URBAN NATURE IN COPENHAGEN

Strategy 2015–2025



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PREFACE

Urban nature is an important resource for Copenhagen and Copenhageners. The city's parks, nature areas and trees help make our city a great place to live.

In this strategy paper, you can read more about how we plan to continue to develop urban nature in Copenhagen but of course also why we plan to do that.

You can read about how urban nature helps us handle increased precipitation and enhance biodiversity in the Copenhagen area and, most importantly, how it makes our city a better place to live.

Because we need more urban nature, and we need more diverse urban nature.

Whether this is about developing Amager Fælled or increasing the number of green courtyards, our goal is to create a city where Copenhageners can enjoy and live in harmony with urban nature. But it goes beyond that. To me, it is also about transforming the way we view nature in the city. Adding nature to Copenhagen roofs and courtyards and appreciating that a bicycle ride can include flowers, shrubs and bees and not just asphalt.

Allowing urban nature to grow a little wild in some places – in street medians or under the trees in Fælledparken. We want to create a more organic city with room for life – for trees, wildlife and people.

Because that is, after all, our most important goal: ensuring that Copenhagen remains a great city for Copenhageners – not just the setting for our homes and workplaces but the setting for our life.





'THE CITY'S GREEN AND BLUE AREAS CREATE A SENSE OF CALM AND BALANCE IN THE CITY. BUT IN AN EXPANDING CITY, IT IS BECOMING INCREASINGLY DIFFICULT TO FIND ROOM FOR NEW LARGE GREEN AREAS. THEREFORE, WE NEED TO INCOR-PORATE NATURE INTO THE FABRIC OF THE CITY EVERY TIME WE CAN. NATURE SHOULD POP UP IN UNEXPECTED PLACES, GIVING US MANY MORE TINY SPECKS OF LIVING GREEN AND BLUE.'

GOAL FOR 2025: 75% OF COPENHAGENERS PERCEIVE CO-PENHAGEN AS A GREEN CITY.

Source: Co-Create Copenhagen

MORE AND BETTER URBAN NATURE

In the City of Copenhagen, we have an ambition of creating a resilient and climate-adapted city that is ready to handle future challenges. In our pursuit of this ambition, urban nature plays a key role. We aim to use urban nature as an active means of adapting the city to future climate conditions, enhancing biodiversity and creating optimal settings for an active urban life – to the benefit of current and future generations. Our ambition is not just to prioritize protected nature in Copenhagen; with this strategy, we also aim to promote existing agreements and legislation¹ and to intensify our efforts to prioritize urban nature that is not covered by legislation. No tree, no green or blue area and no species in city are too minor to constitute a resource or a potential for urban nature in Copenhagen.

In 2009, Copenhagen's City Council approved a decision about 'A Green Copenhagen' aimed at ensuring that the city's green areas would always cover at least as much space as they did in 2008. Since 2008, the City of Copenhagen has created several new parks, including Mimersparken and Kvarterpark Nordvest, which has increased the total amount of green spaces. Until 2025, Copenhagen's population is projected to grow by nearly 100.000. This will reduce the amount of green space per capita even if we expand the total amount of green space. If we compare Copenhagen to other big Nordic cities, for example Oslo, Helsinki and Århus, we find that Copenhageners already have much less green space per capita. Thus, we need a dedicated strategy that not only aims to maintain the status quo in this area but which sets common goals for urban nature in Copenhagen.

With this strategy, we have an ambitious policy that defines the specific effects, goals, efforts and conditions

that we need to implement in order to achieve our common visions:

VISION #1

creating more urban nature in Copenhagen

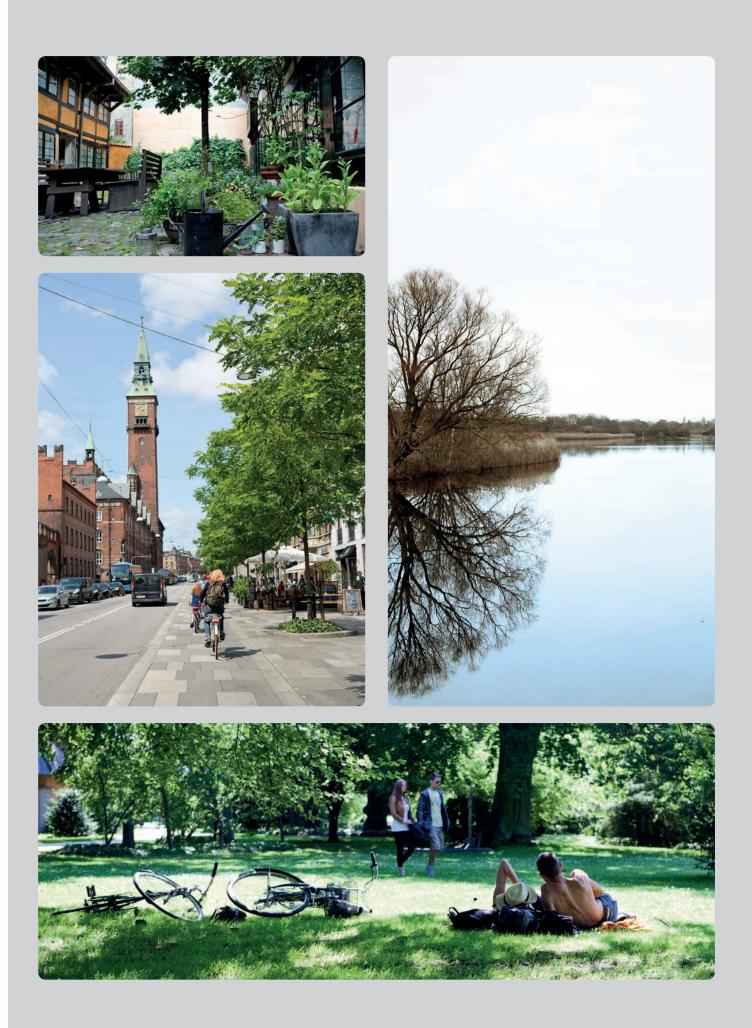
VISION #2

improving the quality of urban nature in Copenhagen

The strategy applies to all urban nature in Copenhagen, including urban nature on municipal as well as non-municipal land. Lakes, streams and the sea are seen as an integrated part of urban nature but are not addressed in the present strategy. Initiatives involving Copenhagen Harbour are described in the City's vision and in the upcoming development plan for the harbour. Initiatives to ensure a healthy water environment in Copenhagen's lakes and streams are found in the City's water action plans. Political and strategic initiatives under the City of Copenhagen's biodiversity strategy 'Plads til Naturen' are incorporated into the present strategy. Recommendations for specific initiatives from 'Plads til Naturen' continue to guide efforts in the City of Copenhagen.

