

Tokyo GREEN BIZ

Tokyo Metropolitan Government Greenery Initiatives



Green Urban Development for the Next 100 Years

Taking every available opportunity to create and preserve greenery, the Tokyo Metropolitan Government (TMG) has advanced a range of efforts to date, with the aim to increase the quantity and quality of greenery throughout our city.

Meanwhile, in recent years, we have seen a shift in trends related to green space, including the functions expected of cities and people's values. For example, greenery is being used to help address social issues, including in climate adaptation measures, and the need for open green spaces has increased as a result of the COVID-19 pandemic. Harmony between the natural environment and urban functions is valued more than ever before across the globe, with overseas cities engaged in promoting green infrastructure and other initiatives.

Against this backdrop, the TMG launched "Tokyo Green Biz" in July 2023. This new green project looks 100 years into the future and aims to further enhance the value of our city's greenery, which brings a sense of ease and calm to daily life, and to pass down our green spaces to future generations with the cooperation of Tokyo residents. Through strengthening efforts to protect, increase and connect, and utilize Tokyo's greenery, we will advance the greening of our city, the conservation of biodiversity, and other initiatives in our push to transform Tokyo into a sustainable city that exists in harmony with nature.

This document highlights various societal trends and issues related to green space, and introduces initiatives being promoted by the TMG from the three perspectives of "protecting," "increasing and connecting," and "utilizing" our greenery.

We hope this will help deepen your understanding of Tokyo Green Biz, which reflects our vision of green urban development for the next 100 years.



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1. Tokyo Green Biz: A New Green Project

Harmony between the natural environment and urban functions is highly valued across the globe.

We face a **major turning point** where we must decide how we will shape our city and the lives of our residents.



GREEN

(Greenery, Trees, & Green Spaces)



BIZ

(Private Entities)

×

Launch of a new green project to be promoted in cooperation with various stakeholders for the sake of Tokyo's greenery



Tokyo GREEN BIZ

A vision that looks 100 years into the future and aims to enhance the value of Tokyo's greenery and pass it down to future generations with the cooperation of residents, the private sector, and other stakeholders.

Tokyo's Greenery Initiatives

Protect, Increase and Connect, and Utilize

As a result of the climate crisis and the fight against the COVID-19 pandemic, people's values and the roles of cities are becoming increasingly diverse.

In order to adapt to shifting trends related to green space, we will strengthen our efforts to protect, increase and connect, and utilize Tokyo's greenery to advance the greening of our city, the conservation of biodiversity, and other initiatives in our push to transform Tokyo into a sustainable city that exists in harmony with nature.

Efforts to Protect Greenery

- Introducing a new scheme to protect trees
- Conserving green farmland
- Promoting the preservation of natural areas

Efforts to Utilize Greenery

- Working together with Tokyo residents
- Promoting the agriculture and forestry sectors
- Making use of natural lands



Efforts to Increase and Connect Greenery

- Maximizing the benefits of greenery and nature
- Expanding greenery
- Accelerating the development of parks
- Forming networks of greenery

Efforts to Protect Greenery

- Introducing a new scheme to protect trees
- Preservation and utilization of productive green land and farmland
- Promoting the designation of greenery-conservation areas
- Conservation and management of water conservation forests
- Conservation of privately-owned greenery such as residential trees
- Appropriate maintenance and management of roadside trees
- Feature: Roadside trees



Overview

We will realize the following initiatives to establish a “Tree Bank,” a new framework to protect trees.





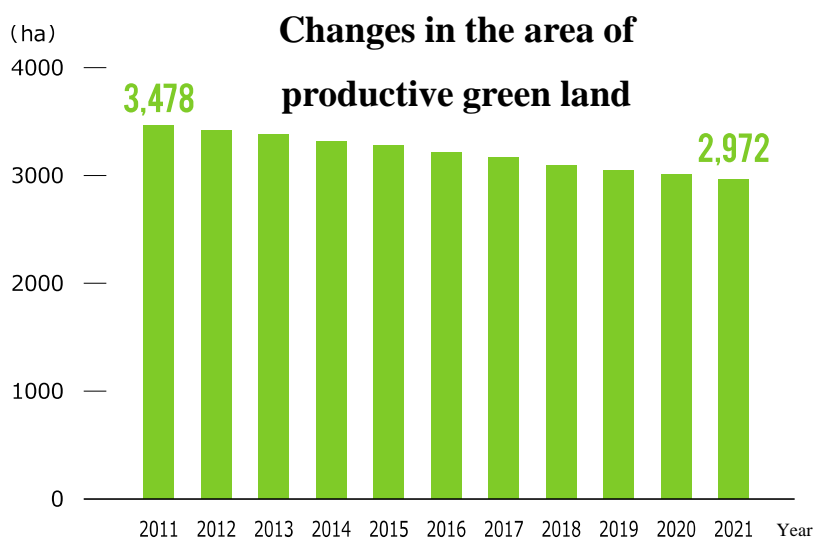
Overview

The roles of Tokyo's farmland include providing fresh, safe, and secure agricultural produce to residents' tables, enriching people's daily lives with a sense of ease and calm, and serving as evacuation sites in disasters.

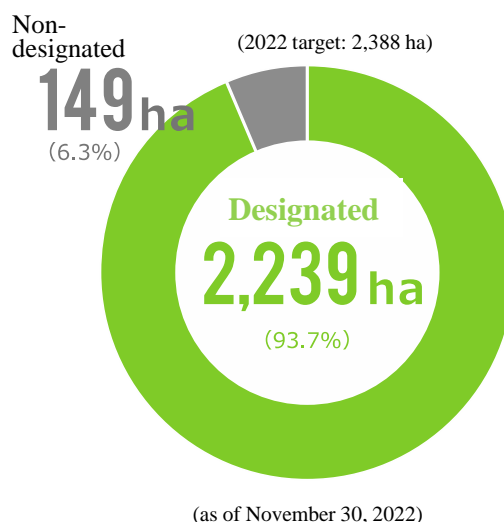
However, farmland, including productive green land, has decreased over the years, so the TMG has been promoting initiatives to preserve beneficial urban farmland.



Main initiatives



Designation status of specified productive green land



In 2022, a large amount of productive green land will reach 30 years since its designation, so procedures are being carried out by municipalities to designate specified productive green land.

Examples of uses of farmland



Agricultural experience farmland



Training users at farmland for seniors



Agricultural wells for disaster response

Promoting the designation of greenery-conservation areas

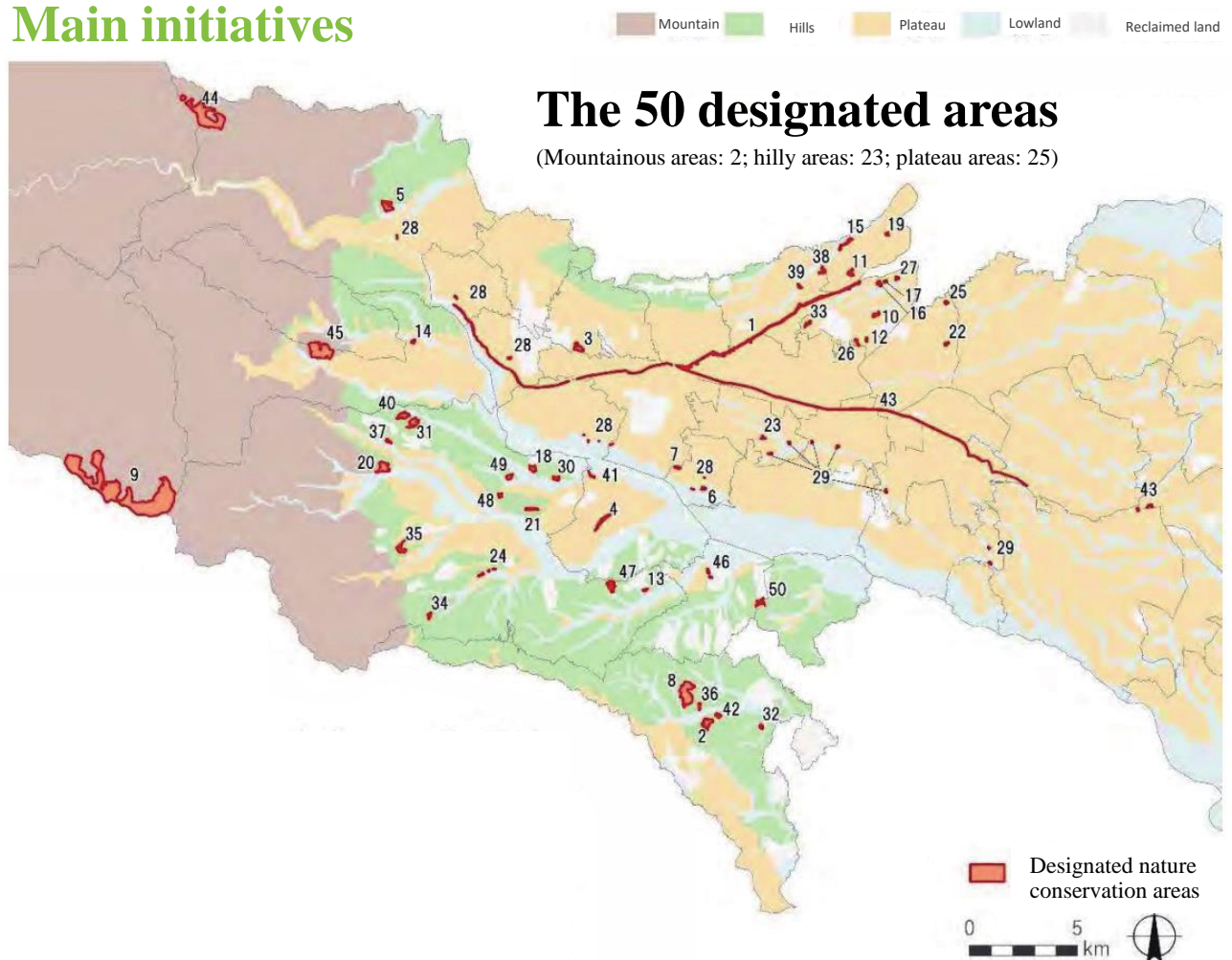


Overview

In accordance with the “ordinances and enforcement regulations concerning protection and recovery of nature in Tokyo,” as of December 2022, the TMG has designated a total of 50 areas measuring around 760 ha as nature conservation areas since 1974, which protect our valuable natural land.



Main initiatives



Historic environmental conservation area



Green space conservation area



Satoyama (woodland area near populated area) conservation area

Conservation and management of water conservation forests



Overview

Area of water conservation forests in the Tama River upper reaches

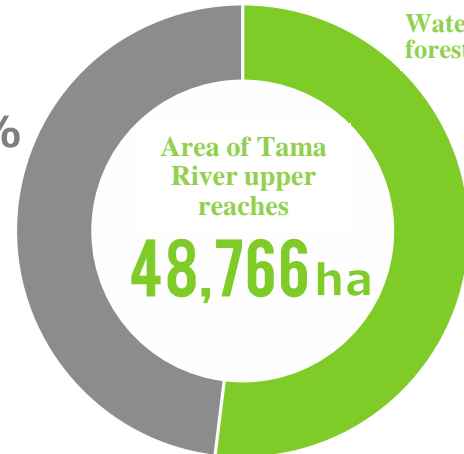
Tokyo's water conservation forests cover around 50% of the watershed area in the upper reaches of the Tama River. They are some of the largest forests managed by waterworks utilities in Japan.

Others

48%

Water conservation forests

52%



(As of April 1, 2023)

The water conservation forests are managed appropriately to ensure a stable supply of clean water from the upper reaches of the Tama River is delivered to people living in Tokyo, and we strive for forest growth that enables satisfactory water conservation forest functions.



Main initiatives

Work to conserve water conservation forests involves forestry maintenance, measures against animal damage and insect damage, and maintenance of forest facilities such as paths, with the aims of healthy growth and management of the forests.



Maintaining a path for forest management (fence made from timber from thinning)



Before



After

Thinning (the selective removal of stunted trees and others)

Conservation of privately-owned greenery such as residential trees

Special green space conservation areas



Overview

Based on the Urban Green Space Conservation Act, these are designated green spaces that form favorable natural environments in the city.

