Mori wo Tsunagu

TOKYO Project

GOOD DESIGN

Mori wo Tsunagu TOKYO Project

A Forest-Centered Project Embarks on a Challenge to Resolve social Issues.

In corporate management, it is essential to address social issues while seeking business growth. The global community shares challenges such as climate change and rapidly diminishing biodiversity. Japan, which has one of the highest forest rates in the world, also faces unique challenges such as degradation of forests due to the decline of forestry. The Nomura Real Estate (NRE) Group entered into a comprehensive partnership agreement* with Okutama Town, a town blessed with rich natural resources and is located near central Tokyo where the Group mainly operates its businesses.
In October 2022, the Group concluded a land rights establishment agreement with the town, through which it will take control of its forests for over 30 years, and launched the Mori wo Tsunagu TOKYO project (Integrated Forest Management Project in Tokyo).

*Comprehensive Partnership Agreement between Okutama Town and Nomura Real Estate Holdings, Inc. on Realizing a Sustainable Society

Areas of collaboration under the partnership agreement

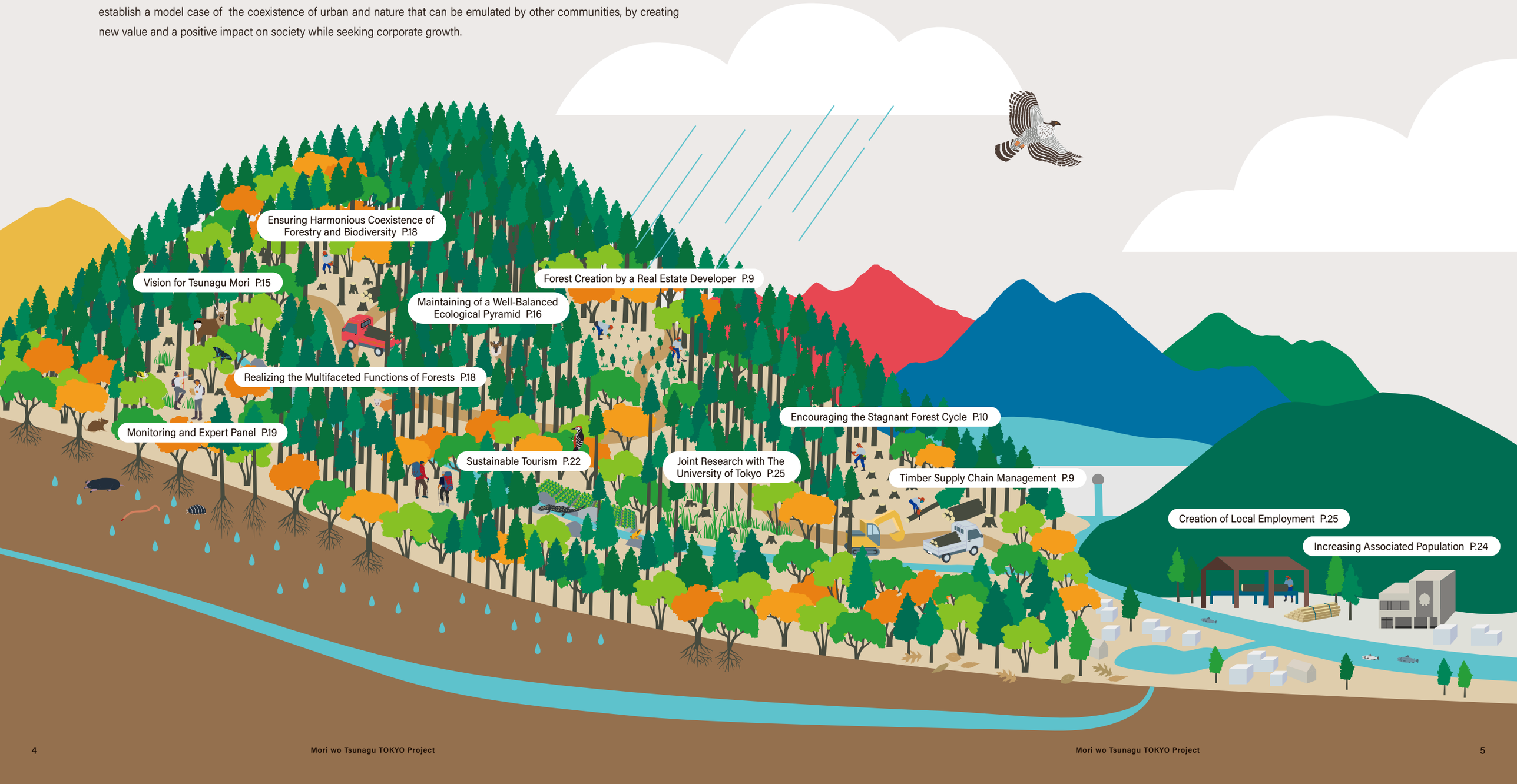
Regional development/ job creation	Natural environment conservation/ climate change solutions	Circular economy/resource utilization of idle areas	Research and development

	Apr. 2021 –	Apr. 2022 –	Apr. 2023 –	Apr. 2024 –	Apr. 2025 –
Forest Creation Decarbonization		Sept. Mori wo Tsunagu LLC. established. Nov. – Dec. Obstructive trees felled. Dec. Joined the Tokyo Prefectural Forest Owners' Cooperative Associations. Mar. Boundaries clarified (Tokyo Govt's Forest Management Support Program) Mar. Flooring materials commercialized.	Phase-1 Forest Management Operation Jun. Acquired SGEC/PEFC FM certifications. Oct. Log yard dedicated to the NRE Group created.	Phase-2 Forest Management Operation Apr. Fuelwood products commercialized. Oct. Acquired Tama timber certification. Oct. Novelty goods commercialized. Dec. Interior louvers commercialized.	Phase-3 Forest Management Operation Apr. Timber supply chain management began. May. Furniture products commercialized. May. Essential oil products commercialized.
Biodiversity			Biodiversity Surveys Oct. Expert Panel established.	Development of KPI/Measurement Methods Apr. Ecosystem Management Plan developed. Oct. Supply of wasabi from Tsunagu Mori began. Jan. Standing dead trees retained.	Monitoring Cultivation of local provenance seedlings to begin. (planned)
Cultivating the next generation				Apr. Sustainable tourism started on a trial basis. Apr. Footpaths built.	Development of activity base and infrastructure (planned)
Co-creation	Aug. Comprehensive Partnership Agreement between Okutama Town and Nomura Real Estate Holdings, Inc. on Realizing a Sustainable Society signed.	Oct. Established surface rights for Tsunagu Mori (30 years).	Oct. Received certification for natural symbiosis sites by MOE. Oct. Concluded an Agreement on Promoting the Use of Wood in Buildings for the Mori wo Tsunagu TOKYO Project with the Tokyo Metropolitan Government.	Apr. Registered as a member of Tokyo Prefecture's Tokyo-NbS Action. Oct. Participated in Okutama Fureai Festival.	Apr. Joint research with Research Center for Advanced Science and Technology, The University of Tokyo began.
PR/Publicity		Nov. Mori wo Tsunagu TOKYO Project announced.	Oct. Featured in Tokyo TV's program World Business Satellite.	Oct. Received Good Design Award. Oct. Received Excellence Award (Director-General Award) in the Forest × ACT Challenge (hosted by the Forestry Agency). Oct. Received Wood Design Award. Nov. Received Grand Prize in the Tokyo-NbS Action Award (hosted by Tokyo Metropolitan Gov't) Dec. Participated at the Forestry Management in Harmony with Biodiversity Conservation in Temperate and Boreal Forests and its Monitoring international symposium.	Apr. Mori wo Tsunagu TOKYO Project website launched. Jun. Featured in the Forestry Agency's Annual Report on Forest and Forestry in Japan.

