving citizens’ access to nature and mitigating pollution and climate risks.

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 2017, the city had started a tree census and counted around 33 million trees. But the exercise could not be completed due to capacity gaps. GNCTD intends to complete the exercise and conduct the tree census as a priority 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:

- Creation of coordination structures between GNCTD (Department of Environment and Forest, Delhi Jal Board), Delhi Development Authority and Urban Local Bodies (MCD, NDMC) for better planning and management of the green and blue spaces in the city.
- Involve local communities and stakeholder groups in the management and protection of open spaces and develop community ownership and responsibility towards these shared resources and urban commons.
- Mobilise funding from the State Government under the Green Delhi Mission and explore other innovative funding mechanisms to support research, on-ground implementation and public engagement programmes.

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:

- Promote projects that focus on the creation of parks and rejuvenation of lakes through Corporate Social Responsibility and Institutional Social Responsibility.
- Create programs which allow citizens, RWAs, CSOs to manage and maintain natural resources like lakes, parks etc. Incentivise these programs through awards and recognition events.
- Repurposing underutilised sites and wastelands as green-blue assets, developing special projects such as biodiversity parks and nurseries, and integrating existing plantations, wetlands, low-lying areas as public green and blue spaces in new development. The draft MPD 2041 provides development strategies and codes to this effect.
- The draft MPD 2041 also recommends computation of a Green-Blue Factor (GBF) at the plot level as a mandatory compliance for all building and layout sanction. GBF is the ratio of the sum of area under different types of blue/green elements against their respective factor to the total plot area.

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

- State Government funding and grants
- State and City level green funding
- Corporate Social Responsibility and Institutional Social Responsibility
- Fines collected from polluters

Additional Resources:
https://ddc.delhi.gov.in/city-of-lakes/
https://www.delhibiodiversityparks.org/index.html

Other supportive actions you may want to highlight:

- Delhi government has launched a dedicated initiative called City of lakes to rejuvenate water bodies. In the first phase, 250 waterbodies and 15 lakes have been identified of which 50 would be rejuvenated. The project intends to rejuvenate 500 water bodies by 2025.
- Delhi government is undertaking development of a network of biodiversity zones and parks under its unique project since 2004. As part of this initiative, Delhi Biodiversity Foundation is managing 6 biodiversity parks in the City.
Urban Nature Declaration

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.

- Create some public spaces in partnership with the communities, social enterprises etc. in DNCC area keeping harmony with nature
- Find out the public spaces for upgrade in DNCC area in close coordination with other agencies such as PWD, RHD, WDB etc.
- Carry out public consultation and involve them in the planning and design process (Kobo tool, Mine craft tool etc.)
- Engage public sector experts
- Explore CSR funds from private corporate agencies
- Prepare a public space management guideline

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.

There is no study about gap analyses, but RAJUK(capital Development authority) has prepared an existing land use map for the city that depicts the information about built up spaces and open spaces. Furthermore a proposal has been developed for mapping of ward-level land use and subsequently for greening of the city.

This analysis and mapping will be conducted by DNCC within two years and will include:

- Updated Ward level map
- Temperature data collection and mapping
- Green space mapping
- LED lighting (Energy saving)

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 recognizing funding and governance mechanisms for delivering urban nature solutions.

To address challenges around the lack of awareness, lack of resources and skilled manpower etc. and support implementation of projects on urban nature, DNCC will adopt the following incentives

- Holding Tax exemption to promote rooftop gardens at building level
- Exploring Public Private Partnerships for financing of adaptation projects (green city bond)
- Capacity building and knowledge enhancement of various organisations involved in implementation of projects like RAJ UK, WASA, Dept of Environment 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.

A baseline natural vegetation inventory is being prepared by Green Saver funded by USAID. The project is ongoing but after completion will be handed over to city corporation

DNCC will monitor, manage and update the green space inventory 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.

Few efforts have already been initiated such as city bonds and tax exemption for rooftop gardens. DNCC will undertake the following activities to incentivise urban nature solutions in the next 5 years

Engagement with the private sector and local communities to maintain and conserve playgrounds, parks, canals etc.

Establishment of blue network throughout the city in cooperation with related agency.

Other supportive actions you may want to highlight

Urban Greening and Park and Playground development in Dhaka North City Corporation

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

City Corporation has limited financial allocation to support all the programs.

Urban Greening and Park and Playground development in Dhaka North City Corporation

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Dhaka North

© Johaer / Unsplash
Dhaka South

Take 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:

DSCC is currently preparing an ‘Integrated City Master Plan for Dhaka (2020-2050)’ that will include a city-level strategy and targets for the development of green and blue areas in the city. The master planning exercise is expected to be completed by the end of 2022. Along with several objectives, the ongoing master plan includes ward level master plan on significant components like- ward (smallest and core entity of DSCC) level solid waste management plan, drainage, disaster, land use, transportation plan etc. for accelerating better service provision.

DSCC has developed and reconstructed 26 parks and 12 playgrounds from 2011-2022 (source-DSCC PND department), DSCC is targeting to develop at least 1 park or playground in each ward (total of 75 wards) as announced by the Honourable Mayor in 2020-2021.

Besides, several parks are being renovated to improve open spaces’ coverage and quality. As part of both these projects, open spaces and green belts are being identified for restoration, development & upgradation by 2024. These restoration and development activities are being implemented through the Planning and design department (PND), Environment, climate and disaster management circle of DSCC.