The strategy is not fully funded. Some of the initiatives described here can be implemented without funding, while other initiatives require funding. This funding should primarily be found in the annual budget negotiations or by reallocating operational funds.

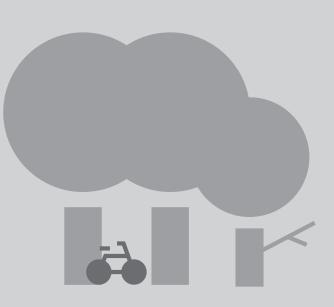
¹ The Green Cities partnership, UN's biodiversity convention, EU's biodiversity strategy 2011–2020 and Naturplan Danmark Natura 2000 areas, NBL Sec. 3 areas, nature management, protected species, the Habitat Directive Annex VI and The Planning Act Sec. 1 and Sec. 33a.



GOALS FOR THE CITY OF COPENHAGEN:

- BIODIVERSITY: To increase the number of initiatives that enhance biodiversity and ensuring that the promotion of biodiversity is always included in the considerations when Copenhagen is developed and transformed, so that we can help expand, enhance and protect urban nature as a whole.
- CLIMATE ADAPTATION: To ensure that the climate adaptation of Copenhagen contributes to creating more urban nature, enhancing biodiversity and creating more recreational experiences.
- NATURE AREAS: To ensure that Copenhagen's nature areas are developed and maintained with particular emphasis on enhancing biodiversity and nature experiences.
- **PARKS:** To ensure that the city's parks are developed and maintained with concern for cultural history, recreational needs and biological considerations.
- CEMETERIES: To ensure that the city's cemeteries are developed and maintained with particular emphasis on making them an active part of recreational life in Copenhagen – with respect for peace, quiet and funerals.
- URBAN DEVELOPMENT: To ensure that local planning processes include demands for the quality and quantity of urban nature and enabling the creation of green municipal areas in urban development areas.

- MUNICIPAL LAND: To ensure that demands are made to the quality and quantity of urban nature when municipal areas, streets and buildings are renovated or transformed.
- NON-MUNICIPAL LAND: To ensure that the City of Copenhagen actively supports green initiatives on non-municipal land by inspiring, motivating and engaging in partnerships with private actors and landowners.
- TREES: To increase the total number of trees in Copenhagen, securing good growing conditions for new and existing trees in the city and securing variation in the selection of species of trees.
- SPATIAL QUALITIES: To ensure that urban nature is created, developed and tended with particular emphasis on maintaining a human scale and an urban expression in the city.
- WATER: To secure access to water and water experiences and securing clean water in lakes, streams and the sea with a varied wildlife and vegetation.



DEFINITION OF URBAN NATURE

ON THE ONE HAND, URBAN NATURE IS NATURE, BECAUSE IT INVOLVES ALL THE LIVING BEINGS AND PLANTS IN THE CITY (...) NOT JUST THE OVERALL GREEN STRUCTURE (...) BUT ALSO A BLACKBIRD ON A ROOF (...) DANDELIONS PUSHING UP AMONG THE COBBLE STONES (...) AT THE SAME TIME, URBAN NATURE IS URBAN, BECAUSE IT IS THE RESULT OF PLAN-NING, LANDSCAPING, ARCHITECTURAL DESIGNS, PLANTING, REFINEMENT AND CONTROL, AND BECAUSE IT IS SUR-ROUNDED BY THE CITY AND THUS BOR-DERS THE URBAN SPACE AROUND IT.

Source: Aarhus University 2011

URBAN NATURE IN COPENHAGEN

Urban nature in Copenhagen is an overarching term that includes all living beings and plants in the city. Urban nature is present throughout the city – in nature areas, lakes and streams, the harbour, parks and cemeteries, streets and urban spaces.. The city's recreational functions, such as playgrounds, artificial grass surfaces, skate parks and bicycle paths are not urban nature. However, urban nature often forms the setting for and are integrated with recreational functions.

Most importantly, urban nature in Copenhagen is contextual and varies according to the location. Urban nature in Copenhagen may therefore be viewed as a scale of structures, spanning from the solitary tree in the dense cityscape to untamed nature areas on the edges of the city. The scale on the next page presents urban nature as it may appear in three classic urban spaces. The representation illustrates how urban nature varies in scale and appearance, depending on the urban context. In addition to the three classic urban spaces, urban nature is also found in countless other places in the city, for example in urban courtyards, along railway lines and on empty plots.

At one end of the scale, we find urban nature in streets and urban spaces. Here, urban nature includes, for street trees, solitary trees, a green schoolyard, green cloudburst streets and temporary urban gardens. Here, urban nature is characterized by being embedded in the urban context. At the middle of the scale, we find urban nature in city parks and cemeteries. Here, urban nature often forms the setting for recreational experiences and integrates with recreational functions. In urban cemeteries, the intensity of use is lower, and the diversity in vegetation and wildlife may be higher. Here, urban nature is extremely cultivated and planned, but simultaneously, there are also more overgrown areas with old trees and rarer species.

At the other end of the scale, we find urban nature in urban nature areas. Here, urban nature is less controlled and more uncultivated. In these settings, urban nature takes the form of meadows, fringe land, lakes and ponds, grazing areas, dying trees and ruderal areas. In the nature areas, recreational functions, such as paths, picnic and exercise areas, work in harmony with the existing natural values, and the recreational experiences are often associated with nature.

URBAN SPACES AND STREET SPACES

< CITY

PARKS AND CEMETERIES





Green paving

Street trees



Peacock butterfly



Great bat



Park trees



Green roofs



Green street-side areas



Temporary green urban spaces Gra





Green facades



Green schoolyard



Green bicycle paths



Lakes



Ponds



NATURE

NATURE AREAS











Purple emperor



Wetlands





Old trees



Reed bunting





Early marsh orchid





Topiary shrubs

Bird island

Dying trees





Six-spot burnet moth

MULTIPLE STUDIES HAVE

ALERY (L

DEMONSTRATED A LINK BETWEEN STRESS AND DISTANCES TO GREEN AREAS - THE SHORTER THE DISTANCE, THE LESS STRESS.

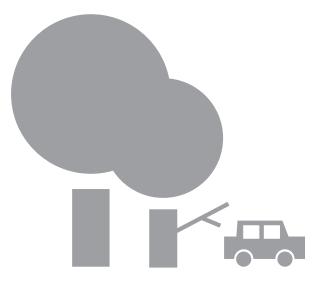
Source: University of Copenhagen 2005

REASONS FOR URBAN NATURE IN COPENHAGEN

Copenhageners need urban nature

Urban nature has a crucial impact on Copenhageners' quality of life, health and general well-being. It gives us aesthetic and spatial experiences, offers unpredictable sensory experiences, such as the changing seasons and the chance to extend our gaze and see the horizon. Urban nature helps make Copenhagen a healthy city to live in – a city with a wide and varied range of recreational experiences with room for physical activity, calm and reflection and rich nature experiences. We refer to this aspect of urban nature as its amenity value.