Landscape Approach

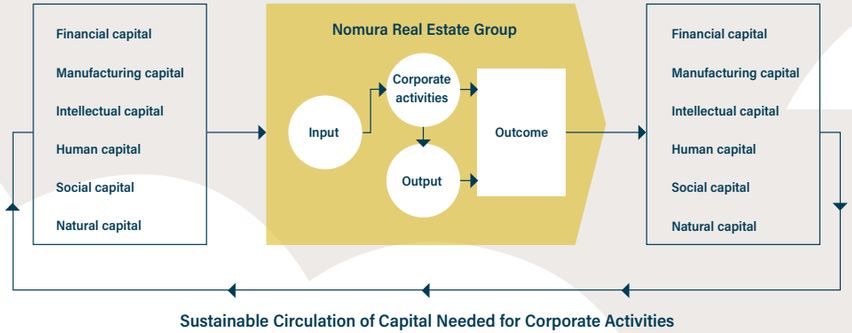
Maximizing happiness among people and abundance for society. Landscape approaches to create coexistence of urban and nature.

Mori wo Tsunagu TOKYO Project takes place on the stage of nature and cities in Tokyo, using landscape approaches that holistically consider the natural environment and human activities to discover solutions. The NRE Group strives to establish a model case of the coexistence of urban and nature that can be emulated by other communities, by creating new value and a positive impact on society while seeking corporate growth.



Be a “Life & Time Developer,” as never seen before

Corporate sustainability refers to a company’s approach to management that aims to achieve long-term growth, continuity, and enhanced corporate value through market creation and the accumulation of various forms of capital and social value. In addition, companies work to preserve and build the surrounding natural environment and social systems, and to reduce risks and create new value, so that the necessary capital for their corporate activities will be circulated. The NRE Group is promoting the Mori wo Tsunagu TOKYO Project with the aim to become a corporate group that society continues to trust and rely on.



Sustainable Circulation of Capital Needed for Corporate Activities

Living creatures on Earth are also the NRE Group’s stakeholders.

Companies’ social mission is to meet the expectations of its stakeholders, including shareholders, customers, business partners, employees, and local communities. The NRE Group considers the living organisms that inhabit the Earth to be part of the natural capital (See illustration on Page 6) necessary for its corporate activities and works to conserve and restore them for mutual support. In other words, living organisms on the Earth are also important stakeholders.

Satoshi Arai, CEO of the NRE Group
Interviewed in TV Tokyo’s program World Business Satellite (aired on Oct. 25, 2023).

FOREST CREATION & DECARBONIZATION

Forests as the Symbiotic Future between Nature and Cities.

Rich forests not only produce wood but also absorb atmospheric CO_2, protect water sources and soil, and contribute to biodiversity, including that in rivers and oceans. Conserving forests is an approach to the headwaters of the cities where most people live to which connects nature with urban dwellers, organizations, and people, and connects the present with the future.

The NRE Group has named this forest in Okutama Town *Tsunagu Mori* (a connecting forest), and is taking on the challenge of growing sustainable forests to allow them to fulfill their multi-faceted functions.

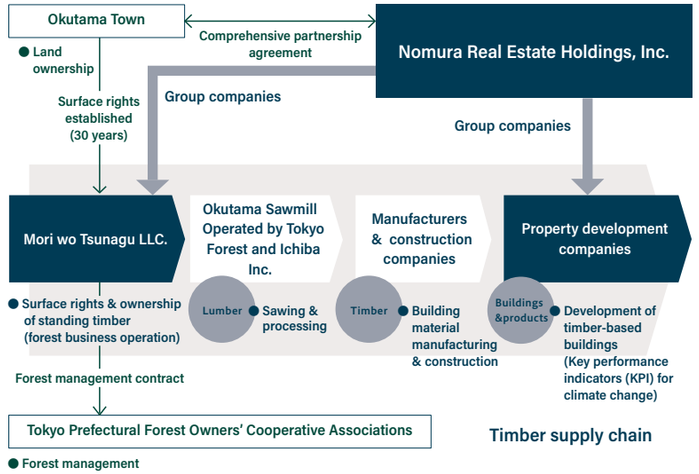
JAPAN WOOD DESIGN AWARD 2024

GREEN PARTNER 2024 JAPAN

Real Estate Developers Produce Timber to Promote Investment in the Supply Chain.

In the Tsunagu Mori, the Nomura Real Estate Group takes on forest business operation and collaborates with local businesses, manufacturers, construction companies etc., to build its own timber supply chain that spans from upstream to downstream.

The sense of security that buyers already exist has encouraged investment in the supply chain, and through the restoration of forestry and the strengthening of the lumber supply chain in the Tama Area, we have started to promote the growing of sustainable forests for local consumption that will create a new economic cycle in cities and mountainous areas.



Managing Tsunagu Mori's Timber Supply Chain According to the World's Leading Standards.

View examples of Tsunagu Mori's timber traceability information:

In December 2025, the EU will apply EUDR[*1] to ban the import of deforestation-linked goods, etc., and demand their traceability according to even more strict criteria than Japan's Clean Wood Act[*2]. Against this backdrop, the NRE Group manages its timber using a proprietary traceability system, operating a timber supply chain management system[*3] that meets international best practices. By scanning the 2D codes displayed on building materials and finished products, users can verify traceability, ensuring transparency through information disclosure. In addition, the Group has acquired the SGEC/PEFC (FM) certifications[*4] and, as a forest owner, has been recognized as a registered Tama-certified timber operator[*5] and is encouraging the entire supply chain to acquire forest-related certification.

EUDR
– the world's leading standards

Active use of wood from Tsunagu Mori
(SGEC/PEFC FM certified)

Timber use of the whole NRE Group
25,904m³/year (Apr. 2023–Mar. 2024)

Use the acquired know-how for future operations.

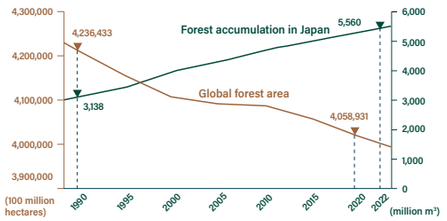
SGEC PEFC とうきょうの木

*1 EUDR: EU Deforestation Regulation *2 Clean Wood Act: a common name for the Act on Promoting the Distribution and Use of Legally-Harvested Wood and Wood Products. *3 Timber supply chain management in accordance with the world's leading standards: traceability control in accordance with EUDR or equivalent regulations (requirements to collect, organize, present, and keep the information set out in Article 9-1 of EUDR, excluding those applicable only within the EU). *4 SGEC/PEFC certification: A system in which an independent third-party organization reviews and certifies forests or forest management organizations, etc., that are engaged in appropriate and sustainable forest management based on certain criteria, etc. *5 Tama-certified timber operator: A business certified by the Tama Timber Certification Council under a system that verifies the origin of timber harvested from responsibly managed forests in the Tama region.

Topics | **Forest Challenges Unique to Japan**

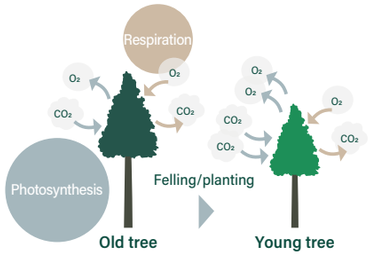
Destruction of ecosystems and the decline of the CO_2 absorption function due to conversion to agricultural land and excessive logging, illegal labor, and the violation of the rights of indigenous people are common challenges worldwide. In Japan, the degradation of forests and the deterioration of their multifaceted functions due to insufficient management of cedar and cypress trees, which were planted in large numbers after World War II, are becoming pressing issues. There is a need to restore the multifaceted functions of the forests through growing sustainable forests, such as the felling of standing trees that have reached the age for harvesting, as well as planting and nurturing of new trees.

Global Forest Area and Trends in Forest Accumulation in Japan



Facilitating Forest Cycle and Increasing CO_2 Absorption.

Increased demand for wood resulting from the strengthened / optimized wood supply chain encourages the stagnant forest cycle in the Tama Area. In addition, aged trees with reduced CO_2 uptake will be cut down as far as they can grow, and the forest will be rejuvenated through reforestation and nurturing, thereby increasing the CO_2 uptake in the forest, where the average age of planted trees is as old as 65 years. The Group aims to improve wood productivity by building logging roads within the site, while at the same time restoring its multifaceted functions, such as CO_2 absorption, water source recharge, soil maintenance and biodiversity preservation.