Tax breaks and other incentives reduce the burden of owning land with trees, while restrictions are imposed on actions such as building and felling trees and bamboo.



Main initiatives

There are 53 designated areas in Tokyo, covering around 321 ha. (As of April 2023)



Special green space conservation area in Nishiarai Sakaecho, Adachi City



Special green space conservation area in Shimohoya 4-Chome, Nishitokyo City

Urban Green Space Contract System



Overview

Based on the Urban Green Space Conservation Act, this is a system that enables local public organizations to form contracts with landowners, etc. to establish and manage green spaces for residents.

The contracts are for five years or more, and have the advantage of reducing the burden of management for owners.



Main initiatives

There are 56 urban green spaces designated in Tokyo (As of March 2022)



Kita Karasuyama 9-Chome residential forest urban green space, Setagaya City

(Source) Website of Setagaya City



Yanbana Ikoi-no-mori, Sugunami City

(Source) Website of Sugunami City

Appropriate maintenance and management of roadside trees



Overview

Roadside trees are being grown with the aim of creating warm and comfortable streetscapes for a good city environment. To maintain and manage them, we prune tall trees, clip shrubs, prevent insects that can cause damage, and examine the trees for disease.



Main initiatives

Appropriate pruning is carried out in accordance with the characteristics and aims of each group of roadside trees.

There are two main types and periods of pruning.

Basic pruning (Winter pruning)

This is mainly for deciduous trees, and aims to shape the overall

Light pruning (Summer pruning)

This is carried out with the aims of adjusting the density of the branches that have sprouted, correctly arranging the tree canopy, preventing trees from falling due to strong winds in a typhoon, etc., and preventing the onset of disease and insect damage.

We also took the opportunity of the Tokyo 2020 Olympic & Paralympic Games to systematically prune trees to ensure shade as a countermeasure against the summer heat.

In the future, we will increase the target routes and promote this initiative.



Creating shade

If appropriate maintenance and management is not carried out, a variety of issues can arise, including reduced visibility of traffic lights, traffic accidents due to fallen trees, and incidents of people falling due to rising tree roots.



Reduced visibility of traffic lights



Fallen tree



Uneven sidewalk due to rising tree roots



Feature

Roadside trees

The roadside trees on public roads, often planted in rows, are greenery that we have many chances to see on a daily basis.

The essential role of public roads is to facilitate the safe and easy movement of people and goods, and the creation of greenery here also adds the role of creating comfortable urban spaces in which we can feel the transition of the four seasons in the city.

As of April 1, 2023, there are around 1 million roadside trees in Tokyo, and around 650,000 are managed by the TMG.



Top 5 roadside trees in Tokyo (no. of trees)

1st	2nd	3rd	4th	5th	Others	Total
Flowering dogwood	Ginkgo	Cherry trees	Trident maple	Zelkova	773,366	1,000,546
60,848	58,858	42,971	35,630	28,873		

*As of April 1, 2023



Ogawayamatanashisen-line (Kodaira City)
Flowering dogwoods



Gyoko-Dori Avenue (Chiyoda-ku)
Ginkgo

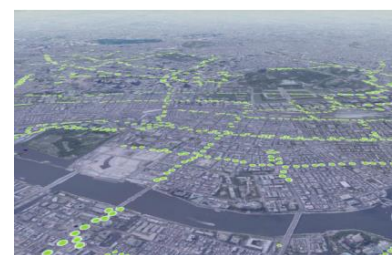


Nakano-Dori Avenue (Nakano-ku)
Yoshino cherry trees



Visualizing roadside trees

The Digital Twin 3D Viewer released by the TMG reproduces buildings and streets in cyberspace and visualizes information about roadside trees on each public road in three special wards in the heart of the city.



Digital Twin 3D Viewer

Efforts to increase and connect greenery

- Maximizing the benefits of greenery and nature
- Development of urban parks and green spaces
- Development of marine parks
- Creation of greenery on roads
- Creation of green spaces according to private-sector development
- Forming networks of greenery
- Feature: 150 years since the creation of Tokyo's parks

Maximizing the benefits of greenery and nature



Overview

We are promoting the introduction of green infrastructure in the facilities owned by the TMG and private facilities to make use of the functions of the natural environment to solve social issues.



Greenbelt for rainfall infiltration (rain garden)

(Source) Website of New York City



Rooftop greening (On the roof of the Tokyo Metropolitan Assembly building)



Development of a multi-natural river system for biodiversity

(Nishitokyo City)

Accelerating the development of urban parks and green spaces

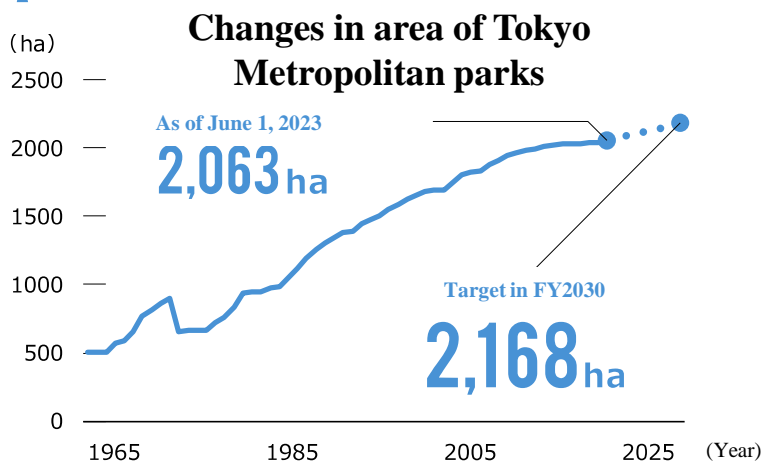


Overview

The greenery of parks and green spaces has various roles: it increases comfort and stateliness, offers places of serenity and recreation, improves the urban environment, and ensures spaces for disaster prevention. Tokyo Metropolitan Parks have been newly expanded and the TMG offers support for the development of municipal parks.



Main initiatives



To date, a total of 2,063 ha have been developed as Tokyo Metropolitan parks. The aim is for 2,168 ha in FY2023.

*The values on the graph up to FY2022 are for April 1.



Nerima Castle Ruins Park



Takaido Park



Rokusen Park



Nakato Park



Overview

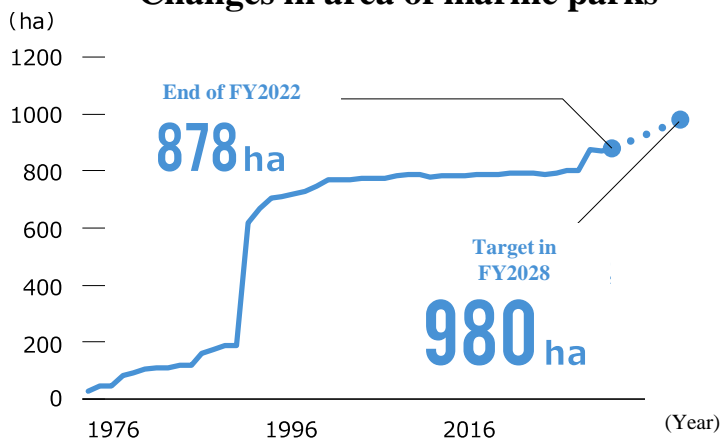
We have been developing marine parks on reclaimed land in Tokyo as spaces where people can feel and experience the sea and nature, as well as enjoy recreation such as sports and bird watching.

There are currently 40 parks open, including Odaiba Marine Park.



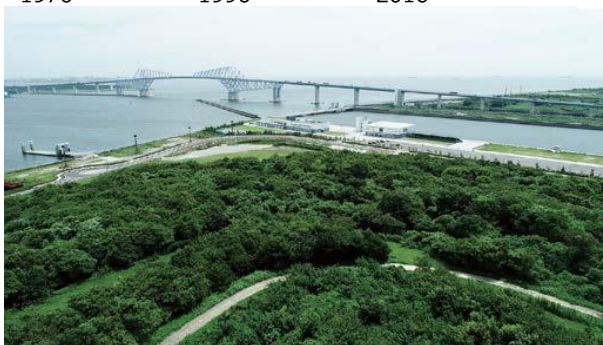
Main initiatives

Changes in area of marine parks



To date, a total of 878 ha have been developed as marine parks. The aim is for 980 ha in FY2028.

*The values on the graph up to FY2021 are for April 1. The values for FY2022 are for the end of the fiscal year



Umi-no-mori Park



Odaiba Marine Park



Harumi Wharf Park © TOKYO PORT TERMINAL CORPORATION.



Ariake Seaside Park



Overview

The greenery on roads has various roles, including offering people a sense of ease and calm, improving the urban environment, and creating beautiful cityscapes.

We have been developing greenery on City roads to demonstrate the roles of roadside greenery to their fullest extent.



Main initiatives

Around 1 million roadside trees are being grown on all of the types of roads (which consist of national roads, metropolitan roads and special Ward/municipal roads) in Tokyo.

Type	No. of trees managed
National roads	24,234
Metropolitan roads	645,875
Special Ward roads	206,451
Municipal roads	123,986

*As of April 1, 2023



Roadside trees <Omotesando in Shibuya City>



Making the road greener <Uchibori-Dori in Chiyoda City>



Green wall <Shinkoganei-kaido in Kodaira City>



Road divider <Metropolitan Road 153 in Tachikawa City>

Creation of green spaces according to private-sector development



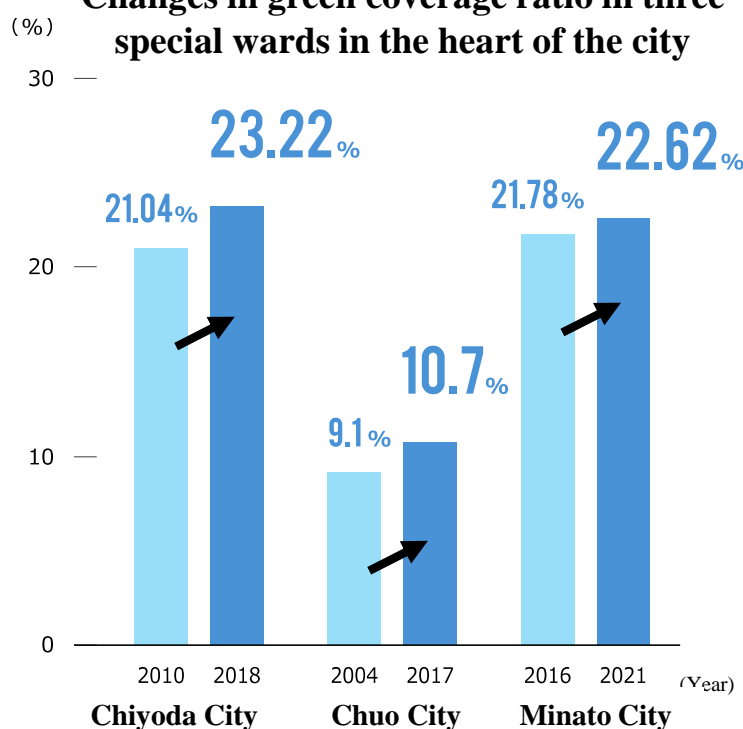
Overview

The TMG is creating new greenery in the city by promoting greenery creation with private-sector development through mechanisms to appraise greenery creation and conservation initiatives in urban development.



Main initiatives

Changes in green coverage ratio in three special wards in the heart of the city



The green coverage ratio in three special wards in the heart of the city, where urban development is underway, has been increasing.

Recent large-scale private-sector developments in places such as Takeshiba, Azabudai, and Otemachi have created 60,000 m² of new greenery in total.