Urban nature areas, parks and green urban spaces serve as the Copenhageners common backyard. This is where Copenhageners get together with friends and family, celebrate children's birthday parties and go sunbathing. The green courtyard or the local urban garden is where Copenhageners run into their neighbours and make new acquaintances across generations and cultures. Urban nature has a positive impact on Copenhageners' physical and mental health; in itself, it has a positive effect on our mood and well-being, and it helps us prevent and manage stress. Urban nature is the biggest arena for both spontaneous and organized outdoor activities in Copenhagen. This is where we go berry-picking, where we go for a run or a walk and where we play ball. Urban nature motivates Copenhageners to move more, and it plays a crucial role for a good and active urban life.



24% OF COPENHAGENERS WOULD CONSIDER DOING VOLUNTEER WORK IN A GREEN AREA, AND THE MAIN MOTIVATING FACTOR IS THE SOCIAL COMMUNITY.

Source: City of Copenhagen 2011

PEOPLE WHO LIVE MORE THAN ONE KILO-METRE AWAY FROM A GREEN AREA HAVE A HEIGHTENED RISK OF BEING OBESE (BMI ≥ 30) THAN PEOPLE WHO LIVE LESS THAN 300 METRES FROM A GREEN AREA.

Source: University of Copenhagen 2011

IN RECENT DECADES, COPENHAGEN HAS LOST THREE SPECIES OF YELLOW WAGTAIL, SAND LIZARDS AND ADDERS AS WELL AS SEVERAL SPECIES OF PLANTS IN AMAGER FÆLLED.

Source: Biomedia 2013

COPENHAGEN NEEDS URBAN NATURE

Urban nature serves a practical purpose in the form of ecosystem services that help Copenhagen adapt to future climate changes, stop the decline in biodiversity and secure a pleasant micro-climate in the city. Urban nature has a positive effect on temperature, air quality and noise. It helps create shade, light and air circulation. A robust and climate-adapted city is a city in harmony with nature. We refer to this aspect of urban nature as its utility value.

Urban nature plays an important role in our efforts to adapt Copenhagen to future climate changes and helps delay, absorb and evaporate rainwater. Climate adaptation of Copenhagen should be seen as a unique opportunity for creating more urban nature, enhancing biodiversity and creating more recreational experiences to the benefit of Copenhageners.

Urban nature helps promote biodiversity in Copenhagen. Biodiversity is crucially important for the ecosystems that serve as the basis for all living organisms in the city. The condition for effective ecosystem services is a rich and diverse range of plants, animals, birds and insects. Natural qualities contribute to enhancing biodiversity in Copenhagen by ensuring habitats and a varied range of species and help create more nature experiences for Copenhageners.

DEFINITION OF BIODIVERSITY

BIODIVERSITY MEANS VARIATION IN LIVING NATURE, NOT JUST A VARIED SELECTION OF SPECIES BUT ALSO A VARIED SELECTION OF GENES, HABITATS AND ECOSYSTEMS. GREATER VARIATION MEANS GREATER DIVERSITY. BIODIVER-SITY INTERACTS WITH THE PHYSICAL EN-VIRONMENT (SOIL, ROCKS, WATER ETC.). THIS INTERACTION FORMS THE ECOSYS-TEMS THAT PROVIDE THE CONDITIONS FOR ALL LIVING ORGANISMS – INCLUDING MANKIND.

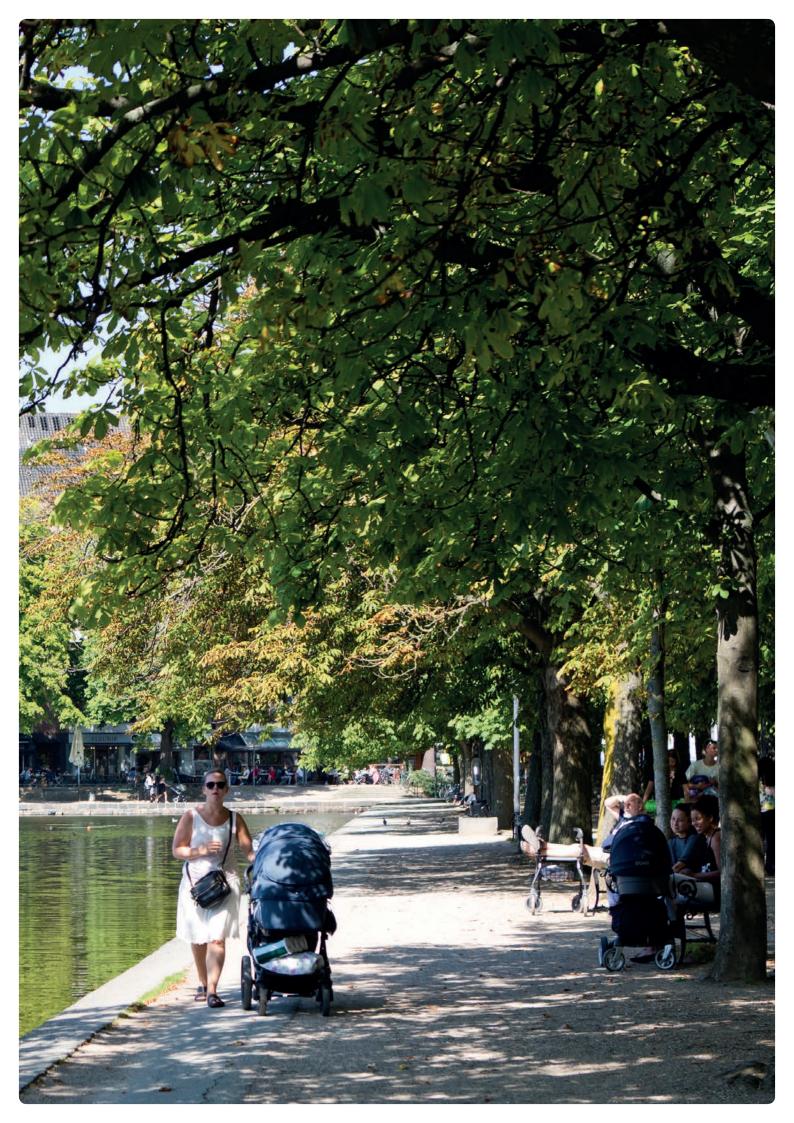
Source: Byens grønne struktur 2015

DOUBLING THE VEGETATION VOLUME AROUND BIRMINGHAM COULD LEAD TO A DROP OF 25% IN PARTICLE POLLUTION.