Interview | *A model case that regards forests as sources for the future*

In addition to timber production, we see the potential of the Mori wo Tsunagu TOKYO Project, which sees the forest itself as an asset that brings multifaceted benefits from a new perspective not found in conventional forest operations. In particular, small-scale clear-cutting in a mosaic pattern (See Page 18) is the first attempt even for those of us who have been involved in forest development for a long time. It is a method that is friendly to the environment, with little damage to the mountains and natural habitats. We hope this initiative will spread to other areas as a model case for forest development in the future, and inspire the whole forestry industry.

Tokyo Prefectural Forest Owners' Cooperative Associatins
Shinji Amanuma (left) and Katsuya Hatanaka (right)

Increasing the Value of Each Tree & Preventing the Destruction of the Entire Forest.

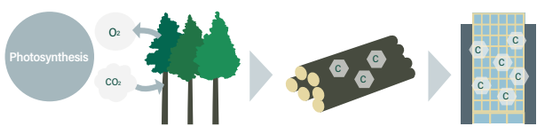
Wood harvested from Tsunagu Mori is used as building materials for real estate development projects, and materials not suitable for building materials are made into furniture. The effective use of twigs, leaves, bark, and end materials is also being considered. We also aim to increase the value of the forest itself by increasing the use value of each tree, such as by increasing the sawmill yield *1 while preventing forest degradation that leads to the loss of multiple functions.
The NRE Group concluded an agreement*2 with the Tokyo Metropolitan Government in October 2023 to promote the recycling, production, and use of forest resources by building a timber supply chain from upstream to downstream, in and around Tokyo. The Group has already started using the wood in buildings in Tokyo.

*1 Sawmill yield: ratio of product lumber to log lumber of raw materials.
*2 The Agreement on Promoting the Use of Wood in Buildings for the Mori wo Tsunagu TOKYO Project.

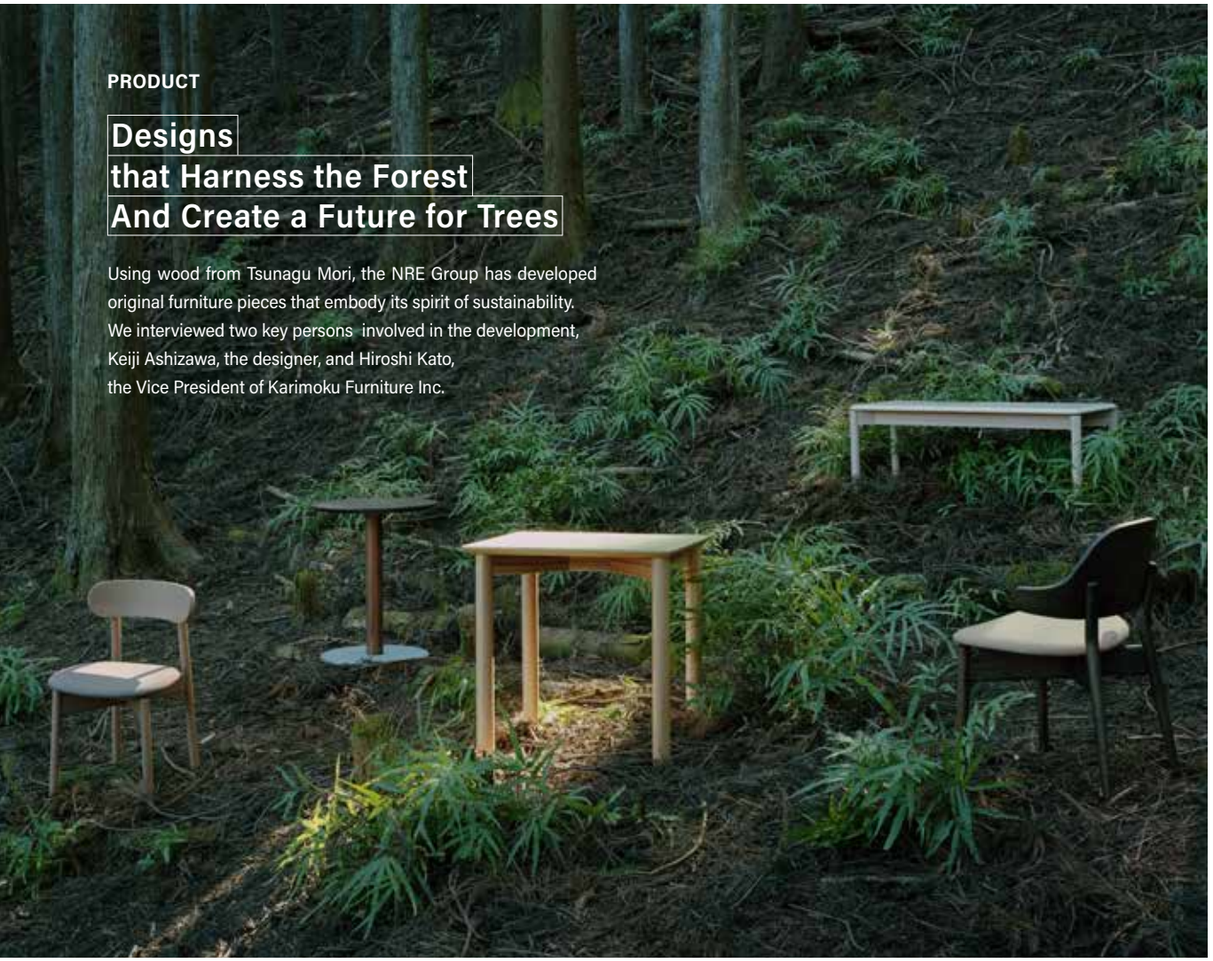
Storage yard of logs divided into Class A to D.

Topics | Development of Timber-Based Buildings and Carbon Storage

Trees absorb and store atmospheric CO_2 through photosynthesis. They also continue to store carbon as long as they are not burned or broken down by microorganisms, which can lead to long-term storage of carbon when used as building materials. The Group is actively engaged in the development of Timber-Based Buildings using the carbon storage rate of 10,000t-CO_2/year, which is fixed in buildings, as a performance index (KPI) for climate change.



(Top right) **NRE Tameike-Sanno Building (Minato-ku, Tokyo)**, a leading project for sustainable buildings, etc. (promotion of wooden construction) designated by MLIT, completed in Oct. 2023. Won the Prime Minister's Award in the "Excellent Facility" category of the Wood Utilization Promotion Competition.Received the Grand Prize in the Minato Model Carbon Fixation Certification Program
(Bottom right) **BLUE FRONT SHIBAURA (Shibaura Project /Minato-ku, Tokyo)**
Bldg. S and Bldg. N, which use wood from Tsunagu Mori in common areas, interiors, etc., are scheduled for completion in Feb. 2025 and 2030, respectively.



PRODUCT

Designs that Harness the Forest And Create a Future for Trees

Using wood from Tsunagu Mori, the NRE Group has developed original furniture pieces that embody its spirit of sustainability. We interviewed two key persons involved in the development, Keiji Ashizawa, the designer, and Hiroshi Kato, the Vice President of Karimoku Furniture Inc.

(Left) **Keiji Ashizawa, architect**
Born in 1973 and founded Keiji Ashizawa Design in 2005. Following the Great East Japan Earthquake in 2011, he was inspired to launch the furniture brand Ishinomaki Laboratory as part of the rebuilding efforts. In addition to architecture and interior design, he works across a wide range of disciplines, including collaborations with furniture manufacturers.

(Right) **Hiroshi Kato, VP of Karimoku Furniture Inc.**
Born in 1966 and has been serving in his current position since April 2010. While supervising various brands such as Karimoku New Standard, Karimoku Case, and MAS, he is rebranding Karimoku Furniture products through collaborations with other industries.

Original furniture made of Class-C/D wood from Tsunagu Mori. The challenge was to use softwood to ensure both strength and aesthetics. Wood with knots and uneven colors was utilized by adding dark brown (opaque color) to the color variation.

Making High-Quality Furniture with Underutilized Softwood.

