YOKOHAMA Forever Forest Activities

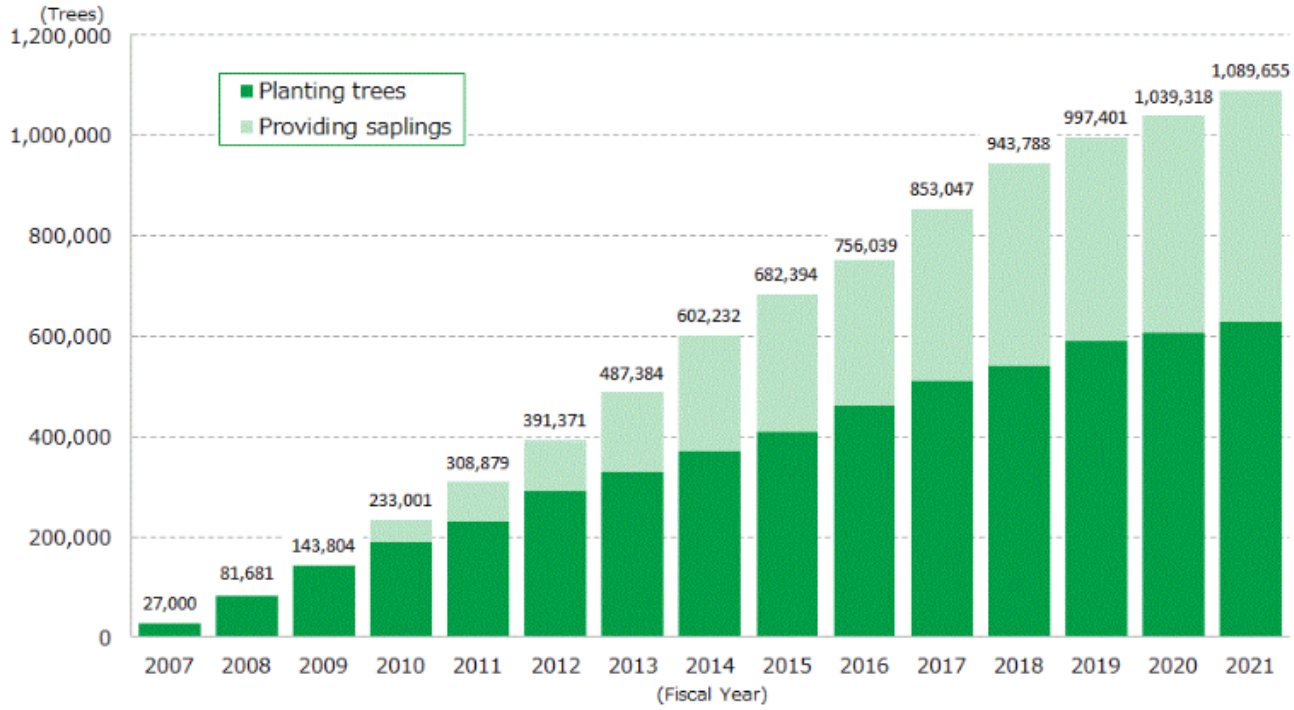
Activities to create our own forests at domestic and overseas sites to become a top-level environmentally friendly company.

Scope of Activities

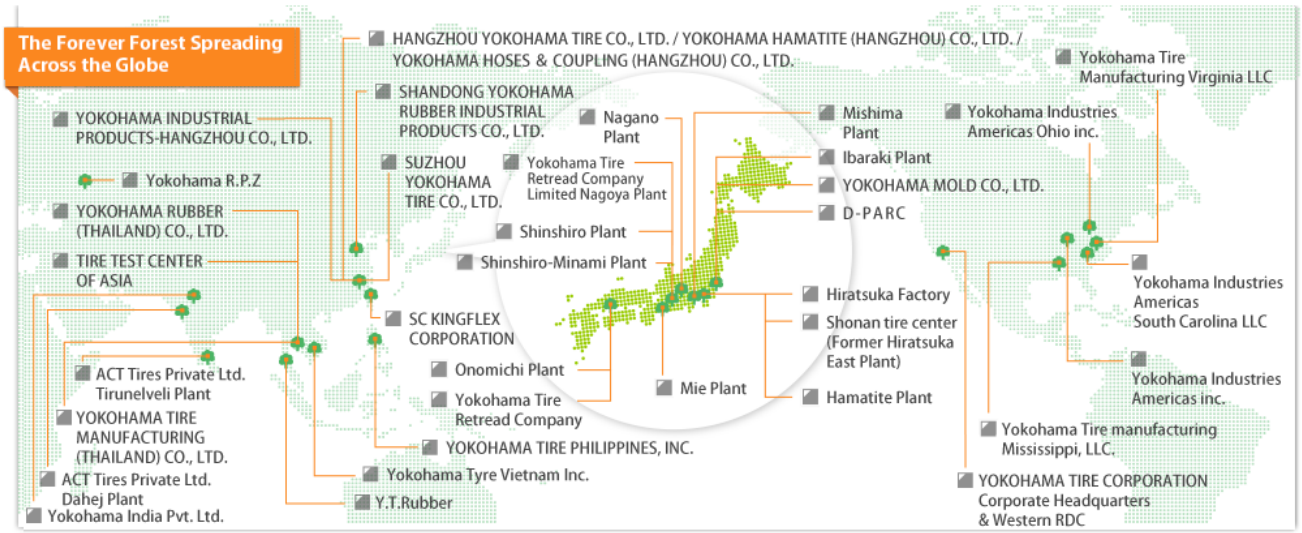
YOKOHAMA Forever Forests commenced in 2007 as a project to make use of potential natural vegetation and plant 500,000 saplings at production and sales related bases in Japan and abroad by 2017 – The Yokohama Rubber Co., Ltd.'s 100th anniversary.
It started with tree planting at the Hiratsuka Factory on November 11, 2007. Tree planting was carried out at 14 bases in Japan, and at a further 21 bases in 8 countries abroad. The goal of planting 500,000 saplings was achieved in September 2017. We will make use of the knowledge we have cultivated up to now and continue to contribute to the conservation of regional biodiversity. In addition to the tree-planting activities at our plants and other locations, we are also providing saplings and knowledge related to planting trees to others as we continue this undertaking.
By the end of fiscal 2021, we had planted 628,000 trees and provided 462,000 saplings for planting, making a total of 1,090,000 trees that had been planted through the Forever Forest project and activities. We will continue this activity, both in Japan and abroad with a new goal to plant a total of 1.3 million trees by 2030, including the saplings to be provided to others for planting.