Source: Lancaster University 2005

ONE SQUARE METRE OF GRASS HAS A TOTAL EVAPORATION OF 400-600 LITRES OF RAINWATER A YEAR, AND A BEECH TREE CAN ABSORB 137 LITRES OF WATER A DAY.

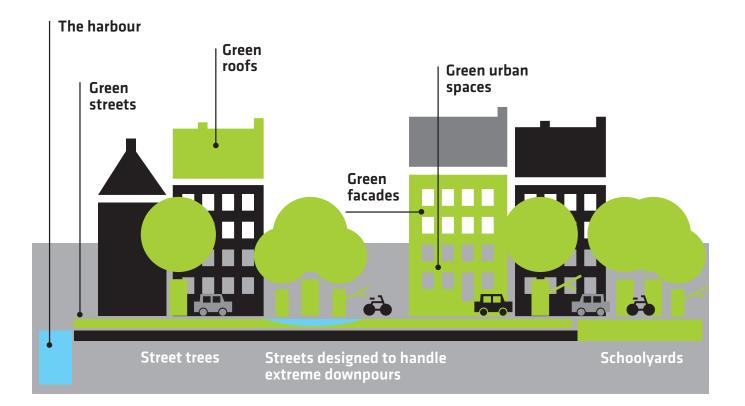
Source: University of Copenhagen 2013



VISION #1 MORE URBAN NATURE FOR COPENHAGENERS

With this strategy we aim to embrace all urban areas and ensure that municipal as well as non-municipal land is included in the effort to create more and better urban nature in Copenhagen.

Our ambition with the strategy is to see more trees along our streets, more green courtyards and more urban nature on roofs tops and to ensure that the species living in the city are prioritized as we develop and transform the city. Where urban nature already exists, it should be maintained and strengthened in order to enhance and expand the nature experiences that Copenhageners call for. The City of Copenhagen aims to develop, strengthen and safeguard urban nature as a whole – even as the city undergoes constant development and transformation. The figure below shows an overview of potential sites for more urban nature in Copenhagen in the terrain, on roof tops and on facades – on municipal as well as non-municipal land.



CITY NATURE,

URBAN SPACES



PARKS AND CEMETERIES



NATURE AREAS



BIODIVERSITY



Endangered species

CLIMATE ADAPTATION





Climate-adapted parks

Endangered species /

Characteristic species



Endangered species / Characteristic species / Native species



Climate-adapted nature areas

Nature experiences, peace and

quiet, one-sided solutions and vulnerable solutions



Climate-adapted urban and street spaces

FUNCTIONALITY



Social community, physical activity, multi-purpose solutions and robust solutions

SPATIAL QUALITIES

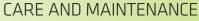




Social community, physical activity,

peace and quiet, multi-purpose solutions and robust solutions







Urban space maintenance



Park maintenance / nature management



Nature management

VISION #2 HIGH-QUALITY URBAN NATURE

With this strategy we aim to enhance the quality of urban nature in Copenhagen. We plan to do this by improving the quality of both new and existing urban nature. In order to ensure high-quality urban nature we have defined five quality parameters: biodiversity, climate adaptation, functionality, spatial qualities and care and maintenance. Most importantly, the quality of urban nature is contextual and varies depending on where in the city we are. On the left is a schematic presentation of the five quality parameters and the quality goals for urban spaces, street spaces, parks, cemeteries and nature areas. The quality goals should be regarded as minimum requirements.

Biodiversity

The City of Copenhagen is obligated to stop the decline in biodiversity, native species and nature types. It is therefore a quality goal that urban nature should reach a stage where biodiversity is increased. The effort may, however, vary, depending on the setting. Nature areas should have a high degree of biodiversity with considerable variation in species and habitats. Nature areas should be home to native species. There should be a focus on wild nature, continuity and authenticity. In parks, cemeteries, urban spaces and street spaces, biodiversity may be lower, and we may use exotic species and cultivated plants that meet functional and aesthetic demands.

Climate adaptation

Climate changes are a fact – also in Copenhagen. It is therefore a quality goal that urban nature should play an active role in our effort to climate-adapt Copenhagen. Urban nature should help ensure a resilient and diverse city that is capable of handling climate changes, new diseases and the arrival of new species. Urban nature should help absorb, evaporate and delay rainwater and secure a pleasant climate in the city. Urban spaces, streets, parks, cemeteries and nature areas should contribute to overall rainwater handling and help improve the city's micro-climate.

Functionality

Urban nature forms the setting for countless recreational functions and experiences. It is therefore a quality goal to ensure that both new and existing urban nature is developed, established and managed with a focus on accommodating the citizens' requests and needs for new recreational functions and on handling increasingly intense use. Copenhagen is a high-density city that has to contain a wide variety of functions. Thus, urban nature needs to be addressed in combination with other functions and as part of multi-purpose solutions that accommodate a variety of needs. Urban nature in urban spaces particular need to be resilient enough to handle intense use and be part of multi-purpose solutions. On the other hand, urban nature in nature areas can be vulnerable, and the functions may be more one-sided and aimed more at the nature experience itself.

Spatial qualities

Urban nature is an architectural element that helps create beautiful and well-planned urban spaces, street spaces and spatial experiences. Urban nature can add a human dimension, coherence, identity and character to urban spaces. Throughout the changing seasons, urban nature makes a rich contribution to the cityscape. It creates variation in colours, light and moods and gives the city a sensuous dimension. Urban nature can bring architectural qualities to an urban space and enhance the neighbourhood as a whole. It is therefore a quality goal to ensure that urban nature is established, developed and maintained with particular emphasis on using urban nature to create beautiful spaces and spatial qualities in the city.

Maintenance

Care and maintenance of urban nature are paramount to the quality of urban nature and appearance. It is therefore a quality goal to ensure that the maintenance effort is adapted to the function, context and intensity of use of the urban nature and that it supports the experiential values of the urban nature. In our urban spaces and street spaces, urban nature maintenance should be based on high-intensity use with a focus on promoting social and cultural experiences. Nature areas should be tended with an emphasis on promoting biodiversity, variation in species and rich nature experiences.



HOW CAN WE CREATE MORE URBAN NATURE IN COPENHAGEN?

With this strategy we aim to embrace all urban areas. The strategy should help ensure that urban nature is integrated, for example when the City of Copenhagen develops distric plans for new and existing urban areas, when our schools are renovated, when co-op housing associations renovate their courtyards, and when the City renovates green areas.