Kato: We can get solid wood from underutilized C or D wood, even if it is knotted or thin, as long as we are willing to go the extra mile for it. Good wood usually means that it is easy to handle, which is a one-sided idea. I think it's possible to make high-quality furniture with low-quality wood depending on how you perceive it. We have a passion for finding value in things that are considered "useless," so felt that the Mori wo Tsunagu TOKYO Project would work well with our spirit.
Ashizawa: Hoping that the furniture will become a tool for spreading the word about Japanese forests, I did not give up on the design just because it was softwood, which is normally not suitable for furniture. Karimoku Furniture's technical expertise made it possible to make high-quality furniture.

Class-C and D wood harvested from Tsunagu Mori. Generally, they are considered low-grade wood with low value and used as biomass fuel (emitting CO_2).
The Mori wo Tsunagu TOKYO Project aims to increase carbon storage by using them to make furniture.

Making Furniture to Be Loved for a Long Time by Emulating Nature

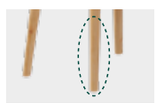
Ashizawa: Chairs, more than anything, need strength. Softwood is overwhelmingly weak compared to hardwood, so I had a difficult time deciding how much I should incorporate it in the design. I also think that we don't necessarily have to stick to just Softwood. A healthy forest is balanced by many kinds of trees living together. I believe that combining strong wood and weak but beautiful wood will expand the possibilities of design.
Kato: I'm always intrigued by how you design by conversing with the materials and paying attention to their individual characteristics.
Ashizawa: I think that designing furniture that people can use for a long time is ultimately good for the environment. Having furniture close to you that you can love will change your perspective. It can raise people's awareness and change their behavior.
Kato: If people can use their furniture for 30 or 50 years, new trees will grow in the meantime, contributing to carbon storage. I think we can extend the furniture's life even longer through proper maintenance and repair.

In creating high-quality well-designed furniture from softwood, 3D models were made to discuss possible modifications on details such as the shape of the backrest and seat, and the diameter and angle of the legs.

Topics

Creating New Values with Inclusive Design.

Inclusive design is a method of developing products and services together with people with special needs, who have been excluded from the conventional scope of users. The Mori wo Tsunagu TOKYO Project has been making prototype furniture for people with visual impairments and those using prosthetic legs and wheelchairs by incorporating their needs into the design through trial use to create new values.



Incorporating user needs into the design ① :

Based on the feedback from visually impaired users, the legs of the tables and chairs were rounded to avoid injury and improve safety.

Incorporating user needs into the design ② :

Responding to the request of people using artificial legs and wheelchairs, the armrest function was added to the backrest to support their upper bodies.

BIODIVERSITY

Halt the Loss of Biodiversity To Be Nature Positive

More than tens of millions of species are said to inhabit the Earth. However, the burden that humans are putting on the global environment threatens their survival, and as a result, the benefits of nature that we have enjoyed for a long time are rapidly diminishing.The NRE Group is promoting Nature Positive, which aims to conserve and restore biodiversity, in line with the international community.

Biodiversity – the Next Global Issue after Climate Change

While companies have long been taking actions against climate change, they began paying attention to biodiversity as another global agenda. The Group has identified biodiversity as one of its material issues through 2030. Since 2024, the Group has been registered as a TNFD[*1] Adopter and has begun disclosures in line with the TNFD framework. The aim is to understand and mitigate the impact of its business activities on biodiversity, while promoting conservation and restoration. Additionally, Tsunagu Mori has been certified by the Ministry of the Environment as a Nature Symbiosis Site[*3] as part of the international 30by30[*2] initiative, which aims to effectively conserve at least 30% of land and sea areas as healthy ecosystems by 2030.

	International Trends in Biodiversity	NRE Group's Initiatives
2012	-Aichi Targets adopted (CBD COP[*4] 10).	
2021	-G7 2030 Nature Compact signed. -TNFD launched.	
2022	-Kunming-Montreal Global Biodiversity Framework[*5] adopted (COP 15).	-Identified biodiversity as one of our material issues. -Joined the 30by30 Alliance. -Joined the TNFD Forum.
2023	-Final TNFD Recommendations (ver. 1.0) published. -SBTs for Nature (guidelines for companies to set science-based nature-related targets) announced.	
2024		-Established the NRE Group Biodiversity Policy. -Registered as a TNFD Adopter. -Joined WWF Japan[*6]. -TNFD disclosure

*1 TNFD: Task Force on Nature-Related Financial Disclosures *2 30by30: A worldwide initiative for governments to effectively conserve at least 30% of land and sea areas as healthy ecosystems by 2030. *3 natural symbiosis sites : A certification system under which the Ministry of the Environment certifies areas where biodiversity within the area is conserved through various efforts regardless of the main purpose of the area. *4 CBD COP: The Convention on Biological Diversity's Conference of the Parties *5 Kunming-Montreal Global Biodiversity Framework: A global biodiversity framework adopted at the 15th Conference of the Parties (COP15) to the Convention on Biological Diversity, held in December 2022, outlining global targets for biodiversity by 2030. *6 WWF: World Wide Fund for Nature

The Vision for Tsunagu Mori, Based on the NRE Group Biodiversity Policy

The NRE Group, in its Biodiversity Policy, expresses its support for the Kunming-Montreal Global Biodiversity Framework, an international agreement on biodiversity conservation. The Group is committed to taking action to achieve a nature-positive* future. With the Mori wo Tsunagu TOKYO Project, the Group has defined four Key Goal Indicators (KGIs) as part of the vision for Tsunagu Mori, each contributing to this policy.

* Nature positive: An approach aimed at halting biodiversity loss and setting natural environments on a path toward recovery.

Tsunagu Mori aims to:

1. Maintain a well-balanced ecosystem pyramid
2. Conserve ecologically valuable species.
3. Ensure harmonious coexistence of forestry and biodiversity
4. Utilize ecosystem services

Topics | **Forests Nourish the Sea. Extending Our Action from the Mountains to the Ocean.**

Many marine organisms rely on food chains sustained by phytoplankton. For phytoplankton to grow, humic ferrous iron—a compound formed from humic substances (derived from fallen leaves in forests) and iron—is essential. The NRE Group plans to relocate its headquarters in the summer of 2025 to BLUE FRONT SHIBAURA, a major redevelopment area along Tokyo Bay. Looking ahead, the Group envisions expanding the Tsunagu Mori initiative downstream along the Tama River to the bay, connecting forests to the sea.

Tokyo Bay as seen from BLUE FRONT SHIBAURA

Enhancing the Ecosystem Pyramid to Create a Bio-diverse Forest

The food chain forms a pyramid of relationships among organisms living in nature, and it is vital to maintain the wellbeing of this ecological pyramid for ensuring biodiversity. The Group conducted ecological surveys to confirm the presence of 1,003 species in Tsunagu Mori, with each zone having its own ecological pyramid. Among them, raptors and other predators called umbrella species such as the mountain hawk-eagle, which sit at the top of the pyramid, are declining, suggesting the decline of other species, meaning that the entire ecosystem is at risk. In order to stabilize the population of mountain hawk-eagle, an umbrella species in and around Tsunagu Mori, the Project has prohibited logging during the nesting season in principle and is working to create a new feeding ground to offset the effect of logging.

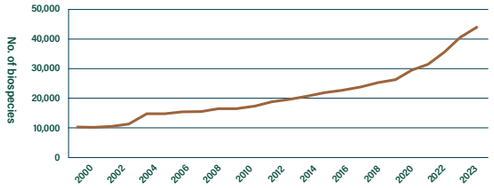
Mountain hawk-eagle, an umbrella species living in and around Tsunagu Mori

Photos taken during the 2023 ecological surveys in Tsunagu Mori
(Left) Japanese sika deer (Right) Japanese dragonet

Endangered Species on the Rise – Preserving Precious Lives

In recent years, the number of endangered species has increased rapidly throughout the world, and the conservation of these ecologically valuable species has become a global issue. Fifty important species have also been identified in Tsunagu Mori located near the center of Tokyo, indicating how vital this forest is for nurturing precious living organisms in nature.