(Sources)

Report on the Survey of Actual Conditions of Greenery and Heat Distribution in Chiyoda City (Chiyoda City)

Report on the 5th Survey of Actual Conditions of Greenery in Chuo City (Chuo City)

Report on the 10th Survey of the Actual Conditions of Greenery in Minato City (Minato City)



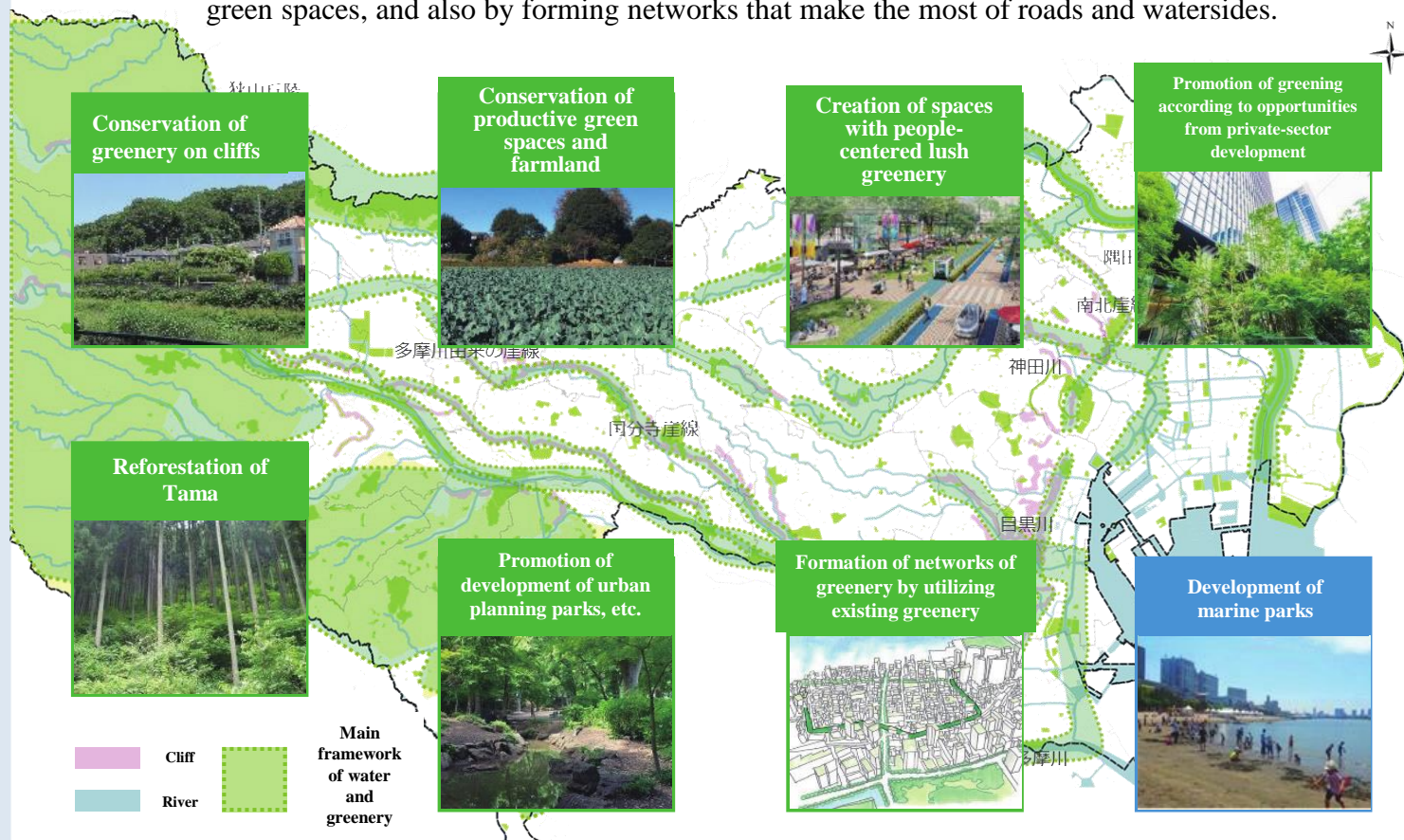
Azabudai Hills



Tokyo Portcity Takeshiba

Forming networks of greenery

We are promoting initiatives to realize a Tokyo filled with water and greenery by developing parks and green spaces, and also by forming networks that make the most of roads and watersides.



Restoring the water of the outer moat using the Tamagawa Josui Aqueduct



Overview

We are promoting improved water quality in the outer moat, which is a historic property, working to provide a rejuvenating area for people working in the heart of the city and to create elegant scenery.



Main initiatives

We are running study sessions for children focusing on the outer moat and Tamagawa Josui Aqueduct so we can drive the purification of the moat and preserve spaces with water and greenery for the future.



Outer moat



Tamagawa Josui Aqueduct

Regeneration of Tokyo Expressway (KK Expressway)



Overview

To create new value and charm in Tokyo, we are promoting initiatives to regenerate the space above the Tokyo Expressway (KK Expressway) as a “Tokyo Sky Corridor,” a corridor in the air surrounded by greenery.



Main initiatives

The goals of regenerating and using the KK Expressway, the vision that is our aim, and policies for development have been established as City policies.

Images of regeneration



A new network of greenery will be created in Tokyo



You can spend time in a restful space with a sense of greenery and enrichment

We held an event called “Ginza Skywalk” so people could experience a pedestrian space, giving more people a sense of the finished image.





150 years since the creation of Tokyo's parks

The parks system was launched in 1873, meaning it has been 150 years since Ueno Park and Shiba Park, the first Tokyo Metropolitan parks, were opened.



Logo of the project for the 150th anniversary of the Tokyo City public park system



Special ambassador for the 150th anniversary project (Official character of Ueno Park)

Tokyo boasts a variety of Metropolitan parks, including the two above, gardens designated as a cultural property, parks with facilities where people can enjoy sport, and even zoos and botanical gardens. The current number of Metropolitan parks is 84.



Ueno Park
(the first Tokyo Metropolitan park)



Hibiya Park
(forerunner of modern western-style parks)



Hama-rikyu Gardens
(A Japanese garden designated as a cultural property)



Komazawa Olympic Park
(Venue for the 1964 Tokyo Olympics)

Efforts to Utilize Greenery

- Working together with Tokyo residents
- Use of funds and fundraising
- Utilizing public spaces to create places of lush greenery
where people can relax
- Forestry cycle and use of Tama timber
- Feature: Forests and decarbonization

Working together with Tokyo residents “Tokyo Green Biz Movement”



Overview

We will use the Forest Environmental Concession Tax to develop the Tokyo Green Biz Movement, which will utilize and foster greenery in cooperation with Tokyo residents.



Tree-planting event

(Source) Tama City website



Tree planting at Umi-no-Mori Park

(Photos taken at the time of tree planting)



Development and management in cooperation with Tokyo residents



Overview

The TMG is promoting initiatives that will utilize and foster greenery to be passed down to the next generation in sympathy and cooperation with Tokyo residents, to create a restful environment in which anyone can be close to greenery in Tokyo. These initiatives will also contribute to the revitalization of local communities, multi-generational exchanges, and environmental education for children.



Main initiatives



Bureau of Environment “Satoyama!” website

Holding events such as forestry maintenance, rice planting, rice harvesting, nature observation, and craft experience programs to maintain environments in which diverse living things coexist.



Umi-no-mori Park

With the participation of Tokyo residents, approximately 240,000 saplings were planted on a garbage heap 30 m high, transforming it into a beautiful forest.

These saplings were purchased using funds gathered from residents and private companies, and raised from acorns by elementary school students and tree-growing volunteers.



Overview

Using the Tokyo Metropolitan Greening Fund, the Tokyo Metropolitan Parks Supporter Fund, and Tokyo Fundraising for Flowers and Greenery, we are promoting greening projects with support from Tokyo residents and companies.



Main initiatives

► Tokyo Metropolitan Greening Fund



Project to support street corner greening
(BRANCH Chofu)



Project to support street corner greening
(Tokyo Shoken Building Inc.)



Project to support flowerbed and garden
creation activities (Shiba Park, Minato City)

► Tokyo Metropolitan Parks Supporter Fund



Project to conserve and promulgate cherry
trees (Ueno Park)



Replenishing an herb garden (Higashimurayama
Central Park)



Gardening show 2022 (Hibiya Park)

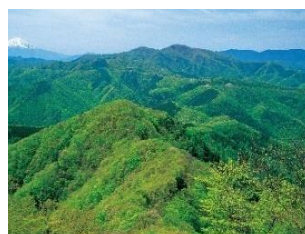
► Tokyo Fundraising for Flowers and Greenery



Project to conserve greenery
rich in biodiversity



Flowers and greenery
hospitality project



Afforestation project with little
pollen



Project to create places for
education about the natural
environment

Utilizing public spaces to create places of lush greenery where people can relax



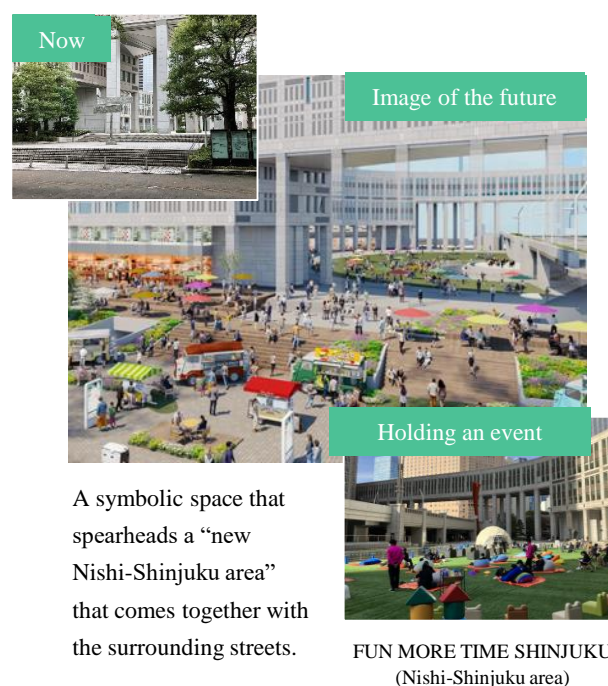
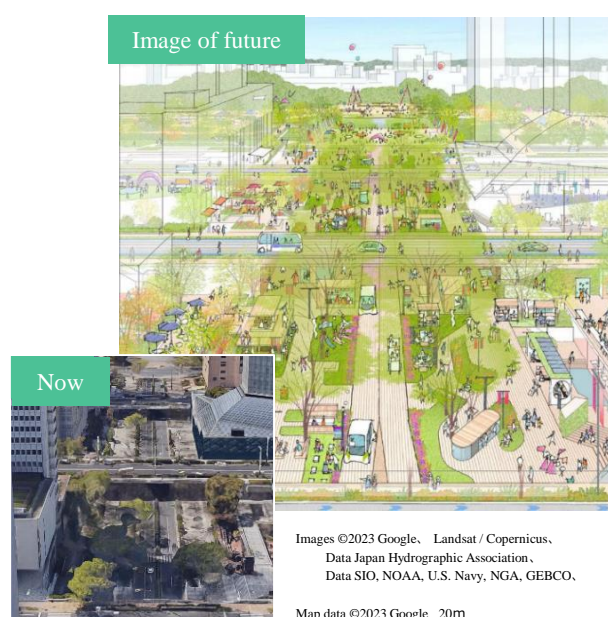
Overview

We are promoting initiatives to reorganize public spaces such as roads and plazas into urban spaces with lush greenery where people can relax and enjoy a walk.



Main initiatives

We are working on events that use sidewalks and public open spaces so visitors can enjoy their experience of Shinjuku, with the aim of reorganizing urban spaces in the Nishi-Shinjuku area.



Expanding initiatives through local organizations and municipal governments, etc.