The strategy is therefore structured around four themes that together cover all of Copenhagen. The four themes aim to ensure that municipal as well as non-municipal land is included in the effort to create more and better urban nature in Copenhagen.

Each theme contains a number of initiatives that the City of Copenhagen needs to implement to achieve our goals. The initiatives fall into five categories: tools, catalogues, action plans and projects, organizational changes, and partnerships. The initiatives in the strategy are not fully funded and therefore require subsequent economic priorities. Additional funding should primarily be found in the annual budget negotiations or by reallocating operational funds.

THEMES:

#1 URBAN NATURE IN GREEN MUNICIPAL AREAS

#2

URBAN NATURE IN URBAN DEVELOPMENT AREAS

#3

URBAN NATURE ON MUNICIPAL LAND

#4 URBAN NATURE ON NON-MUNICIPAL LAND

Copenhageners as co-creators of future urban nature

The effort to create more and better urban nature in Copenhagen is not only up to the City of Copenhagen. It requires local support and needs to happen in co-creation with private landowners, business owners and others who are passionate about urban nature in Copenhagen. It is therefore our intention to create the best possible settings to inspire and motivate Copenhageners to get involved in the effort to create more urban nature in Copenhagen. It is our ambition to support communities that contribute to creating more and better urban nature in Copenhagen, including everything from volunteering with nature management to grazing guilds and local urban gardens.

The success of the strategy depends very much on the commitment and active participation of local Copenhageners. We need to invite and motivate everyone who uses the city to take active part in developing urban nature in Copenhagen. In part because it is more satisfying to live in a city that one can help co-create, and in part because that will increase Copenhageners' awareness of, attachment to and understanding of urban nature.

68% OF COPENHAGENERS VISIT CITY PARKS, NATURE AREAS, BEACHES AND HARBOUR BATHS AT LEAST A COUPLE OF TIMES A WEEK DURING THE SUMMER.

Source: City of Copenhagen 2013

CAN.

THEME #1 URBAN NATURE IN GREEN MUNICIPAL AREAS

INDICATORS 2025:

- 95% of the users are satisfied with the quality of the parks, cemeteries and nature areas in the City of Copenhagen.
- The City of Copenhagen annually launches two nature maintenance projects in green municipal areas.

This theme applies to all the green areas owned by the City of Copenhagen, including parks, nature areas, cemeteries and beaches as well as the species living here. Green municipal areas make up about 17% of the city's total area.

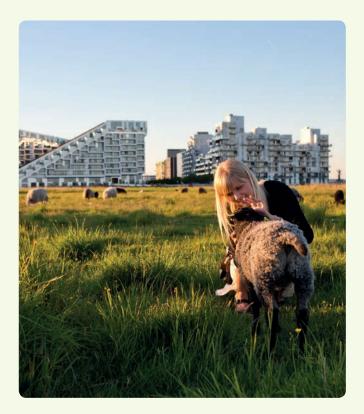
Green municipal areas are an important resource for urban nature in Copenhagen. They form the setting for countless recreational functions and organized activities and serve as the habitat for a wide variety of animals and plants. Moreover, green municipal areas also play an important role in the climate adaptation of Copenhagen.

It is thus the most important ambition of the City of Copenhagen to preserve and safeguard the green municipal areas and the species living there, including the healthy trees.

It is our ambition to develop and manage municipal nature areas with an emphasis on enhancing biodiversity and the citizens' nature experiences. We aim to do this by means of a targeted analysis of natural values and targeted initiatives to preserve endangered species and by intensifying nature management efforts and our focus on communication and learning about urban nature.

It is our ambition to ensure that the City's parks are developed and maintained with an emphasis on cultural history, recreation and biological considerations. We aim to do this by means of a strategic operation of our parks, by learning even more about how Copenhageners use city parks and by coordinating our efforts in the parks across professional boundaries.

In addition, we aim to improve our ability to activate untapped existing potentials, including Amager Fælled and the city's cemeteries, which can be made more accessible and attractive for Copenhageners.



78% OF COPENHAGENERS VISIT CITY PARKS, NATURE AREAS, BEACHES AND HARBOUR BATHS TO GET SOME FRESH AIR.

Source: City of Copenhagen 2013

| INITIATIVE | DESCRIPTION | IMPACT |
|--|---|---|
| | | 1 2 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Action plans | Developing a new concept for action plans for each urban district. The plans should coordinate current initiatives and set the course for the development of urban nature in each district. A pilot project is carried out in connection with the action plan. *This initiative also applies to theme 3. | Enhanced experiential value Enhanced biodiversity Enhanced resilience More multi-purpose solutions |
| Policy for cemeteries | Developing a policy for the cemeteries owned by the City of Copenha- gen. The policy should increase the focus on the cemeteries' recreational potential and ensure that they are included as an active part of Copen- hageners' recreational life. | Enhanced experiential value Enhanced maintenance effort More multi-purpose solutions |
| Nature manage- ment and nature rehabilitation | Developing and implementing an action plan for nature management in the green areas owned by the City of Copenhagen, including efforts to eradicate invasive species, nature rehabilitation, adaptive nature man- agement and establishing competences in the city administration. | Enhanced experiential value Enhanced biodiversity Enhanced conservation effort |
| Initiatives for endangered species | Developing and implementing an action plan for endangered species in Copenhagen. As a minimum, the action plan should contain an annual effort for an endangered species in Copenhagen. *This initiative applies to all four themes. | Enhanced experiential valueEnhanced biodiversity |
| Mapping urban nature | Charting existing nature resources in Copenhagen. This initiative should be carried out in cooperation with local citizens and green interest organizations. *This initiative applies to all four themes. | Enhanced experiential valueEnhanced biodiversity |
| User studies | Conducting user studies in green municipal areas. The citizens' behav- iour and needs are documented in annual user interviews and park counts. *This initiative also applies to theme 3. | Enhanced experiential value More multi-purpose solutions |
| Strategic management of urban nature | Conducting a pilot project for a long-term strategic management of urban nature, including strategic priorities for operational funds, replace- ment and improvement of urban nature and resource allocations. In the long term, the aim is to implement the pilot project on a larger scale. | Enhanced preservation effortEnhanced resilience |
| Partnerships in green municipal areas | Establishing partnerships in green municipal areas, including volunteer nature management, grazing guilds etc. The partnerships should be focused on both maintaining and developing the green areas. | Enhanced preservation effort Enhanced awareness, own- ership and understanding of urban nature. |
| Communication and learning about urban nature | Coordinating the initiatives of the City of Copenhagen regarding com- munication about urban nature and launching new communication and learning initiatives. The new initiatives should have particular emphasis on the learning perspective for children and young people. These initia- tives will be implemented in cooperation with the City's nature schools and staffed playgrounds. *This initiative applies to all four themes. | Enhanced awareness, ownership and understand- ing of urban nature |