IUCN Red List of Threatened Species™
Types of threatened/endangered species

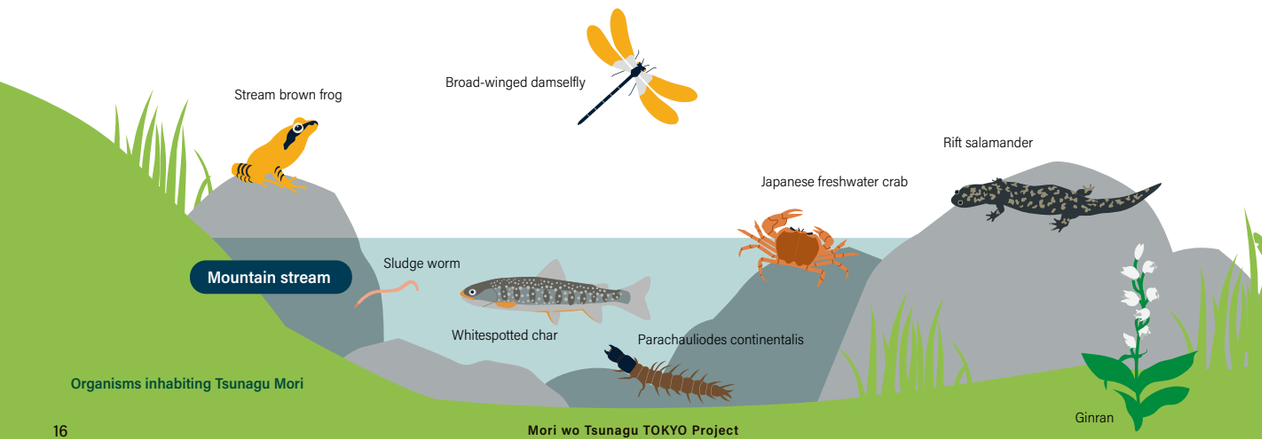


List of ecologically valuable species* inhabiting Tsunagu Mori

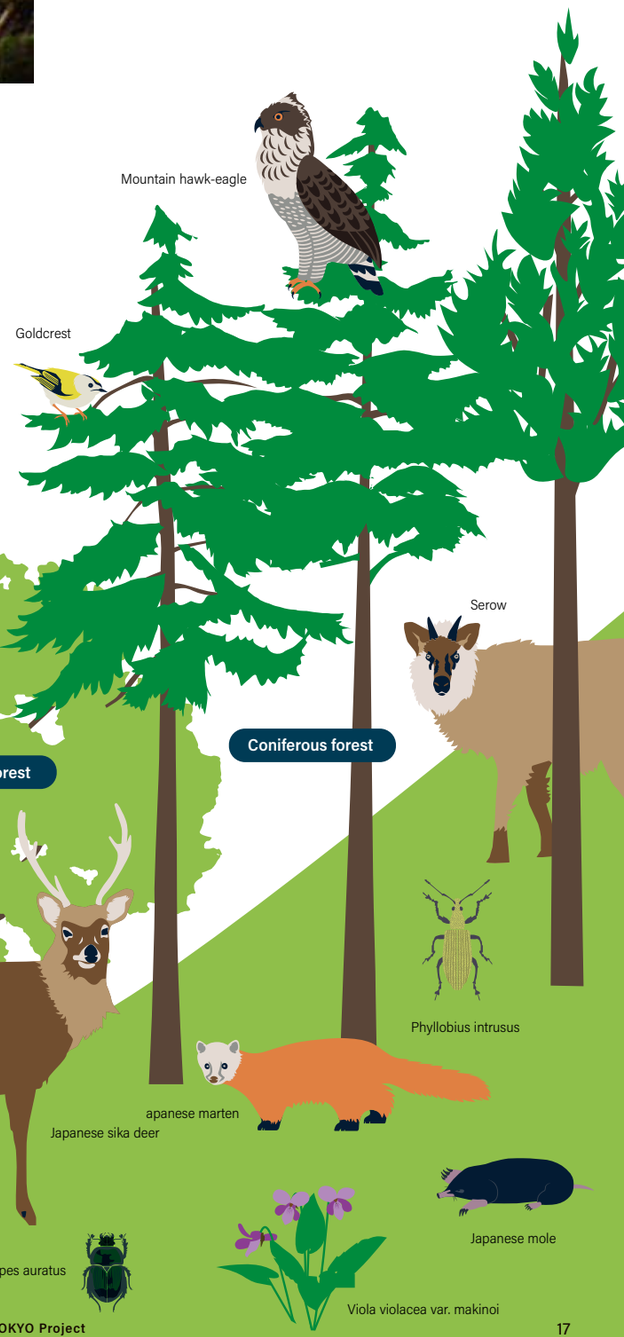
Plants	Deparia pseudoconilii	DD	Reptiles	Far eastern skink	NT	Birds	Eurasian treecreeper	NT
	Cephalanthera erecta	EN		Japanese grass lizard	NT		Blue-and-white flycatcher	NT
	Thrixspermum japonicum	NT		Japanese forest rat-snake	NT		Asian brown flycatcher	VU
	Rubus phoenicolasius	NT		Japanese keelback	NT		Japanese thrush	NT
	Viola sieboldii	NT		Japanese odd-tooth snake	NT		White's thrush	NT
	Viola violacea var. makinoi	VU		Tiger keelback	VU		Eurasian bullfinch	VU
	Swertia japonica Makino	VU		Japanese pit viper	EN		Meadow bunting	NT
	S. laeteviolacea var. abbreviate (Tougoku-shisoba Japanese skullcap)	VU	Birds	Japanese dragonet	VU		Grey bunting	EN
	Scutellaria shikokiana Makino	EN		Oriental cuckoo	NT	Insects	Mnais costalis (Broad-winged damselfly)	EN
Mammals	Japanese black bear	NT		Japanese sparrowhawk	NT		Erynnis montanus	NT
	Serow	VU		Buzzard	NT		Isoteinon lamprospilus	NT
Amphibians	Higashihida salamander	VU		Mountain hawk-eagle	EN		Papilio maackii	NT
	Japanese common toad	NT		Owl	VU		Genji firefly	NT
	Tago's brown frog	NT		White-backed woodpecker	NT	Fish	Whitespotted char	CR
	Stream brown frog	NT		Ashy minivet	DD	Benthic animal	Parachauliodes continentalis	DD
	Glandirana reliquia	VU		Goldcrest	VU			
	Buergeria buergeri	NT		Asian stubtail	NT			
				Eurasian nuthatch	NT			

*Key Species: Species that meet the criteria of any one of the following: (Alphabetical codes in the table refer to classification ranks under The Red Data Book Tokyo.)

- **Red Data Book Tokyo 2023** (mainland): See the table at left [Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Data Deficient (DD)]
- **Act on the Conservation of Endangered Species of Wild Fauna and Flora** (Endangered Species Act): Higashihida salamander, Mountain hawk-eagle
- **IUCN Red List**: Japanese black bear, Higashihida salamander
- **MOE Red List 2020**: Higashihida salamander, Mountain hawk-eagle, Whitespotted char

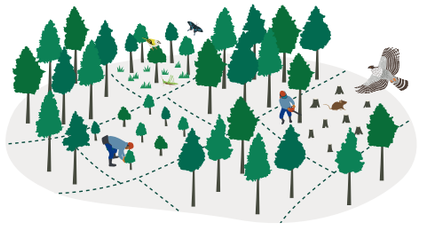


Organisms inhabiting Tsunagu Mori



Harmonious Coexistence of Forestry and Biodiversity – creating a model case for non-economic forests

In the mid-20th century, Japan cut down natural forests rich in ecosystems and planted Japanese cedar and cypress trees all over the country to meet the rising demand for wood due to population growth. However, now that demand for domestic wood has slumped, questions are being raised as to what to do with non-economic forests that are not suitable for wood production. Tsunagu Mori aims to create a model case for non-economic forests in Japan by realizing harmonious coexistence of forestry and biodiversity through small-scale clear-cutting in a mosaic pattern, grassland creation on young plantations, and retaining standing dead trees with high stumps (intentionally left tall).