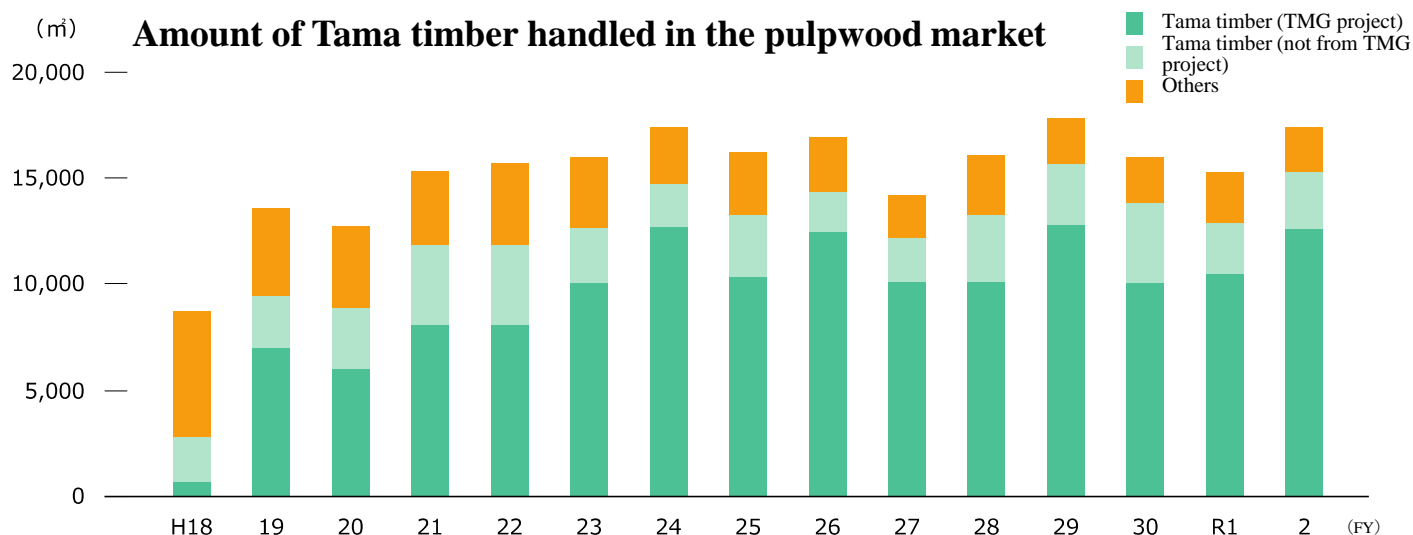
Overview

Around 40% of the total area of Tokyo is forest. These forests offer versatile functions, including providing timber, forming plentiful water resources, and containing sediment runoff and protecting residents from disasters.

These forests are an asset shared by Tokyo residents, and to pass them on to the next generation, the TMG is promoting the establishment of sustainable forest cycle and stronger management capabilities in the forestry industry.



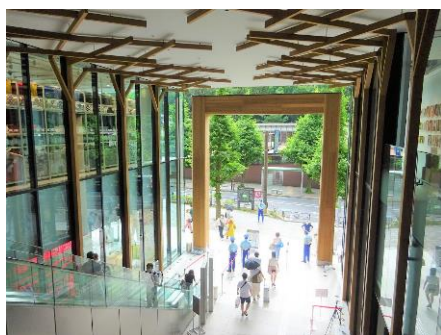
Main initiatives



(Source) 2021 survey of Tokyo forests, forestry (Bureau of Industrial and Labor Affairs), and TMG

The amount of Tama timber is steadily increasing, and around 80% of this is wood felled through TMG projects.

Examples of use of Tama timber



WITH HARAJUKU (Shibuya City)



Keio Asobi no Mori HUGHUG (Hino City)

Hub to communicate the appeal of Tama timber



TOKYO MOKUNAVI



Feature

Forests and decarbonization

In recent years, the area of Japan's forests has remained more-or-less stable, but "forest stock," an estimation of forest resources, has continued to increase.

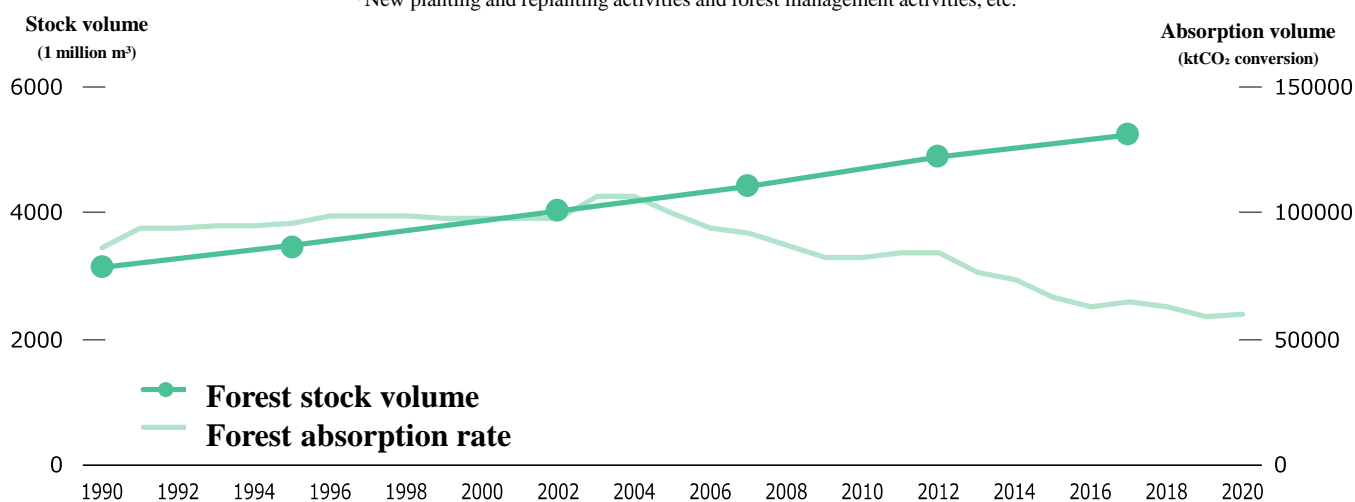
On the other hand, there is a tendency for forests' greenhouse gas absorption volume to decrease with the aging of planted forests.

To ensure forests' absorption, we are promoting a forestry cycle of "fell, use, plant, grow." Additionally, revisions were made to the J-Credit Scheme in August 2022* to facilitate the steady creation of young forests.

*For details see the J-Credit Scheme website (<https://japancredit.go.jp/about/revision/>)

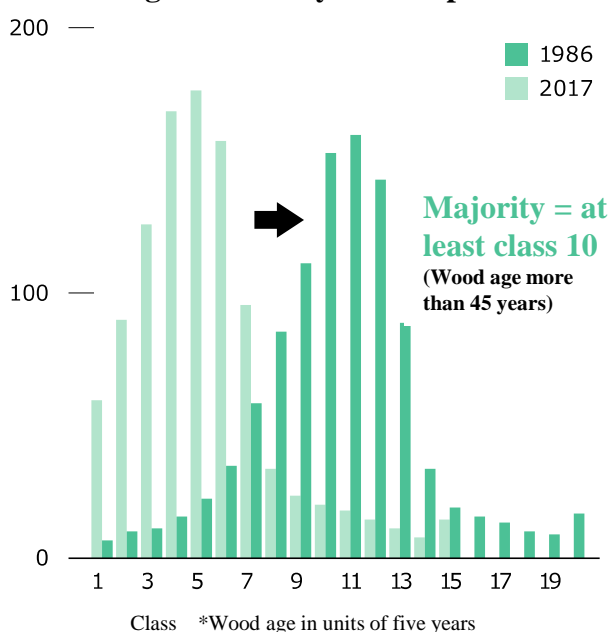
Changes in forest stock volume and forest absorption volume due to carbon sink measures*

*New planting and replanting activities and forest management activities, etc.



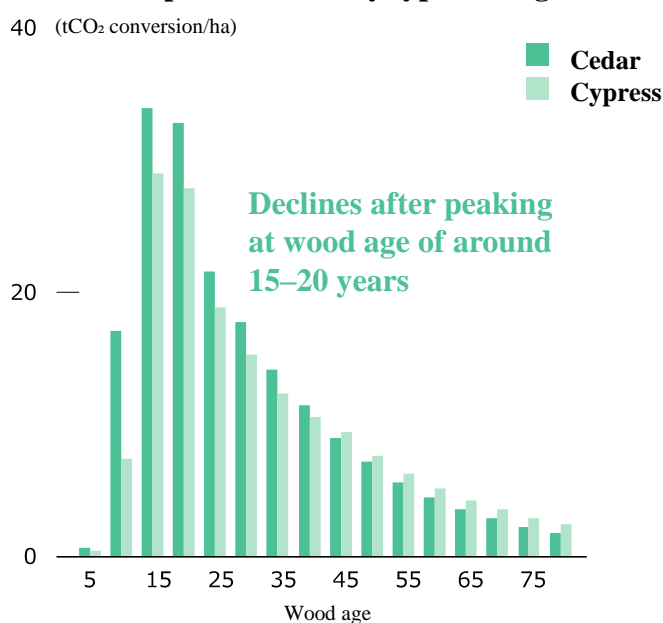
(Source) Created based on the Forestry Agency's "Status of Forest Resources (2017)" and the National Institute for Environmental Studies' "Japan's Greenhouse Gas Emissions Data (1990 to FY2021)"

Changes in area by class of planted forest



(Source) Created based on documents from the Forestry Agency's First Forestry Subcommittee

CO₂ absorption volume by type and age of wood

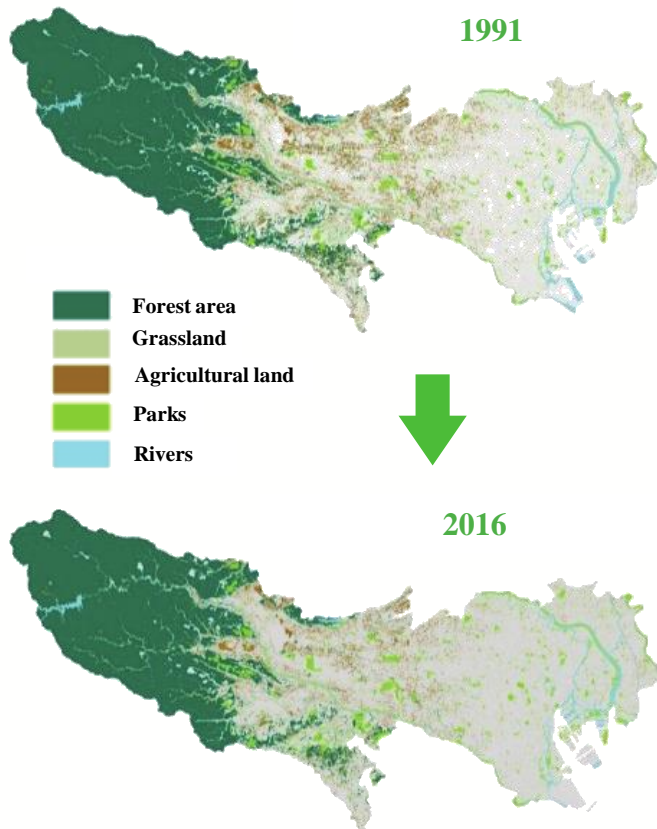


(Source) Created based on Nagano Prefecture's "'Project to Promote Forest Fostering' CO₂ absorption calculation standards"

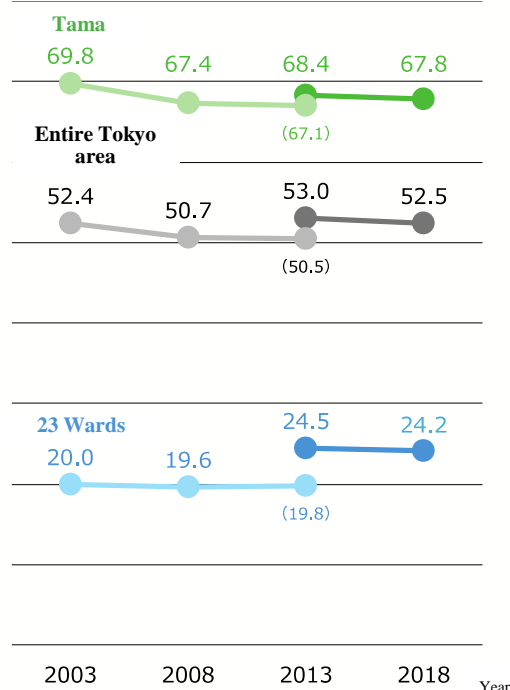
2. Reference Changes in circumstances surrounding greenery in recent years

Status of greenery

Although there was a tendency for it to decrease, in recent years Tokyo's greenery has stabilized thanks to the development of parks, conservation of productive green spaces, and the creation of greenery with any given opportunity.