A few initiatives are already ongoing to address challenges around the lack of technical and financial capacities to support the implementation of projects of urban nature. DSCC will further build on the capacities to support the implementation of projects, open spaces and green belts are being developed to achieve urban resilience and ecosystem and climate services towards achieving the 2030 target.

Capacity building of DSCC staff (A project named “Urban Resilience Project”; which is specifically being developed to achieve urban resilience from natural and man-made disasters. Under this project, several training programs are being arranged for capacity building for the DSCC officials.)

- Development of database and mapping (Under “Urban Resilience Project” and “Integrated City Master Plan for Dhaka (2020-2050)” database and maps are being produced)
- Involvement of private sector
- Tax exemptions
- Alignment with national programs for financial support through the departments or Ministries

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 following table consists of the data from the “Detailed Area Plan (2022-2035) for Dhaka” and ongoing “Integrated City Master Plan for Dhaka (2020-2050)”. The table highlights the available existing information of vegetation and water body coverage in the DSCC area (Please note that this information would be updated finally after the completion of the ongoing master plan).

<table>
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<tr>
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</tbody>
</table>

Other supportive actions you may want to highlight

Ongoing “Integrated City Master Plan for Dhaka (2020-2050)” would guide regarding the possible course of actions and locations for green areas, open space development which could be accessible to all citizens. DSCC’s ongoing projects on urban greening and canal restoration are usually conducted through the regular funding and grants from the national government through the Ministry of Public Works. Regular maintenance activities are usually conducted through the regular revenue generation of DSCC. Apart from that, several projects like “Dhaka City Neighbourhood Upgrading Project” are being funded by the World Bank. DSCC is open to international collaborations for a few upcoming projects as well.

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

DSCC’s ongoing projects are financed through DSCC’s own resources besides funding and grants from the national government through the Ministry of Public Works. Regular maintenance activities are usually conducted through the regular revenue generation of DSCC. Apart from that, several projects like “Dhaka City Neighbourhood Upgrading Project” are being funded by the World Bank. DSCC is open to international collaborations for a few upcoming projects as well.
Urban Nature Declaration

The KMC is intended to develop a "Karachi’s Nature Restoration Plan (KNRP)" to fulfill the pledged declaration targets of C-40 Urban Nature Declaration, which has been committed by the Municipal Commissioner of KMC and Mayor of Karachi. The KNRP will be composed with short- and long-term goals to make the city greener, natural and climate resilient. The document would enable the KMC to chalk out a plan and move towards the ultimate goal of prosperity and development. Superficial details of the Actions are given below.

- **KMC will build a partnership with the different institutions in order to launch various skill building programs addressing the climate change, at the onset, following are the target institutes:**
  - University of Karachi
  - SZABIST
  - Sindh Technical Education & Vocational Training Authority (STEVTA)
  - Hunar Foundation
  - AmanTech

- **KMC will work with these institutes and record the number of individuals trained for the green jobs’ applications.**

- **KMC will develop a process to involve vulnerable and marginalised communities in design and implementation and monitoring of KMC’s schemes or projects.**

- **The KMC’s Ecological Restoration Program will be launched, which will create jobs opportunities and will enhance community resilience against climate change, the program will be focusing following:**
  - Rehabilitation and Enhancement of Green Spaces
  - Cleansing of City’s Streams
  - Improvement and establishment of Heatstroke/Emergency centres

- **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.**

  **Action-IV: The KMC will establish a liaison with the Forest Department of Government of Sindh and IUCN to conduct a detailed gap analysis and to propose an implementation strategy for this goal. The report will enable KMC to identify the opportunities for the green urban spaces, plantation locations for the Miyawaki Forests, appropriate indigenous species, plantation time and maintenance requirements. In the first target, at least 50,000 plants will be planted in the FY 2021-22, and 100,000 in the FY 2022-23.**

- **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 recognizing funding and governance mechanisms for delivering urban nature solutions.**

  **KMC is currently assembling a preparatory program for dealing with climate consequences. Therefore, the KMC-PIU’s priority will be to address the key barriers which are causing hindrances in maintaining open green areas, urban plantation and the overall implementation of KNRP. As part of the KNRP, the PIU-KMC will continue to prepare reports to the higher management giving a status and gap analysis for the KNRP and present possibilities for new green initiatives. The analysis presented by the PIU will be included in the annual city budget. The KMC wants to promote urban environmental and climate issues at the head of its priorities. Therefore, in accordance with existing measures and priorities, budgets will be allocated to realise the mayor’s vision in environmental aspects.**

  **Moreover, in order to remove financial barriers and obtain financial assistance for new projects, we intend to build networking with the Sindh Environmental Protection Agency, Industrial and Trade associations, as a result, we can build the city more climate resilient, liveable and ready to combat with Climate Change Consequences.**

- **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 KMC will undertake a comprehensive inventory of natural trees and vegetation in collaboration with the Forest Department. This process will be conducted by the end of FY 2022-23 and engage the expert firm in the field. The inventory will help to manage the Karachi to conserve the indigenous and endangered urban species of Karachi as well as to enhance the greenery within the city. The findings of the baseline will be integrated into the urban planning processes in order to avail the opportunities for managing the urban nature. To conduct this study financial assistance will be required for which different donor agencies will be approached.**

- **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 line with the Action-VII, there will be citizen involvement, including the private sector, e.g., the industries, trade and industrial associations, NGOs, academia and others. The KMC would provide the possibility for collaboration to all stakeholders who initiate local initiatives to increase green spaces, biodiversity and encourage to create more and better urban nature.**
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 Fellows 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.