Small-scale clear-cutting in a mosaic pattern and grassland creation

Standing dead trees (high stumps)

Ecosystem Management Plan Based on Ecological Surveys

In Tsunagu Mori, an ecosystem management plan has been developed based on the results of ecological surveys conducted in 2023. The forest has been zoned into four areas, each with a defined vision and action plan, in order to enhance the multifaceted functions of the forest.*

*Multifaceted functions of forests: Biodiversity conservation, climate change mitigation, landslide/soil-erosion prevention, water source recharge, creation of a comfortable environment, health and recreation, culture, and material production.

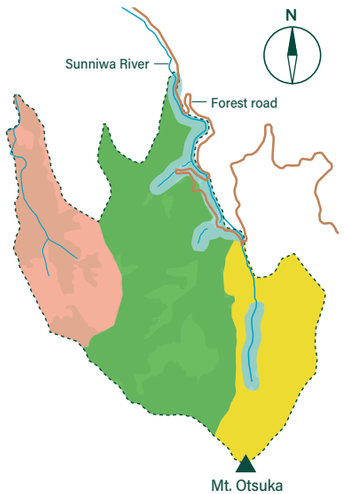
Zoning of Tsunagu Mori

Ecosystem Conservation Zone:
Area aiming for a pristine ecosystem through thinning of planted forests and conservation of natural forests

Logging-Biodyversity Symbiosis Zone:
Area where the life cycles of both wild species and planted trees are promoted for sustainable timber production.

Stream Conservation Zone:
Areas for environmental conservation of mountain streams and valley forests by reducing human impacts.

Recreation Zone:
Area that encourages visitor behavior change through cultural services.



Felled ground in Logging-Biodyversity Symbiosis Zone

Wasabi paddy in Stream Conservation Zone

Hiking trail in Recreation Zone

Original Monitoring System Towards Tsunagu Mori's Visions & Goals

Since boundaries in natural ecosystems are seldom clear-cut, it takes a long time for the benefits of forest management to become apparent. To evaluate progress toward the four KGIs that define the vision for Tsunagu Mori, the NRE Group has established its own KPIs to clarify evaluation metrics and measure effectiveness. In addition to five-year ecological surveys, the Group conducts annual monitoring and links findings to business management, guided by expert advice, to maximize the project's impact.

Monitoring System

	1	2	3	4
KGI	Maintain a well-balanced ecosystem pyramid	Conserve ecologically valuable species.	Ensure harmonious coexistence of forestry and biodiversity	Utilize ecosystem services
KPI	Presence/absence of raptor species*1	No. of identified key species	Area of grassland created (m²) / No. of local provenance seedlings*2 planted	No. of users through sustainable tourism, etc.*3
Measurement method	Ecological surveys conducted every five years	Ecological surveys conducted every five years	Measured annually	Measured annually

*1 Raptors: Raptors such as the mountain hawk-eagle and owls have been selected as indicator species for maintaining the ecological pyramid, based on their position at the top of the food chain. *2 Local provenance seedlings: Seedlings grown from seeds collected from naturally occurring trees within the region, ensuring local genetic characteristics. *3 No. of users through sustainable tourism, etc.: Tourism and other activities are conducted based on zoning defined in the ecosystem management plan to prevent overuse. The appropriateness of these programs and their impact on Tsunagu Mori are continuously reviewed and discussed by the biodiversity expert committee.

EXPERT MEETING

Biodiversity Expert Panel

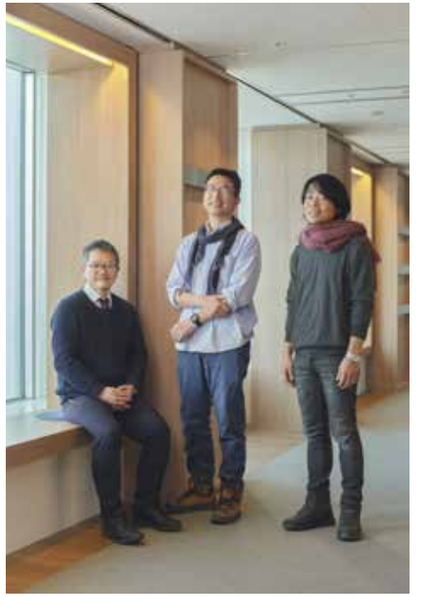
As part of its monitoring system, the Mori wo Tsunagu TOKYO Project has established an expert panel comprising scholars and activist who are versed in the ecosystems of Tama Area to have discussions from multiple angles based on advanced theories on forests and biodiversity to ensure that the project will not become a self-righteous one initiated by a private company. We intend to continue addressing the regional issues while ensuring consistency with international guidelines and producing academic results.

(From left)

Dr. Shizuka Hashimoto
Professor, Department of Ecosystem Studies, Graduate School of Agricultural and Life Sciences, The University of Tokyo; Co-chair Multidisciplinary Expert Panel (MEP), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)
[Fields of expertise] Ecosystem services, landscape planning, and environmental policy.

Mr. Nozomu Mitarai
Representative of the Study Group of Natural History in Ome City [Fields of expertise] Living organisms and ecosystem of the Tama region.

Dr. Akira Mori
Professor, Research Center for Advanced Science and Technology, The University of Tokyo
[Fields of expertise] Ecology, biodiversity, and ecosystem services.



CULTIVATING THE NEXT GENERATION

Cultivating the next generation to think and act in ways that maximize happiness and abundance for the planet, both now and in the future.

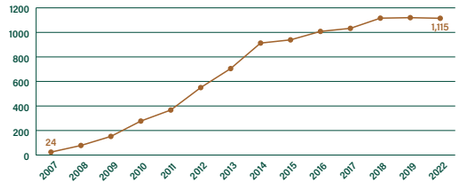
With today's complex social systems, no company can achieve its sustainability goals on its own. To become truly sustainable, a business must work hand in hand with its customers, investors, business partners, and local communities. Together, they need to think and act in ways that maximize happiness and abundance for the planet, both now and in the future.　As a real estate developer, we are shifting from creating things to creating experiences—and now to cultivating future creators who boldly think and act for themselves to shape what comes next.

Photo: The NRE Group's Machi wo Mirume
(Seeing the City Through The Eyes of Another) outreach class

Cultivating Creators of a Sustainable Society

Today, we face numerous global challenges such as climate change, poverty, resource depletion, conflict, biodiversity loss, and infectious diseases. To address these issues, education is indispensable for empowering individuals to see global challenges as personal concerns and to take action toward their solution. In 2019, Education for Sustainable Development: Towards Achieving the SDGs (ESD for 2030) was adopted by the United Nations General Assembly*1 and the UNESCO General Conference.*2 In Japan, the new national curriculum introduced in 2020 emphasizes the concept of "creators of a sustainable society" and incorporates the principles of ESD.*3 Today, over 1,100 schools across Japan have been approved as UNESCO Schools*4 based on these principles. The NRE Group views this trend as an opportunity for its own growth. Through its Mori wo Tsunagu TOKYO Project, the Group is working to nurture the next generation of sustainability leaders.

Number of UNESCO Schools in Japan (Reference) UNESCO School Guidebook



*1 United Nations General Assembly: One of the principal organs of the United Nations, comprising all member states
*2 UNESCO General Conference: The highest decision-making body of the United Nations Educational, Scientific and Cultural Organization (UNESCO)
*3 ESD: Education for Sustainable Development
*4 UNESCO Associated Schools: Schools approved for membership in ASPnet (Associated Schools Project Network), an international network established to put UNESCO's ideals into practice in school settings

Utilizing Okutama, a Town Facing Many Challenges, as a Field for ESD

To cultivate the creators of a sustainable society, it is essential to provide real-world settings where learners can engage with social issues as personal concerns. Faced with a low birthrate and aging society with its population dwindling, the decline of forestry, and numerous other challenges, Okutama Town serves as an ideal site for applying ESD. At the same time, the NRE Group is expected to contribute to solving these issues as part of its own corporate growth.
Through the Mori wo Tsunagu TOKYO Project, the Group is taking on these challenges by leveraging Okutama's rich natural environment—developing timber-based buildings through circular forestry, creating local employment, promoting behavioral change through sustainable tourism, and increasing engagement from non-residents.
In recent years, NbS*1—an approach that utilizes ecosystem services*2 to address social issues—has gained global attention. In 2024, the Group received the Grand Prize at the first Tokyo NbS Action Award, hosted by the Tokyo Metropolitan Government.