Changes in green ratio

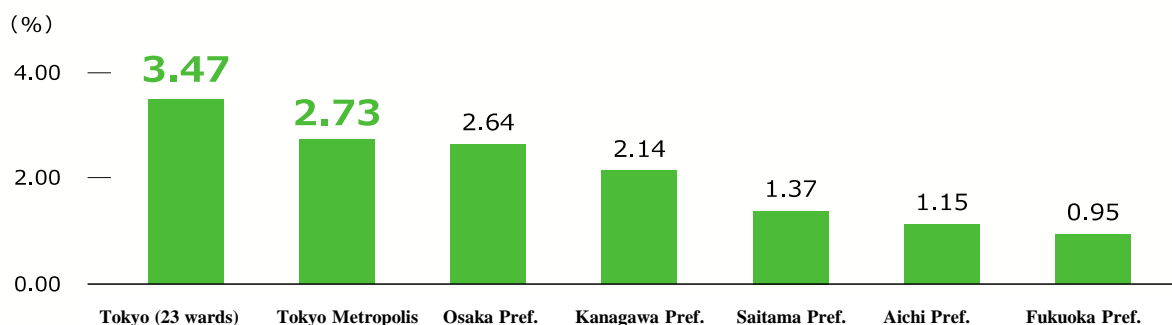


【Green ratio】 The proportion (%) of the total area of the region that consists of ground covered by greenery and park/water areas.

Park area

The proportion of the area of the prefecture occupied by urban parks is larger in Tokyo than in any other prefecture

Proportion of prefecture that is urban park area



(Source) Created based on Ministry of Internal Affairs and Communications documents

The social environment surrounding greenery

The required role of greenery

Rising global temperatures
Increasingly severe natural disasters

Solving social issues by using greenery

Example of use of greenery overseas (Singapore)



(Source) PUB Bishan Park pamphlet

Changes in people's values and behavior with the global pandemic

Responding to a need for ample spaces

Example of open green space overseas (New York)

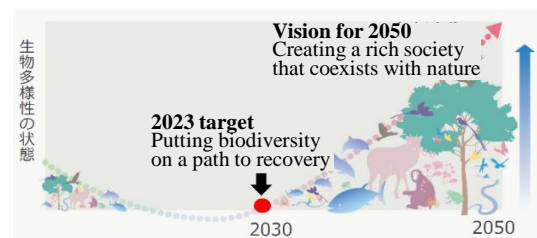


(Source) Bryant Park website

Realization of the global goal of "nature positive"

Formation of hubs for biodiversity

Image of the realization of "nature positive"



(Source) Bureau of Environment "Tokyo Biodiversity Strategy for 2030"

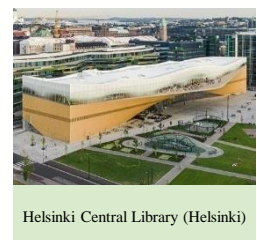
Increasing demand for wood as a sustainable material

Demonstration of multi-faceted functions of forests

Global trend for wooden structures



Grand Palais Éphémère (Paris)



Helsinki Central Library (Helsinki)

(Source) Helsinki City website

Increasing global demand for food
Effective use of resources

Sustainable, multi-purpose agriculture

Main functions of urban farmland



Provides fresh produce



Places for close farming experiences/exchanges



Environmental conservation

(Source) Ministry of Agriculture, Forestry and Fisheries website

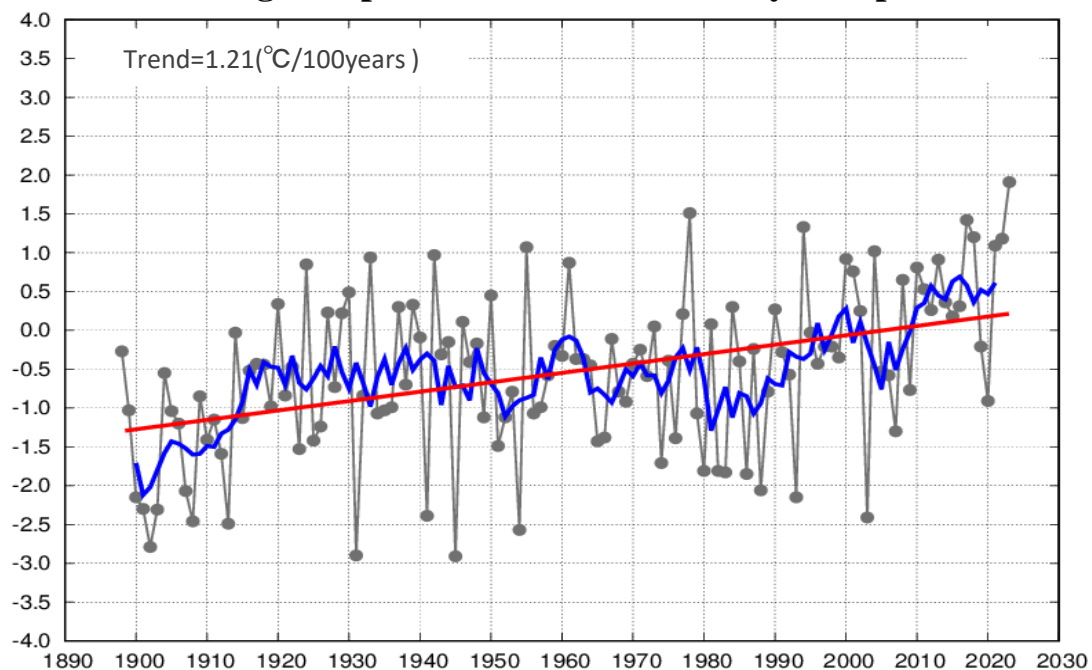
Rising global temperatures

A variety of risks are manifesting due to the rising global temperatures caused by climate change.

Increased temperature in Japan

The average temperatures in July this year were the hottest recorded temperatures in history.

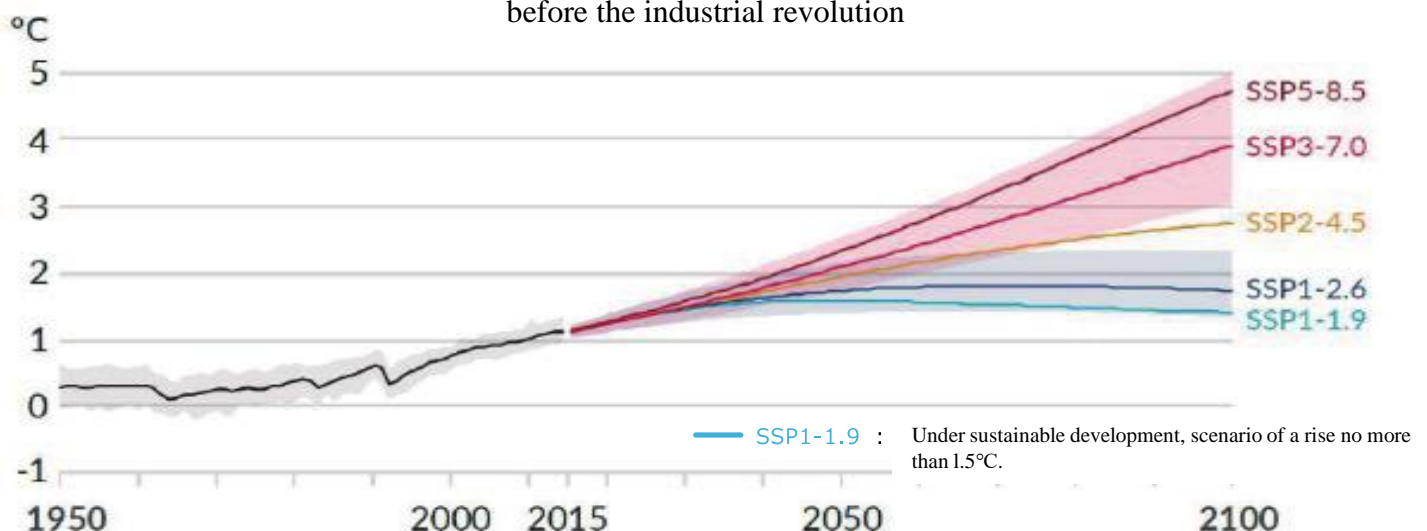
Average temperature deviations in July in Japan



Thin line (black): Deviations from standard average temperature values each year
 Thick line (blue): 5-year running average for deviations
 Straight line (red): Trend of long-term change
 Standard values: Average values over the 30 years between 1991 and 2020
 (Source) Japan Meteorological Agency website

Predicted rise in temperature in the future

The world is making efforts to limit the average global temperature rise to 1.5 °C compared to before the industrial revolution



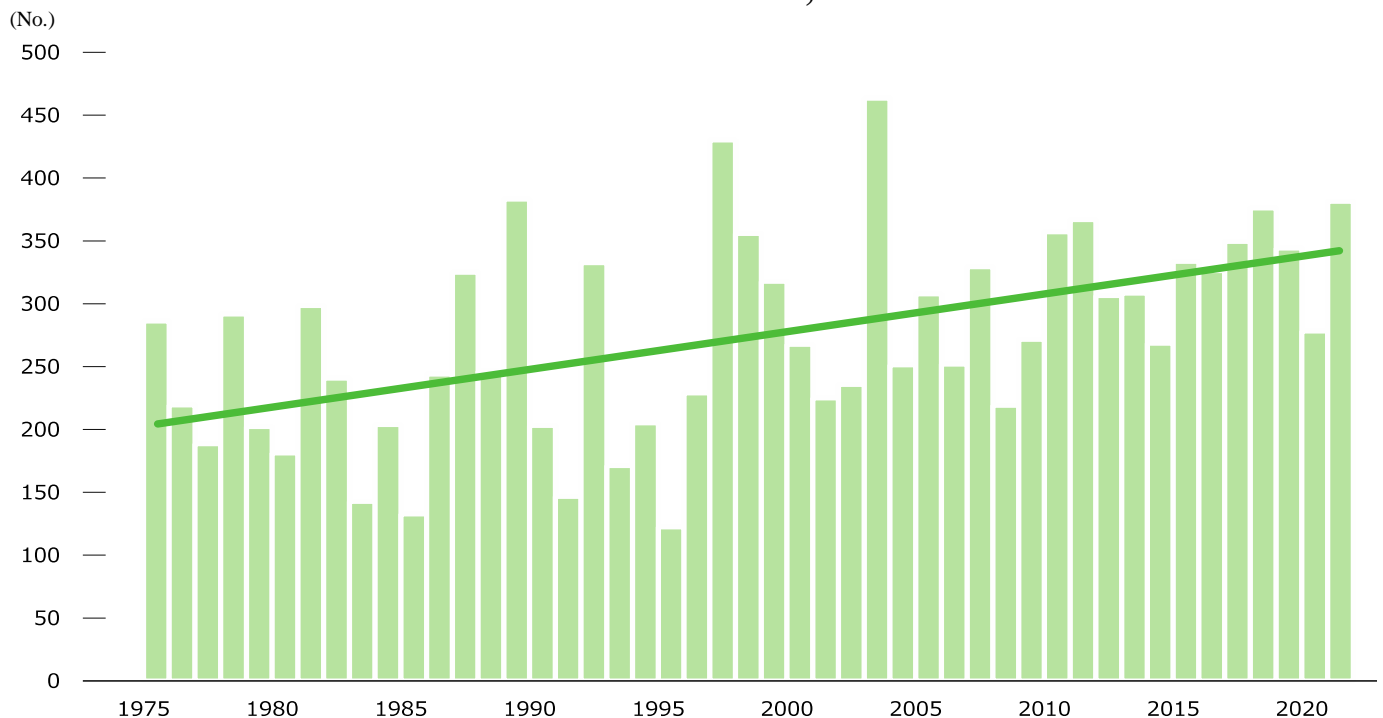
Increasingly severe natural disasters

Due to climate change, increased rainfall is expected, and there will be increasingly frequent and severe damage from wind and rain.

Changes in no. of occurrences of heavy rain

There is a tendency for an increased occurrence of heavy rain (of at least 50 mm in an hour) in a year.