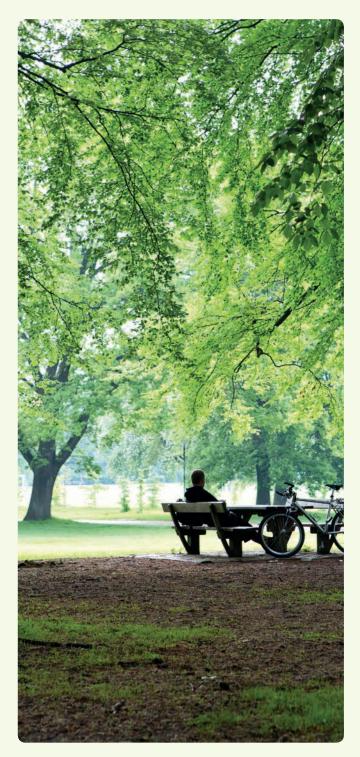
THEME #1 CASE STORY: FÆLLEDPARKEN

With 11 million visitors every year, Fælledparken is Copenhagen's most-visited park. From 2009 through 2013, the park underwent extensive renovation, which improved the park considerably. The renovation was made possible by a donation from the private foundation A.P. Møller and Hustru Chastine Mc-Kinney Møllers Fond til almene Formaal.

Today, the park contains an interactive tower playground, a 3.5 -kilometre lit running path, the largest skate park in Northern Europe, a 200-square-metre dance space, 152 benches, more than 1.,000 new trees and a new playing field with an artificial grass surface. These new features have not detracted from the existing natural amenities. Fælledparken has preserved its identity despite the changes. We chose to preserve its unique character and the existing natural amenities by avoiding making major changes in the middle of the park and instead positioning the new recreational features towards the edge of the park.

The old trees in Fælledparken serve as the habitat for Copenhagen's largest population of protected great bats. As part of the effort to promote biodiversity in the City of Copenhagen, studies in 2010 and 2015 documented which of the old trees the bat population needs to survive. In addition, an artificial bat's roost has been established with the hope of eventually replacing trees that have to be cut down for safety reasons. As far as possible, old trees are preserved as torsos to promote biodiversity, since old trees are habitats for a large number of fungi, insects and birds.

This renovation was the most extensive park renewal in Copenhagen ever and cost a total of DKK 196 million. Fælledparken exemplifies how we can improve recreational facilities and enhance user intensity while safeguarding cultural history and biological qualities.



THE VALUE OF A HOME INCREASES BY UP TO 10% ON AVERAGE WITH EACH ADDI-TIONAL 10 HECTARES OF PARK OR URBAN NATURE AREA WITHIN A 500-METRES DISTANCE.

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Source: Gevinster ved investeringer i byliv of bylivskvalitet 2013

THEME #2 **URBAN NATURE IN URBAN DEVELOPMENT AREAS**

INDICATORS 2025:

- Urban nature is incorporated into every phase of urban planning in the City of Copenhagen.
- At least 90% of Copenhageners in urban development areas are within less than a 15-minute walk from a park, beach, nature area or harbour bath.

This theme includes all the areas selected for urban development in the 2015 municipal plan for the City of Copenhagen and new local district plan areas within the existing city. The strategy for urban nature is subordinate to the general goals for urban development in the municipal plan. In terms of acreage, the urban development areas amount to about 6% of the total area of the city, while the acreage of the new local district plan areas is undetermined.

Access to green areas close to home is an important factor for Copenhageners' quality of life and a key priority when we choose a home in Copenhagen. Several studies have shown that proximity to green areas has a positive influence on property values and a significant impact on urban life in the local area.

It is our ambition to ensure good and easy access to green areas in urban development areas. To do this, we will be making demands to both the quality and quantity of urban nature in local district planning and make existing nature a priority in urban development areas. These demands have to be reconciled with any planning challenges.

Moreover, the City of Copenhagen aims to ensure the possibility of creating green municipal areas in urban development areas by means of a strategic selection of areas that can be converted into green municipal areas in the future. Any needs to acquire areas will be stated in development maps in Municipal Plan 2015.

In developing new urban areas, we aim to enable a flexible and creative use of urban areas. We aim to do this in partnership with private landowners and by backing initiatives and activities that will help create more urban nature in urban development areas.

To turn the urban development areas into attractive green urban areas it is important to focus more on visualizing and communicating the value of urban nature to both landowners, clients and developers and to enhance our efforts to incorporate and prioritize urban nature at every stage of the planning process.



ACCESS TO GREEN AREAS IS A TOP PRI-**ORITY WHEN PEOPLE CHOOSE TO SETTLE IN COPENHAGEN.** SHORT DISTANCES TO A GREEN COURTYARD OR GREEN AREA ARE IMPORTANT FOR ADULTS WITHOUT CHIL-DREN AS WELL AS FOR FAMILIES WHEN THEY CHOOSE A HOME.

Source: City of Copenhagen 2014

| INITIATIVE | DESCRIPTION | IMPACT |
|--|--|--|
| Green planning tool | Developing a greenification tool that the City of Copenhagen will use to specify demands concerning the quality and quantity of urban nature in local planning. The tool is to accommodate any planning chal- lenges and must include an assessment of the economic consequences. | More urban nature in urban development areas Enhanced biodiversity Climate adaptation Enhanced experiential value |
| Catalogue of urban nature solutions | Developing a catalogue of solutions that involve urban nature to be used in connection with urban development. The catalogue should include key figures as well as initial and operational costs for the individual solutions. | More urban nature in urban development areas Enhanced biodiversity Climate adaptation Enhanced experiential value |
| Acquiring land for new green areas | Developing and implementing an action plan for the strategic selection and purchase of areas for establishing new green municipal areas in urban development areas. This initiative may also include areas in the existing city. | More urban nature in urban development areas Enhanced experiential value |
| Economic benefits of green areas | Developing analyses of green areas to document the value of green areas in Copenhagen. This includes a dialogue with developers and clients and the development of business cases. The initiative may be carried out in cooperation with institutions of higher learning. | More urban nature in urban development areas |
| Urban nature in urban planning | Analysing how the City of Copenhagen currently incorporates urban nature into urban planning and developing a new procedure for incorporating urban nature into the planning process. | More urban nature in urban development areas |
| Partnerships in urban development areas | Establishing partnerships in urban development areas. These partnerships should be focused on urban nature and on establishing temporary green areas and urban spaces. | More urban nature in urban development areas Enhanced awareness, own- ership and understanding of urban nature |

THEME #2 CASE STORY: THE VEGETABLE MARKET IN VALBY

Copenhagen Wholesale MarketThe vegetable market has been located in Valby since 1958 but is now relocating to a new and more modern market locationin Høje Taastrup with room to expand. This presents the City of Copenhagen with an opportunity for developing the area into a new and attractive urban area with a strong element of urban nature.