(Source: Tokyo Metropolitan Government website)

*1 NbS (Nature-based Solutions): Solutions that use natural systems and processes to address societal challenges in ways that benefit both nature and people.
*2 Ecosystem Services: The benefits that healthy, biodiverse ecosystems provide to humans. These are generally categorized into four types: provisioning, regulating, cultural, and supporting services.

Engage the Senses, Learn, and Take Action: Sustainable Tourism Programs in Practice (Examples)

As part of its human development efforts, the Mori wo Tsunagu TOKYO Project has launched a series of sustainable tourism programs in Okutama Town. These programs are designed to help participants internalize global challenges as personal concerns and take meaningful action toward their resolution. Rooted in Okutama's rich natural environment, the initiative leverages ecosystem services and advances NbS.

* D&I (Diversity & Inclusion): Efforts to ensure diverse individuals can thrive and fully contribute.

Guidance Session

An introduction to the NRE Group's sustainability vision and the purpose of the Mori wo Tsunagu TOKYO Project. Participants gain foundational knowledge and develop a mindset for the program.

Social activities with people with disabilities
(D&I*/Human Rights)

At the Tokyo Tama Gakuen support facility for people with disabilities, participants engage in shiitake mushroom cultivation and cultural exchanges with residents through dance, deepening understanding of an inclusive society where no one is left behind.

Nature Walk
(Biodiversity Conservation)

Exploring the lush forests of Tsunagu Mori with a nature guide, participants learn about local wildlife and the importance and fragility of biodiversity.

Wasabi Harvesting
(Ecosystem Services/ Water Source Recharge)

Participants harvest locally grown wasabi—commissioned by the NRE Group—and learn how healthy forests support clean spring water and ecosystem services.

Seed Gathering
(Genetic Diversity)

Through collecting seeds from native tree species in Tsunagu Mori, participants learn about the importance of preserving genetic diversity as a key layer of biodiversity.

Timber Processing & Firewood Splitting
(Timber Use/Business Collaboration)

By visiting a sawmill that processes timber harvested from Tsunagu Mori and experiencing woodworking firsthand, participants gain a tangible understanding of sustainability in action through business collaboration.

Interview | ***We want to inspire people to think about and act for nature and life.***

We, as nature guides, do not simply call on visitors to conserve nature and living things, but by showing them many wonderful aspects of the forest, we try to inspire them to cherish and undertake initiatives for nature, of which they are an integral part. The entire area of Okutama Town is a national park, so we hope that the NRE Group will encourage many people from the central Tokyo area to visit the town, so that we can both protect nature and benefit society.

a nature guide from the Center for Environmental Studies
Ms. Maiko Sato,

Interview | ***Sharing the Charm of Nature and the Community Through Wasabi Cultivation***

We see great potential in the story behind wasabi farming in Okutama—the wasabi is grown outdoors in the heart of nature, yet technically still in Tokyo.
We hope that NRE Group will serve as a hub for collaboration, bringing together people from diverse backgrounds to help share the appeal of the region more widely. Wasabi grown in Tsunagu Mori is now being served at hotels and restaurants operated by the Group. It would be wonderful if this became an opportunity for people in the city to reflect on nature.

Wasabi Brothers
Tatsuya Tsunoi (left), Hitoshi Tsunoi (right)

Topics | **Conserving Genetic Diversity Through the Planting of Local Provenance Species**

Biodiversity exists on three levels: genetic diversity, species diversity, and ecosystem diversity.
To help conserve genetic diversity, the NRE Group collects seeds (nuts and fruits) from native tree species in Tsunagu Mori and the surrounding Tama region. These are grown into seedlings and replanted in Tsunagu Mori as part of reforestation efforts.

Planting local prevalence seedlings

From Hands-On Experience to Business Use Wood Fuel Made from Forest Offcuts

As part of the Mori wo Tsunagu TOKYO Project, wood offcuts generated during the processing of timber from Tsunagu Mori (see the illustration on Page 11) are repurposed into fuelwood products through sustainable tourism activities to be used at hotels and restaurants operated by the NRE Group.

Pizza Oven at NOHGA HOTEL AKIHABARA TOKYO

CO-CREATION

Creating New Value with Diverse People and Organizations

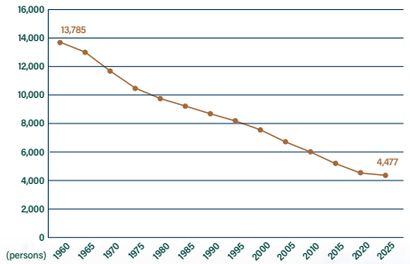
Companies carry out their business activities based on a social system comprised of multi-layered stakeholders, including the natural environment.
Through the Mori wo Tsunagu TOKYO Project, the NRE Group aims to build social capital that contributes to its long-term growth and survival by networking people and organizations from all backgrounds to promote diversity and create new values.

Addressing the Challenges of Okutama Town Together to Co-create a Brighter Future

Okutama Town is situated within the Chichibu-Tama-Kai National Park, boasting a rich natural environment and easy access from the metropolitan center. On the other hand, the town is faced with a low birthrate and aging society —its population dwindling to one third of its peak— as well as declining forestry, which was once the town's main industry. Against this backdrop, Okutama Town and the NRE Group concluded a comprehensive partnership agreement in August 2021 (see "Key Areas of Collaboration Under the Comprehensive Partnership Agreement" on Page 3). The NRE Group aims to achieve both a associated population* and corporate growth through co-creation with Okutama Town and various organizations and people in the area.

*Associated population: a number of people who do not reside in the town on a permanent basis but are involved with the town and residents more deeply than just visiting as tourists.

Population Trend in Okutama Town



Source: National Census and National Institute of Population & Social Security Research (estimate as of March 1, 2025)


Photo: Organisms inhabiting Tsunagu Mori

Interview

Partnership with the NRE Group is a great opportunity for Okutama Town.

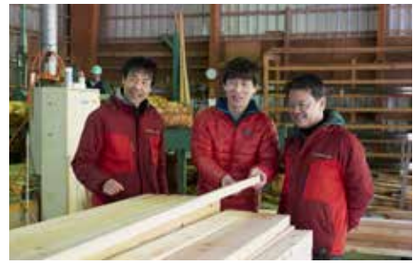
We feel that the social environment in which consideration for nature has become indispensable these days is an opportunity for Okutama Town. However, in a town with a population of less than 5,000, there are limits to what the government and local residents can do on their own, so we look forward to new initiatives in cooperation with the NRE Group. We hope that the Mori wo Tsunagu TOKYO Project will lead to an increase in the number of fans in Okutama and in the associated population.


Planning & Finance Division, Okutama Town
(From left) Ryusuke Tokuo, Naoya Sugiyama, Naoto Sugita

Interview

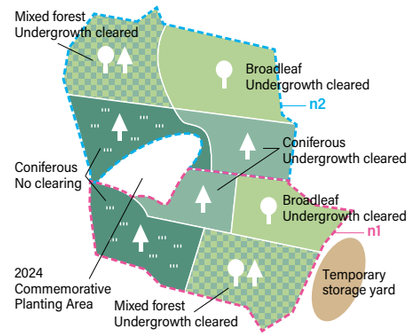
The more people love and appreciate natural wood, the more jobs and skills will be created and transferred.

In addition to the chronic labor shortage, the lumber industry is faced with the challenge of passing down craftsmanship due to the aging of the workforce. Even if demand for lumber increases, the supply chain will not function without skilled people working in the field. Owing to the Mori wo Tsunagu TOKYO Project, we were able to hire more people. We hope this initiative will increase the number of young people who are attracted to working with wood and trees, leading to job creation and skill transfer.