No. of occurrences across 1,300 locations

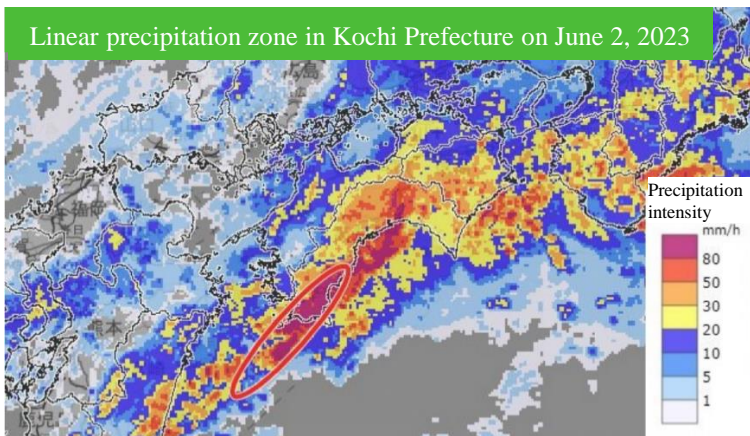


(Source) Created based on the IPCC Sixth Assessment Report Working Group I report

Concentrated heavy rain due to linear precipitation zones

Once again, this year has seen record heavy rain due to linear precipitation zones across the entire country, and there has been significant damage.

Linear precipitation zone in Kochi Prefecture on June 2, 2023



Examples of heavy, concentrated rain from linear precipitation zones, etc.	Damage
July 14–19 Iwate Pref., Akita Pref., etc.	Fatalities: 1; Destroyed: 2 buildings; Inundation above floor level: 824 buildings
July 11–13 Iwate Pref., Toyama Pref., etc.	Fatalities: 13; Destroyed: 16 buildings
July 7–10 Fukuoka Pref., Saga Pref., etc.	Inundation above floor level: 768 buildings
June 28 – July 6 Yamaguchi Pref., Kumamoto Pref., etc.	
June 1 –3 Kochi Pref., Wakayama Pref., etc.	Fatalities: 5; Destroyed: 13 buildings Inundation above floor level: 2,149 buildings

(Source) Created based on the IPCC Sixth Assessment Report Working Group I report

Solving social issues by using greenery

We need to use greenery to respond to increasingly severe wind and rain damage caused by climate change and to solve social issues, including biodiversity conservation.

Examples of the use of greenery overseas

Cities in other countries are engaging in various green infrastructure initiatives.

Green infrastructure

An approach that attempts to use the functions of the natural environment to solve a variety of issues in society, including adapting to climate change and conserving biodiversity.



New York

Greenbelt for accumulation and infiltration of rainwater
(rain garden)

(Source) New York City website



Singapore

A park that allows residents to become familiar with nature and water in normal times, and acts as a flood plain when the river floods

(Source) PUB Bishan Park pamphlet

Changes in people's values and behavior with the global pandemic

As globalization has advanced in recent years, human behavior has changed, including ensuring social distancing and avoiding crowds in the COVID-19 pandemic, in which there is a growing risk of infectious disease from around the world spreading in Tokyo.

Repeatedly occurring infections

New diseases are repeatedly occurring around the world, and spreading across national borders

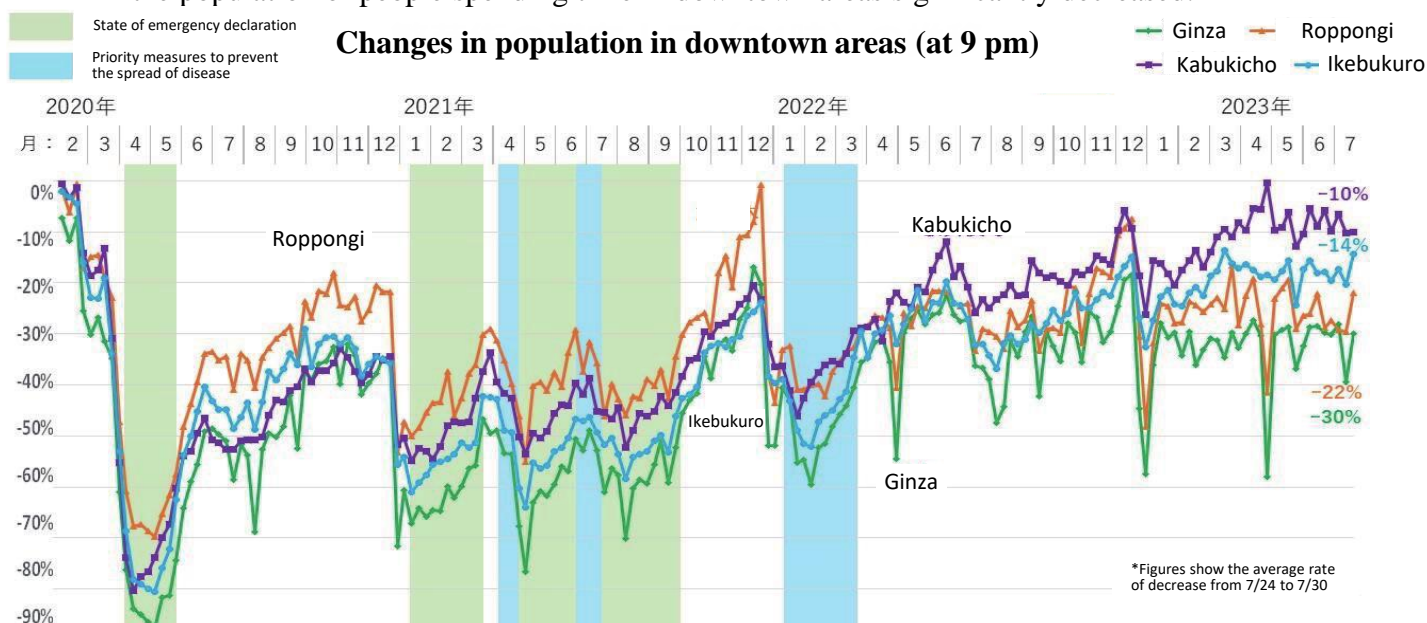
History of infectious diseases around the world

Years	Disease
B.C.E onwards	Smallpox
14 th century onwards	Bubonic plague (epidemic in Europe)
1918 onwards	Spanish flu
1981 onwards	AIDS (Acquired Immune Deficiency Syndrome)
2002 onwards	Severe acute respiratory syndrome (SARS)
2009 onwards	New strain of influenza (H1N1)
2012 onwards	Middle East respiratory syndrome (MERS)
2014 onwards	Ebola hemorrhagic fever (African epidemic)
2020 onwards	Coronavirus disease (COVID-19)

(Source) Created based on Health, Labour, and Welfare white papers, National Hepatitis Institute website, etc.

Status of congestion in downtown areas

During the period of the declaration of a state of emergency and key measures to prevent the spread, the population of people spending time in downtown areas significantly decreased.



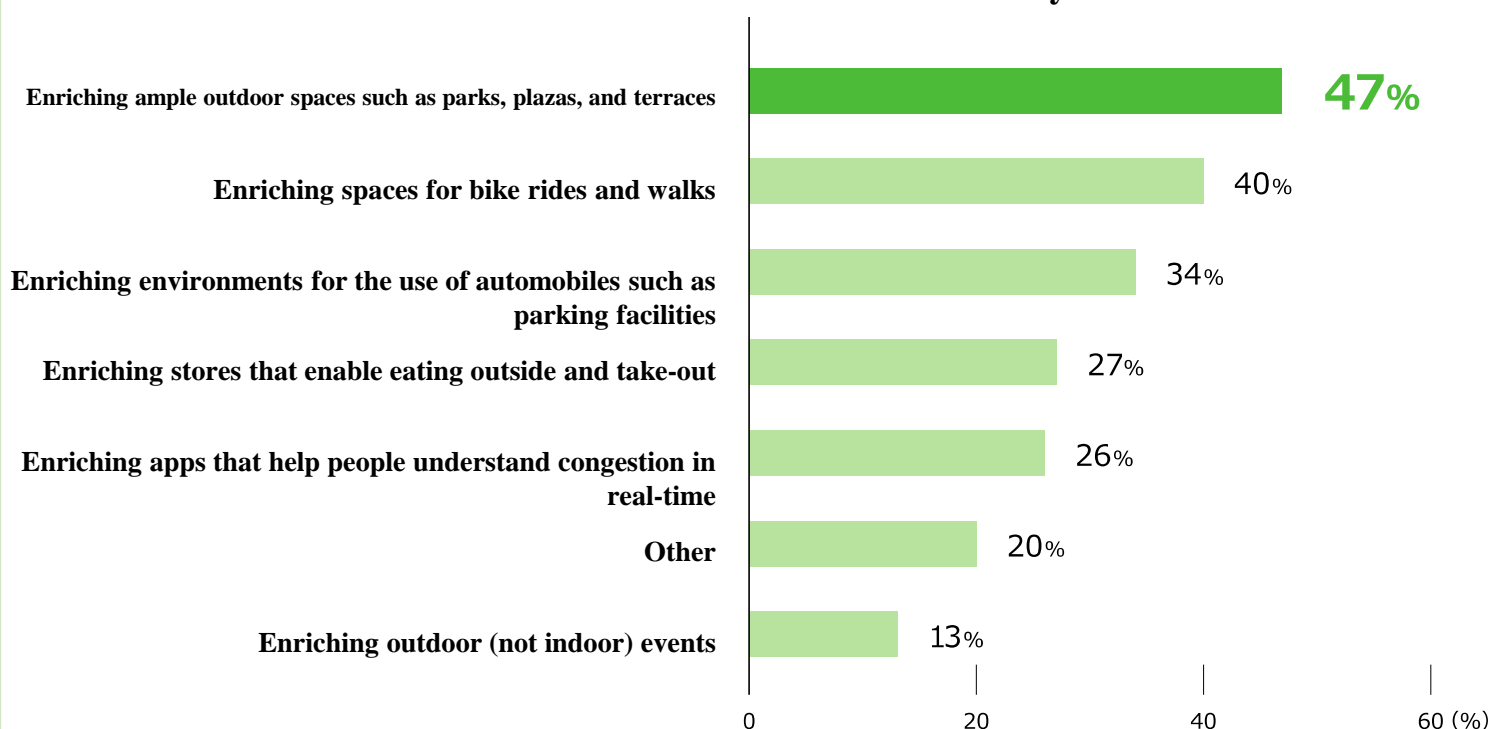
Responding to a need for ample spaces

The role required of cities and people's values changed with the COVID-19 pandemic, including an increased need for ample spaces such as parks and plazas

Awareness of urban spaces and nature

When it comes to initiatives required of cities, there is a lot of interest in enriching outdoor spaces.

Enrichment initiatives in urban centers and city centers



(Source) Created based on the Ministry of Land, Infrastructure, Transport and Tourism "Daily behavior survey under the effects of COVID-19 (no. 3)" (May 2023)

Example of an open green space overseas

The development of open green spaces is progressing in cities overseas.