The area should offer varied housing forms and possibilities for community building in a dense city with a green expression and a sustainable approach. The area allocated to the vegetable hall becomes the green heart of the area and home to a green park with high nature qualities. The park preserves the unique industrial story associated with the area and also serves as a green meeting place with easy access for everyone. The area will be characterized by a more diverse range of species than today, which contributes to both more and better urban nature. In addition, the spaces will encourage movement in the form of ball games, play, fitness and self-organized sports activities.

The plans for the vegetable market focus especially on integrating attractive green areas with high recreational values that are easily accessible to local residents. The urban area therefore exemplifies how urban nature can be prioritized and incorporated into an urban development area.





THEME #3 URBAN NATURE ON MUNICIPAL LAND

INDICATORS 2025:

- 50% of Copenhageners are satisfied with the amount of vegetation in streets, alleys and city squares.
- 20% of Copenhagen's total area is covered by tree crowns.

This theme applies to all the areas in Copenhagen that are owned by the City of Copenhagen, apart from green municipal areas: everything from nursery schools, schools, nursing homes, municipal streets and urban spaces to office and staff buildings. These areas account for about 18% of the city's total area.

Copenhagen is under constant development, and the city administration is continually adding new institutions, expanding schools, expanding infrastructure and establishing new recreational functions and cultural venues. The areas owned by the City of Copenhagen hold a significant potential for creating more urban nature in Copenhagen, since in these areas we can set specific standards for the amount and quality of urban nature.

It is our ambition to lead the effort to create more urban nature in Copenhagen. We aim to do so by specifying demands for urban nature in municipal building projects and public works projects, preserving existing urban nature, optimizing our management of urban nature and improving the possibilities for funding urban nature in public works projects. To ensure that urban nature is a priority inmunicipal constriction projects, we aim to improve our ability to find intelligent and multi-purpose solutions, where urban nature may, for example, serve as engaging environments for play and learning in schools. Urban nature should be an integrated part of the solution, for example when we transform streets, schools and city squares, to ensure that streets and urban spaces contribute to the experience of Copenhagen as a green metropolis that offers many varied nature experiences.

Copenhagen's main streets are highlighted with street trees like certain urban spaces also stand out as particularly beautiful due to the presence of trees. It is therefore our ambition to preserve existing trees, add new ones and ensure good conditions for new and existing trees in the city. In addition, we also aim for a variation of species.

Climate adaptations lead to extensive changes to many of the city's streets and urban spaces. It is our ambition to ensure that climate adaptations in Copenhagen help create more urban nature, enhanced biodiversity and more recreational experiences.

56% OF COPENHAGENERS SAY THAT THEY WOULD SPEND MORE TIME IN CITY SQUARES AND SHOPPING STREETS IF THE CITY WERE GREENER.

Source: City of Copenhagen 2013

DESCRIPTION

INITIATIVE

IMPACT

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|--|---|--|
| Green planning tool | Developing a greenification tool that the City of Copenhagen will use to specify demands concerning the quality and quantity of urban nature in public works projects. The tool is to include an assessment of the economic consequences. | More urban nature in public works projects Enhanced biodiversity Climate adaptation Enhanced experiential value |
| Tree policy and guidelines for trees | Developing a tree policy and administrative guidelines for preserving, planting and caring for trees in Copenhagen, securing the selection of species of trees and safeguarding trees deemed worthy of preservation. *This initiative applies to all four themes. | More urban nature Enhanced care Enhanced biodiversity |
| Catalogue of urban nature solutions | Developing a catalogue of solutions involving urban nature to be used in connection with public works projects. The catalogue should include key figures as well as initial and operational costs for the individual solutions. | More urban nature in public works projects Enhanced biodiversity Climate adaptation Enhanced experiential value |
| Climate adaptation and urban nature | Establishing a think tank to set the course, inspire and create images of/ visions for incorporating urban nature into plans for managing cloud- bursts. Developing a catalogue of green solutions to manage cloudbursts | More urban nature in public works projectsRainwater management |
| 100,000 trees | Developing and implementing an action plan for planting 100,000 trees in Copenhagen by 2025. The plan should include initiatives for street trees, park trees and partnership trees. *This initiative applies to all four themes. | More urban nature Enhanced experiential value |
| Green links | Developing an action plan for green links in Copenhagen. The map should include existing and potential green links seen in relation to climate adaptation, biodiversity and dispersal corridors and recreational connections. The action plan should generate awareness of green links in the City's planning in general. | Enhanced biodiversity Climate adaptation Enhanced experiential value |
| Urban nature fund for munici- pal land | Establishing an annual urban nature fund to supplement existing works budgets, where it is relevant to strengthen urban nature. The fund should accept applications from all administrations in the City Copenhagen. | More urban nature in public works projects |
| Utilizing operational com- petences across administrative boundaries | Carrying out a pilot project across administrative boundaries with the purpose of utilizing existing green operational competences in the administrations more efficiently. In the long term, the pilot project should be implemented on a larger scale. | Enhanced maintenanceEnhanced resilience |
| Partnerships in municipal areas | Establishing partnership projects on municipal land. The partnerships should focus on the care and development of urban nature on munici- pal land, including, for example, temporary green urban spaces, urban gardens and flower beds in nursery schools and schools. | More urban nature in municipal areas Enhanced awareness, ownership and understand- ing of urban nature |
| | | |

THEME #3 CASE STORY: AMAGER FÆLLED SCHOOL

With the renovation of the schoolyard at Amager Fælled School, the City of Copenhagen replaced asphalt and grey concrete with plants and trees. Amager Fælled School now has Denmark's first wooded schoolyard.

The new green area is not only for the benefit of students and teachers. The local community also has access to a new oasis, as the wooded schoolyard fuses with the urban space to form an open recreational area outside school hours. The wooded area consists of nine islands, each delimited by a low concrete embankment. On the islands, there is a variety of trees, including oak, fir and aspen. The students can move around on the islands, which feature clearings, play spaces and varying terrain heights.

The schoolyard exemplifies how urban nature can create exciting environments for play and learning. Here, urban nature has a high priority and has become an integrated part of the proposed solution.





THERE ARE SOME 500 WORN-DOWN BACKYARDS LEFT IN COPENHAGEN, OF WHICH ABOUT 300 ARE POTENTIAL GREEN COURTYARDS.