Tokyo Forest and Ichiba Inc.
(From left) Kazunari Ushijima, Keishi Nishihara, Hiroshi Noguchi

Creating a Forest Model That Leaves No Problems for the Future: Joint Research with The University of Tokyo Begins

Today's forest challenges are, in many cases, a legacy of past forestry practices from an era when the industry was once highly profitable. These challenges have left us with important lessons. Now, as climate change and biodiversity loss emerge as global concerns, there is growing demand for forest management methods that will not pass unresolved problems on to future generations.
The NRE Group has launched a joint research initiative with the Biodiversity and Ecosystem Services Laboratory (led by Prof. Akira Mori) at the Research Center for Advanced Science and Technology, The University of Tokyo. Together, we are exploring how to maintain young planted forests as biodiversity-rich grassland environments, aiming to establish a science-based model for future forest management.



Joint Research Site: 2023 Clear-Cut Area (see local map on Page 27)

Embracing Our Role in the Community Supporting the Future of Local Development

Local communities are built on histories, cultures, and resources passed down through generations.
As a member of the Okutama community, the NRE Group fosters open dialogue and mutual understanding with local residents through participation in events such as the Okutama Fureai Festival—the town's largest community event—as it helps to shape the kind of community development future generations will carry forward.


The NRE Group booth at the Okutama Fureai Festival

Sustainability Policy (vision of 2050)

Earth Pride

Connecting the Globe

Pursuing humanity

We strive to answer the deep questions of human existence and well-being in a world where technology is increasingly progressing and being integrated into our lives. By providing an inclusive living environment where people support and connect with each other, we contribute to the creation of a society where no one will be left behind.

Maintaining harmony with nature

Our aim is to achieve true harmony with our natural environment for our future children and healthy ecosystems by reconsidering how human economic activities should operate. While carefully conserving the Earth's finite resources, we improve the relationship between nature and humans.

Building the future together

The ambition we have is to create unprecedented value from diverse organizations and people working together to overcome boundaries. We are continuously challenging ourselves with novel ideas of living, business and working styles for an innovative society where all people with various backgrounds and values can build on their strengths.

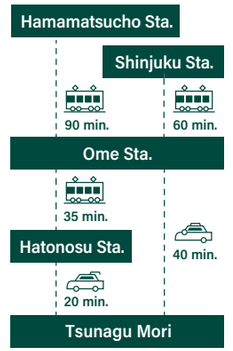
Priority issues for 2030 (materiality)

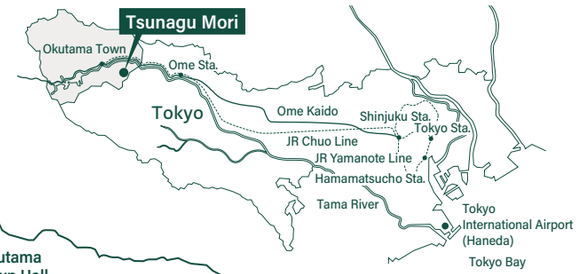
The NRE Group established its sustainability policy, "Earth Pride," which shows the Group's vision of 2050, seeing changes as new growth opportunities in its management and business environment such as the climate change, which is a global issue, the intensification of natural disasters and the diversification of people's values. In order to realize the goals of the policy, the Group identified five themes as the priority issues it should address by 2030.

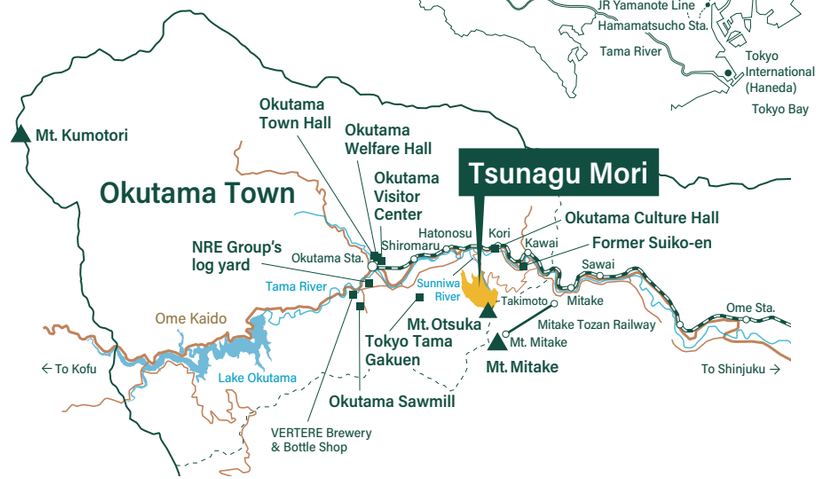
Society & Employees		Climate Change & Natural Environment		
Diversity & Inclusion	Human Rights	Decarbonization	Biodiversity	Circular Design
Provide inclusive-design products and services.		35% reduction in CO_2 emissions (Cf. FY2019)		
Procurement Guidelines questionnaire survey: 80% completion		Meet the ZEH/ZEB-oriented standards (energy-saving performance indices) in newly built properties.		
Establish a human rights due diligence system		Develop timber-based buildings: 10,000t-CO_2/yr of carbon storage		
% of men and women taking parental leave: 100%		Obtain certifications related to biodiversity		
% of women in managerial positions: 20%		Long-life building initiatives: NRE Group's standards applied to 100% of buildings		
1-on-1 meetings: 100% completion		Reduce waste and increase reuse: 20% reduction in industrial waste		
Human-rights-related seminars: 100% attendance				

Key performance indicators (KPI)

Access to Tsunagu Mori (approx. time)







Tsunagu Mori Overview

Location

Kotaba, Okutama-Town, Nishitama-gun, Tokyo

Rights

Ownership: Okutama Town

Surface rights: Mori wo Tsunagu LLC.

(Nomura Real Estate Holding's 100% subsidiary)

Area

Approx. 130 hectares (actual measurement)

Standing trees

Cedar/cypress: 74%

Broad-leaved trees: 26%

Other

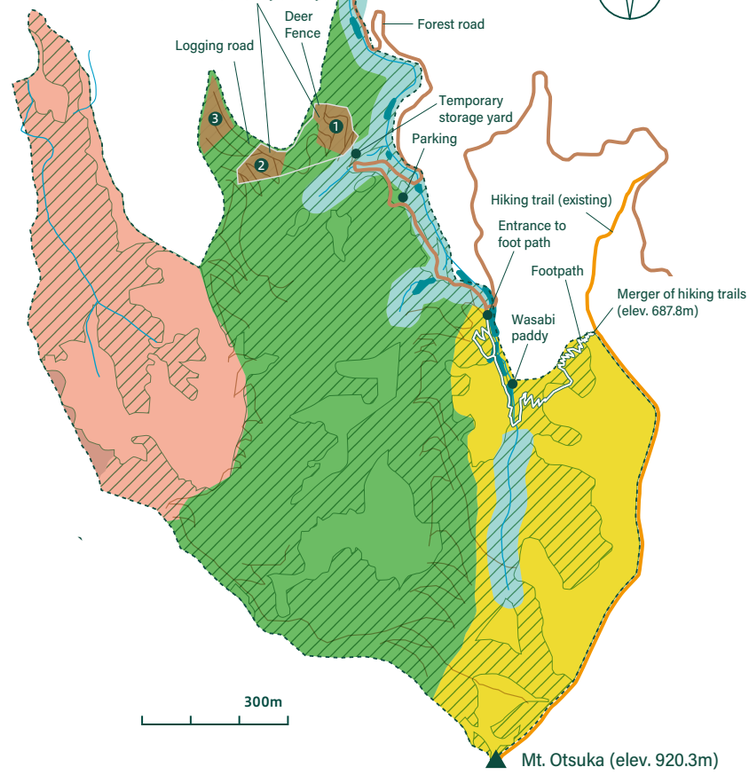
(Sunniwa) forest road(jurisdiction of Okutama Town)

Sunniwa River(administered by Okutama Town)

Part of the Chichibu-Tama-Kai National Park

- Ecosystem Conservation Zone
- Logging-Biodyversity Symbiosis Zone
- Stream Conservation Zone
- Recreation Zone
- Planted forest
- Natural forest
- Regeneration cutting area

❶ 2023
❷ 2024
❸ 2025



Visit the Mori wo Tsunagu
TOKYO Project website

NOMURA REAL ESTATE GROUP