New York

A lively park in which communities and private business operators work together

(Source) Bryant Park website

Realization of the global goal “nature positive”

To contribute to the global goal “nature positive realization” we must strive to conserve biodiversity

COP15 and national trends

October 2021

COP15 Part 1 held

Kunming Declaration
“putting biodiversity on a
path to recovery”

December 2022

COP15 Part 2 held

Kunming-Montreal Global
Biodiversity Framework
adopted

March 2023

**National
Biodiversity
Strategy of Japan**
for 2023 – 2030
formulated

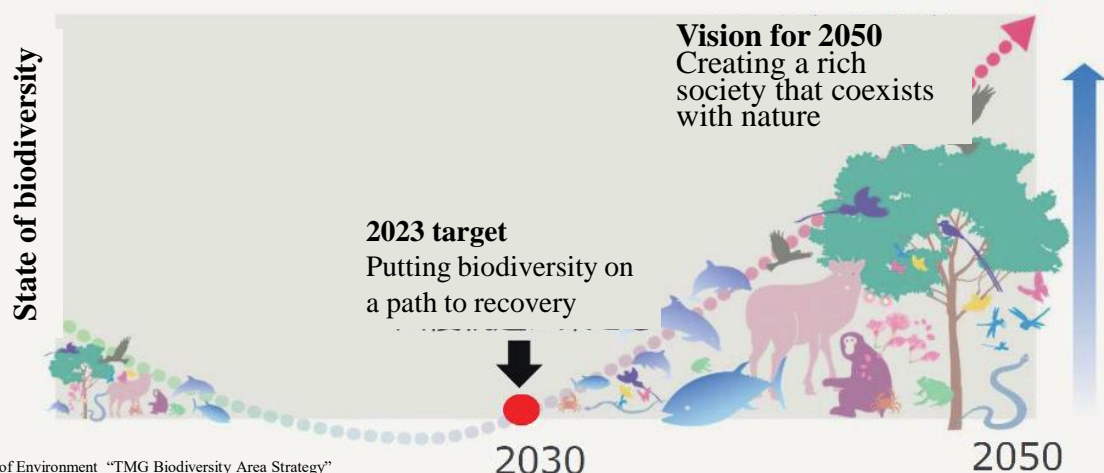
Kunming-Montreal Global Biodiversity Framework

2030 mission

“Nature Positive”

Urgent behavior to stop and reverse the loss of biodiversity to put nature on a path to recovery.

Image of the realization of “nature positive”



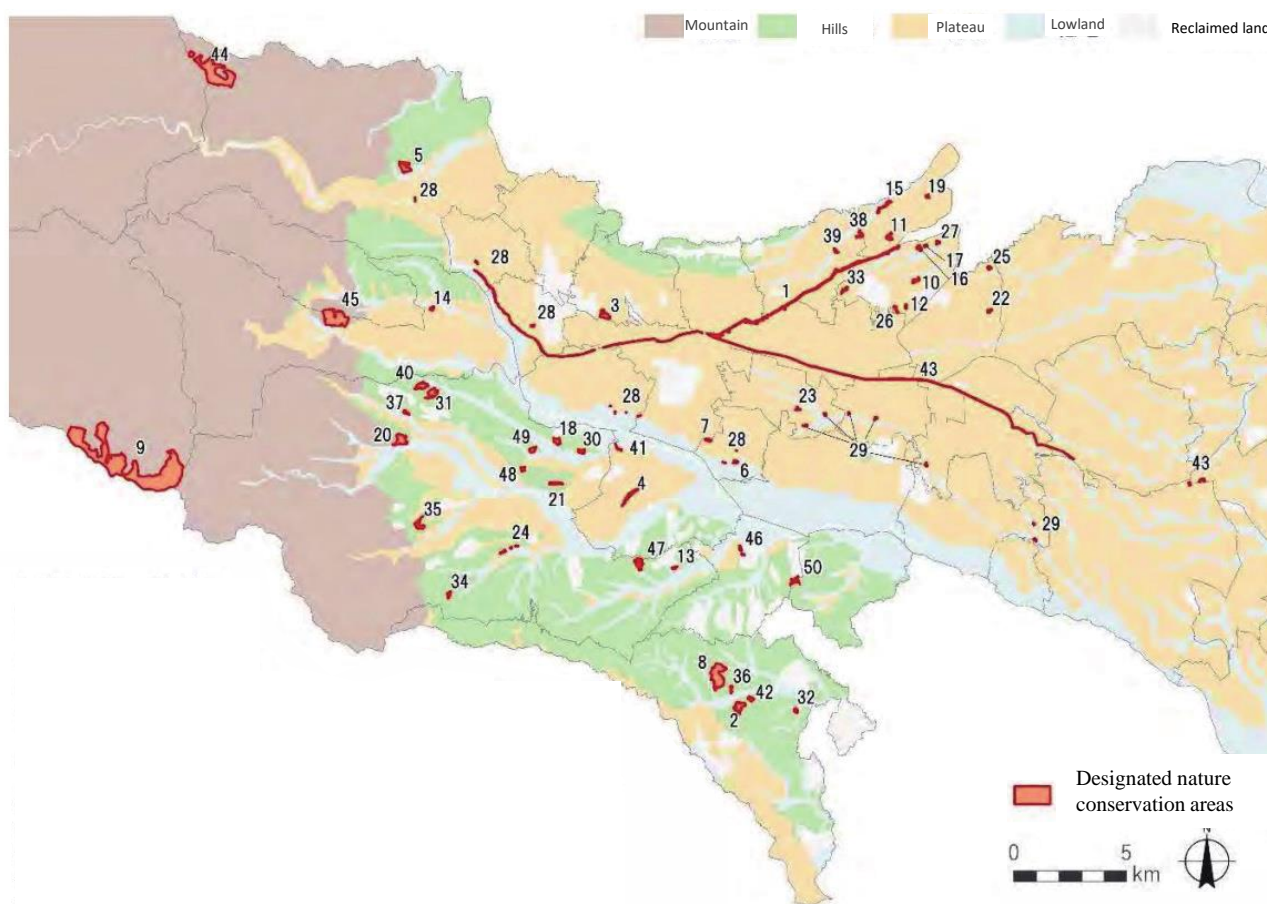
(Source) Bureau of Environment “TMG Biodiversity Area Strategy”

Formation of hubs for biodiversity

The expansion of conservation areas and the promotion of management and usage makes these function as hubs for biodiversity.

Distribution of designated conservation areas

The distribution of the 50 designated conservation areas is: 2 mountainous areas; 23 hilly areas; 25 flat areas

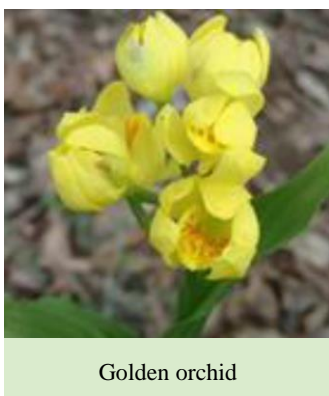


(Source) Bureau of Environment "Conservation area conservation and utilization plan"

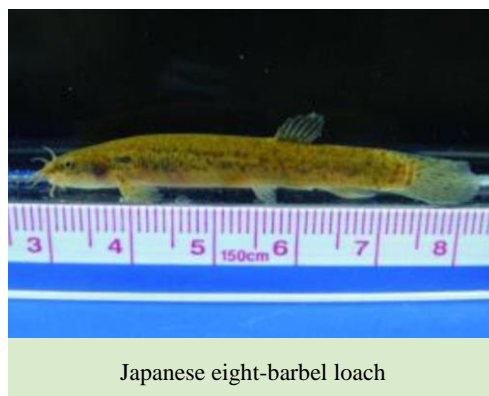
Existence and growth of diverse living things



Kingfisher



Golden orchid



Japanese eight-barbel loach

(Source) Bureau of Environment "Conservation area conservation and utilization plan" Overview version

Increasing demand for wood as a sustainable material

Wooden materials and wooden structures are the subject of great expectations
as wood is a sustainable and renewable resource.

Wood as a non-plastic material

Compared to artificial resources such as plastic, wood is renewable and good for the environment.

Wooden straws



(Source) Tokyo Metropolitan Industrial Technology Research Institute website

Wooden cutlery and tableware



A global trend for wooden structures

New wooden facilities are being built around the world

Grand Palais Éphémère (Paris)



Helsinki Central Library (Helsinki)



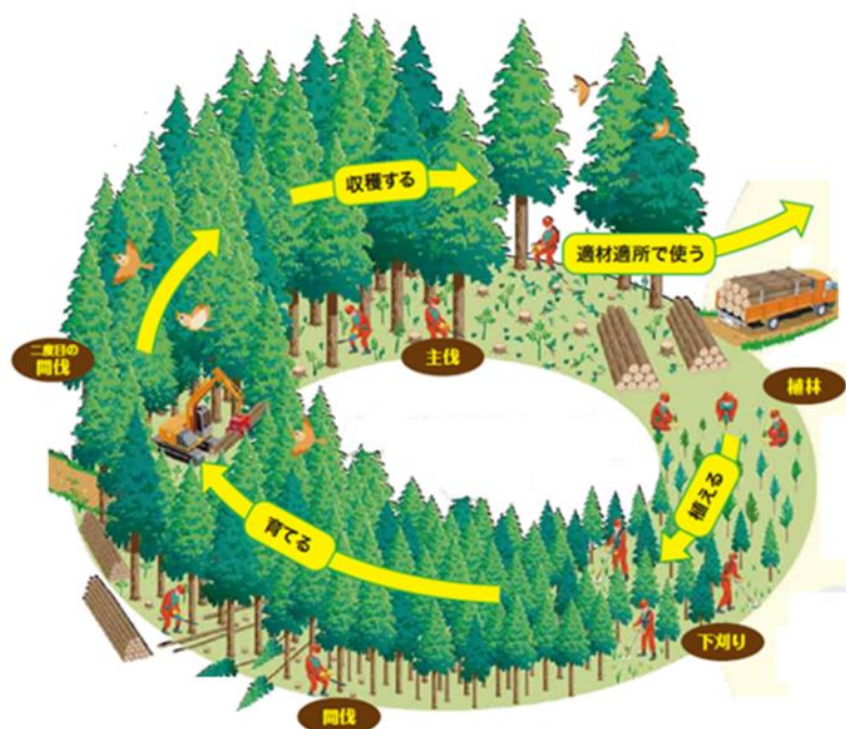
(Source) Helsinki City website

Demonstration of multi-faceted functions of forests

Aiming for the cyclic use of forest resources will demonstrate the multi-faceted functions of forests as well as ensuring appropriate forestry development and conservation.

Image of forest cycle

To maintain healthy forests, we create a cycle of planting, growing, and use when we utilize wood.



(Source) Forestry Agency website

Forest development initiative with the cooperation of multiple local municipalities

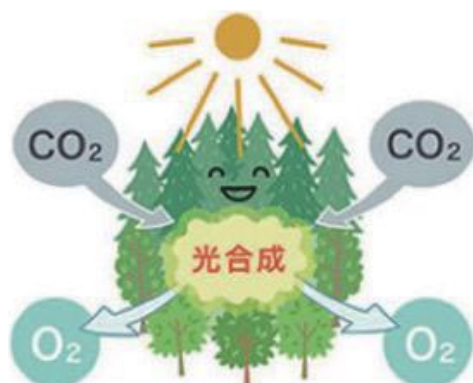
The Agreement For Intracity Collaboration for the Use of the Forest Environment Concession Tax was signed on July 31, 2023



Main functions of forests

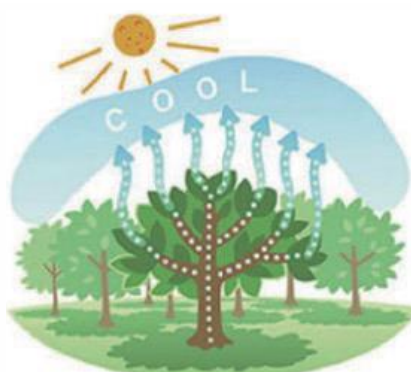
Global environmental conservation

Mitigation of global warming, stabilization of the global temperature



Creation of a comfortable environment

Climate mitigation, atmospheric purification, comfortable lifestyles, environmental creation (noise prevention)



Production of materials

Wood, food (mushrooms, etc.), industrial resources, high-level raw materials



(Source) Bureau of Industrial and Labor Affairs "Forest Creation Promotion Plan"