Source: City of Copenhagen

THEME #4 URBAN NATURE ON NON-MUNICIPAL LAND

INDICATORS 2015:

- 10% of Copenhageners find that they take active part in the effort to create more and better urban nature.
- The City of Copenhagen annually carries out 50 partnership projects with an emphasis on urban nature.

This theme applies to all areas in Copenhagen that are not owned by the City of Copenhagen, including non-profit housing, private detached homes, co-op housing associations, state-owned areas and companies. Non-municipal land makes up about 57% of the City of Copenhagen.

Non-municipal land holds a huge potential for creating more urban nature in Copenhagen. In part because they make up the bulk of the city's acreage and in part because we are already seeing growing interest among Copenhageners to engage in the effort to create more urban nature in Copenhagen. Moreover, many of the privately owned areas already have many trees and species that make a valuable to urban nature in Copenhagen.

It is our ambition to support urban nature initiatives on non-municipal land by engaging in partnerships with private landowners and by inspiring and motivating them to create more urban nature in their land. This should include partnerships between the City and private landowners, campaigns, support for planting initiatives and inspirational material. As part of climate adaptations in Copenhagen, some of the privately owned streets in Copenhagen are to be transformed into green cloudburst streets. This is going to involve partnerships between the City of Copenhagen, utility companies and the private landowners' associations. The green cloudburst streets hold a big potential for creating more urban nature in Copenhagen. It is our ambition to ensure that the establishment of green cloudburst streets contribute to creating more urban nature, enhancing biodiversity and adding recreational experiences.



ALMOST 50% OF SURVEYED OWNERS OF DETACHED HOMES WERE MOTIVATED TO PLANT TREES IF THEY RECEIVED ADVICE AND GUIDANCE.

Source: University of Copenhagen 2014

| NITIATIVE | DESCRIPTION | IMPACT |
|---|---|--|
| Catalogue of Irban nature Solutions | Developing a catalogue of urban nature solutions to be used in non-municipal areas. The catalogue includes key figures as well as initial and operational costs for the individual solutions. | More urban nature in non-municipal areas Enhanced biodiversity Climate adaptation Enhanced experiential value |
| Jrban nature und | Establishing an annual urban nature fund to support private initiatives aimed at creating more urban nature in Copenhagen. Among other purposes, the fund may be used to co-fund the planting of trees in pri- vate streets, volunteer nature management and efforts to safeguard endangered species. The fund may also be used to apply for co-funding from external foundations. | More urban nature in non-municipal areas Enhanced awareness, own- ership and understanding of urban nature Enhanced biodiversity |
| Partnerships on Ion-municipal and | Establishing partnerships between the City of Copenhagen, companies, green enthusiasts, non-profit housing associations and others. The partnerships should focus on knowledge sharing, communication and events that engage and motivate citizens to contribute to the effort of creating more urban nature in Copenhagen. | More urban nature in non-municipal areas Enhanced awareness, own- ership and understanding of urban nature |
| Making room for ainwater | Establishing partnerships between the City of Copenhagen, utility companies, and private landowners and initiating projects aimed at managing rainwater on private land. | More urban nature in non-municipal areas Rainwater management |
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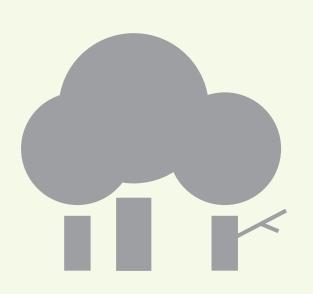
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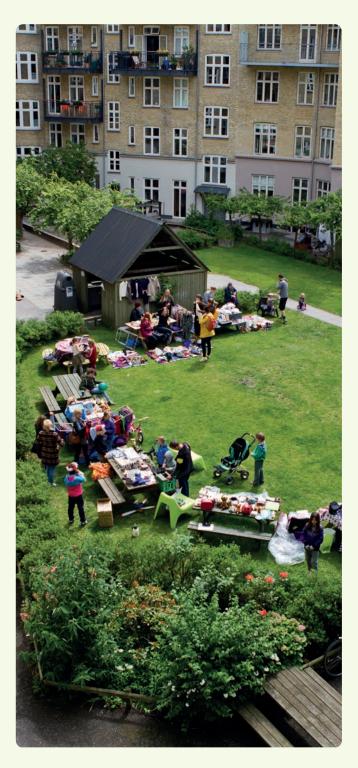
CASE STORY: GREEN COURTYARDS

For many years, the City of Copenhagen has invested in renovating worn-down and divided backyards to turn them into larger shared courtyards as part of the urban renewal programme. In cooperation with the Danish state, the City of Copenhagen is currently establishing 10 to 12 green courtyards a year.

The courtyards serve as important green oases in the city, where Copenhageners meet their neighbours and experience nature and the changing seasons up close. Apart from creating more attractive local environments and proximity to urban nature, the green courtyards also play an important role in climate adaptations in Copenhagen, since the courtyard renovations typically also involve a dedicated effort to secure local rainwater drainage. Since the 1960s, more than 600 courtyards have been established in the City of Copenhagen. Courtyard renovations have involved the establishment of 450,000 square metres of lawn and the planting of 15,000 trees. By comparison, Ørstedsparken covers 65,000 square metres.

The courtyards are an important resource in increasing the amount of urban nature in Copenhagen and exemplify how local Copenhageners can be engaged in the effort to create more urban nature.





INDIKATORER FOR BYNATUR I KØBENHAVN

| | INDICATOR | SOURCE | BASELINE |
|--|--|--|---|
| Theme 1: Urban nature in green municipal areas | 95% of the users are satisfied with the quality of parks, cemeteries and nature areas owned by the City of Copenhagen The City of Copenhagen annually initiates two nature management projects in green municipal areas | Yardstick measure- ments in 11 selected parks, cemeteries and nature areas. | 90% in 2014 First measurement in 2016 |
| Theme 2: Urban nature in urban development areas | Urban nature is incorporated at every stage of urban planning in the City of Copenhagen 90% of Copenhageners living in urban development areas should be within a 15-minute walk from a park, a beach, a nature area or a harbour bath | | First measurement in 2016 Baseline established in 2016 |
| Theme 3: Urban nature on municipal land | 50% of Copenhageners are satisfied with the amount of vegetation in streets, alleys and city squares 20% of Copenhagen's total area is covered by tree crowns | The user survey 'Mere grønt' | 30% in 2014 16% in 2015 |
| Theme 4: Urban nature on non-municipal land | 10% of Copenhageners find that they take active part in the effort to create more and better urban nature The City of Copenhagen annually carries out 50 part- nership projects with a focus on urban nature | | Baseline established in 2016 First measurement in 2016 |



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