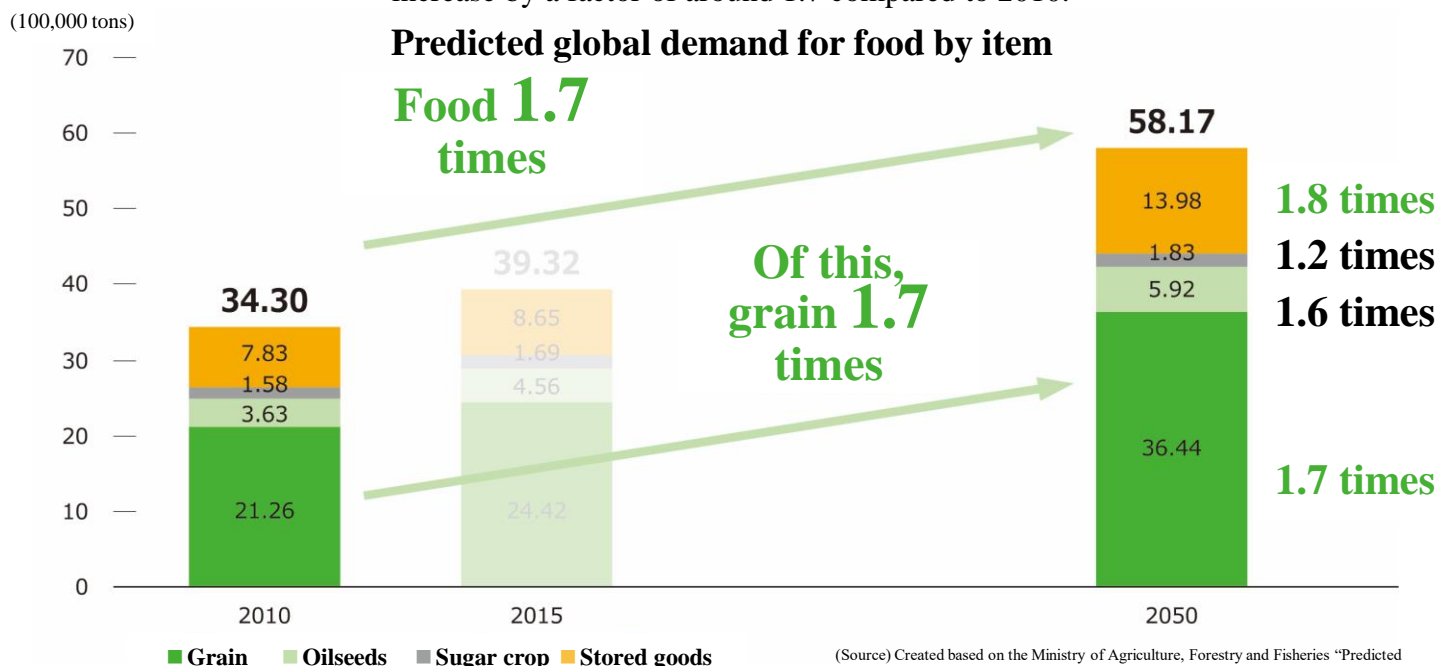
Increasing global demand for food Effective use of resources

With population growth, food production is a global issue.

We need to make effective use of our limited resources.

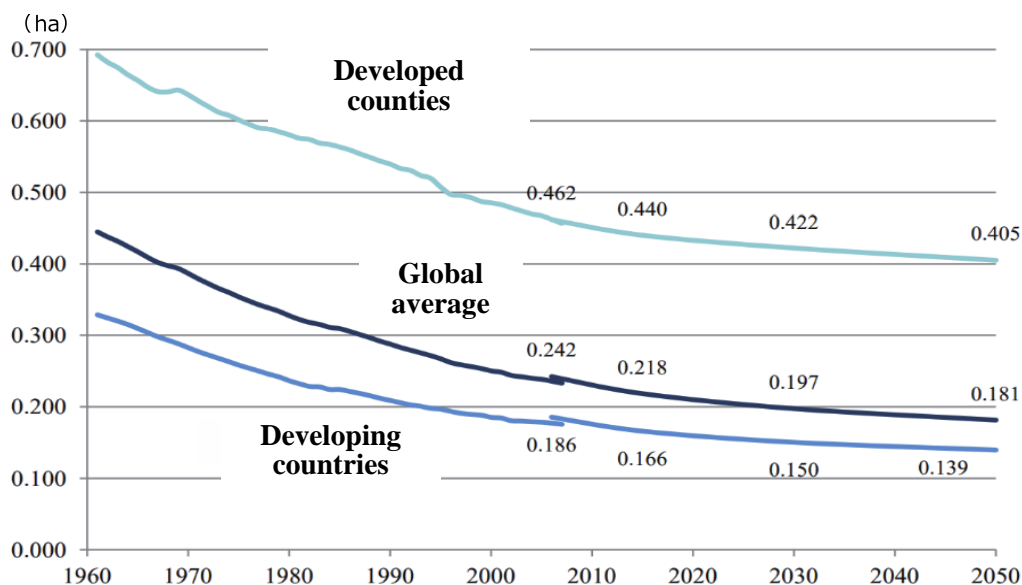
Predicted global demand for food

Due to population growth and economic development, the global demand for food in 2050 is expected to increase by a factor of around 1.7 compared to 2010.



Predicted cultivation area per person

It is predicted that the cultivation area per person will decrease in both developing and developed countries



Sustainable, multi-purpose agriculture

It is vital that we develop sustainable agriculture and protect the key agricultural industries in Tokyo with a variety of functions

Main functions of urban farmland

Provides fresh produce



Provides fresh produce that consumers demand, offers information about food and agriculture

Environmental conservation



As urban greenery, retains rainfall water, adds to groundwater, protects living things

Fosters an understanding of agriculture among residents



Fosters an understanding of agriculture among residents through nearby urban agriculture

Places for close farming experiences and exchanges

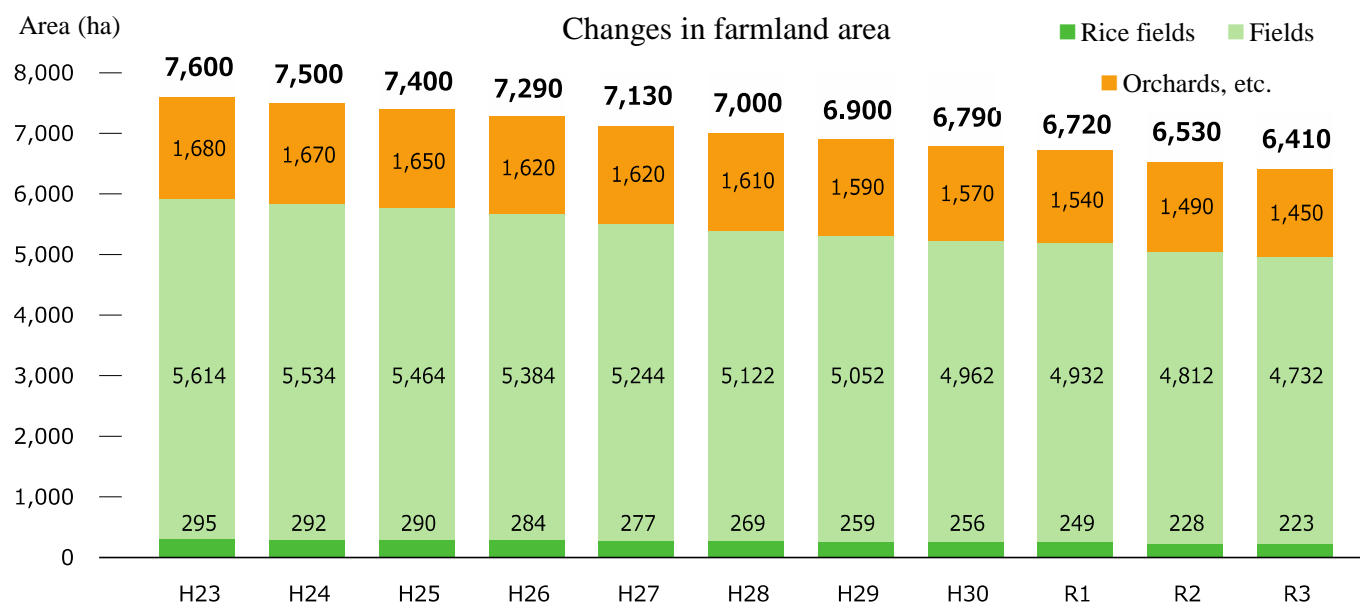


Exchanges between producers and consumers through farming experiences for Tokyo residents and children, exchanges and the sale of produce.

(Source) Ministry of Agriculture, Forestry and Fisheries website

Changes in farmland area

Farmland in Tokyo has decreased by 1,190 ha over ten years (2011–2021) (decrease ratio: 15.6%)



(Source) Created based on the Ministry of Agriculture, Forestry and Fisheries "Cultivated Land and Crop Area Statistics" *The totals may not add up due to rounding.

Glossary of terms



Glossary

Term	Pronunciation	Meaning
Alpha-numeric		
A		
Agricultural experience plantation		A plantation in which people can experience farming with detailed guidance from farmers.
Aging class		Aging forests. The age of the wood is expressed in classes in units of five years.
C		
Conservation area		An area designated by the TMG based on an ordinance with the aim of protecting and restoring nature.
G		
Green coverage ratio		The proportion of area covered by greenery as seen from above, including woodland, grassland, and greenery on roofs.
Green space conservation area		A suburban region in the city in which a natural environment such as trees or a waterside has formed independently or together; an area that needs to be protected for its favorable natural environment. One type of conservation area designated by the TMG.
Green infrastructure		Approach that attempts to use the functions of the natural environment to solve a variety of issues in society.
Green road		A road on which road greenery and the greenery of surrounding public facilities is developed together.
H		
Historic environment conservation area		A region with nature that also has historical heritage; an area of land that that needs to be protected for its favourable natural environment in addition to its historical heritage. One type of conservation area designated by the TMG.
J		
J-Credit Scheme		National certification scheme that gives “credits” for greenhouse gas (e.g. CO ₂) emission reductions and absorption through initiatives such as introducing energy-saving equipment and forestry management.
K		
KK Expressway		Road for automobiles managed and operated by the Tokyo Expressway Company.
M		
Marine Park		Parks that make the most of the characteristics of coastal areas established on reclaimed land in Tokyo; these parks are developed and managed by the Port Authority according to a different regulatory system to Metropolitan parks (the Tokyo Metropolitan Marine Park Ordinance), based on the Urban Parks Act. There are three types: seaside parks, wharf parks, and green road parks.

Glossary

Term	Pronunciation	Meaning
P		
Productive green land		A mechanism for the systematic conservation of agricultural land in the city.
Public open space		Open spaces and land that are open to the general public among sites with buildings. Events can be held here using the urban development organization registration system.
R		
Residential trees		An area of trees created to surround a residence. These are decreasing due to inheritance reasons, etc. As of 2020, there were around 800 examples of residential trees in the city. (TMG Bureau of Urban Development July 2020 “Comprehensive Policy for Securing Greenery”)
S		
Satoyama conservation area		A region in which mixed tree groves, farmland, and springs come together and diverse creatures live, or a hillside region acknowledged to have potential for a favorable natural environment for life and regions consisting of the flat land around this; areas of land whose natural environments must be restored and protected. One type of conservation area designated by the TMG.
Slope		Artificially created slopes modified from natural land by filling (adding soil) or cutting (removing soil)
Special green space conservation area		System based on the Urban Green Space Conservation Act that serves as a mechanism to designate green spaces where favorable natural environments are forming in the city.
Specified productive green land		Mechanism for designated productive green land areas over 30 years old to extend the potential purchase offer period by 10 years.
T		
Tama River upper reaches area		The Tama River watershed upriver of Hamura Intake Weir. The Tama River, the original water source for Tokyo, runs from Yamanashi Prefecture through Tokyo and into Tokyo Bay.
Tokyo Metropolitan park		Parks established and managed by the TMG Bureau of Construction based on the Urban Parks Act and Urban Parks Ordinance
Tokyo Sky Corridor		A public space for pedestrians being developed through the regeneration/use of the space above the Tokyo Expressway (KK Expressway), currently used as a road for automobiles.
U		
Urban planning park		One type of urban planning facility set out in the City Planning Act. Mainly public spaces that aim to provide recreation such as rest, viewing, walks, games, and sport in a natural environment, and facilitate evacuation, etc. during disasters such as earthquakes and fires.
W		
Water conservation forest		A forest located in the upper reaches of a river where there are particular expectations of functions such as the retention of water resources, mitigation of flooding, and purification of water quality.



TOKYO
METROPOLITAN
GOVERNMENT

Tokyo Green Biz

Office of the Governor for Policy Planning, Tokyo Metropolitan Government

<https://www.seisakukikaku.metro.tokyo.lg.jp/basic-plan/tokyo-greenbiz-advisoryboard/>