First tree-planting ceremony at Hiratsuka Factory in November 2007

Number of trees planted



Click names of plants to see activities progress at each plant.



Purpose of Forever Forest Activities

Developing participants' environmental awareness

Participants in this project do everything on their own, from germinating seedlings to tree-planting, and then nurturing the forest. The "realizations" that participants gain help develop their environmental awareness.

Disaster prevention, and forming environmental conservation forests

Since the broad-leaved evergreen trees which are selected for panting are not easily blown over by typhoons, and are also fire-resistant, they minimize damage from disasters such as earthquakes, typhoons, tsunamis, and fires. Their forests can also serve as evacuation areas for local residents. The expertise built through this Yokohama Forever Forest Activities has been utilized in building the "forest seawall" (planting trees for the "Heisei Forest no Mori" in the town of Otsuchi) to protect against tsunamis, beginning in 2012.

Helping Decelerate Global Warming

Our company’s production sites around the world plant forests of trees indigenous to the locale that absorb and store CO2, helping to decelerate global warming.

Preserving Biodiversity

For the Forever Forest over 50 varieties of trees are planted at some locations, based on the types of trees normally found in that particular soil. This not only improves biodiversity in and of itself but also nurtures rich biodiversity by providing natural habitats for birds, insects, and other life forms.

Tree planting at Yokohama Tire Manufacturing (Thailand) Co., Ltd.（YTMT)

The 7th " Forever Forest" tree-planting ceremony at Suzhou Yokohama Tire Co., Ltd. (CSZY)

Features of Forever Forest Activities

The Miyawaki Method

Yokohama Rubber has been under the guidance of the late Dr. Akira Miyawaki, a plant ecologist and professor emeritus at Yokohama National University, who has been involved in forestation around the world.
The late Dr. Miyawaki's method is different from mere afforestation.
It is a distinctive technique that plants mixes of saplings from different tree species that are native to the area soil, to grow the trees close together (mixed, dense planting) in arrangements that closely resemble natural forests. This method has been employed both inside and outside of Japan to regenerate forests in many different places. While normal forest regeneration is said to require 100 years or more, the Miyawaki Method can regenerate forests within 10 to 20 years from planting. Miyawaki Method forests only need to be managed for the first three years after planting.

Additionally, large numbers of broad-leaved evergreen trees are selected for this method. Thanks to their deep roots which grow straight downward into the earth, these conservation forests are tough to take down, creating strong protection against natural disasters such as typhoons, earthquakes, tsunamis, and fires. Yokohama Rubber aims for coexistence with local communities, using the Miyawaki Method to plant trees around plants at production sites which can help keep damage to a minimum in the event of disasters inside or outside of the plants.

Tree planting using the Miyawaki method at the Shinshiro Plant

Germination of Saplings by Hand

The core concept that Yokohama Rubber has for creating these forests is for participants to directly do so themselves. This includes preparing the soil and germinating the saplings by hand. Employees handle practically everything, from preparing the soil to extracting the acorns, and preparing pots for the saplings. Currently the portion of saplings prepared by hand has reached 80%. Each plant gathers acorns, sows seeds, and organizes the raising of saplings and such to either plant them around their own facilities, or offer them to the local community.

Tree-Planting by Employees and Regional Communities

This project is supported by the efforts of employees, families, and local residents at our locations around the world, to plant trees and help nurture them. We hope that planting and nurturing trees together can give everyone in local communities a sense of togetherness, and spur feelings of communal trust within those communities. Employees of municipal government agencies also take part in the project, opening up more support for activities such as tree-plantings in local communities.

Measuring the effect of tree planting

Quantities of absorbed and stored CO2 are being monitored at the Hiratsuka Factory, in addition to observation of bird populations. Trees absorb CO2 from the air into cell walls, etc. It is known that the amount of CO2 absorbed by a tree can be estimated by measuring a tree's diameter and height. Measurements of the diameter and height of trees have been taken on a regular basis since April 2009 for monitoring the accumulated amount of CO2. Carbon assimilation by the YOKOHAMA Group as a whole was estimated based on the results of the most recent Hiratsuka Factory growth survey (growth and survival rates of planted trees).

According to this estimate by The Yokohama Rubber Co., Ltd. (YRC), approximately 1,576 tons of carbon dioxide had been assimilated by the end of fiscal 2021 through the YOKOHAMA Forever Forest Activities.

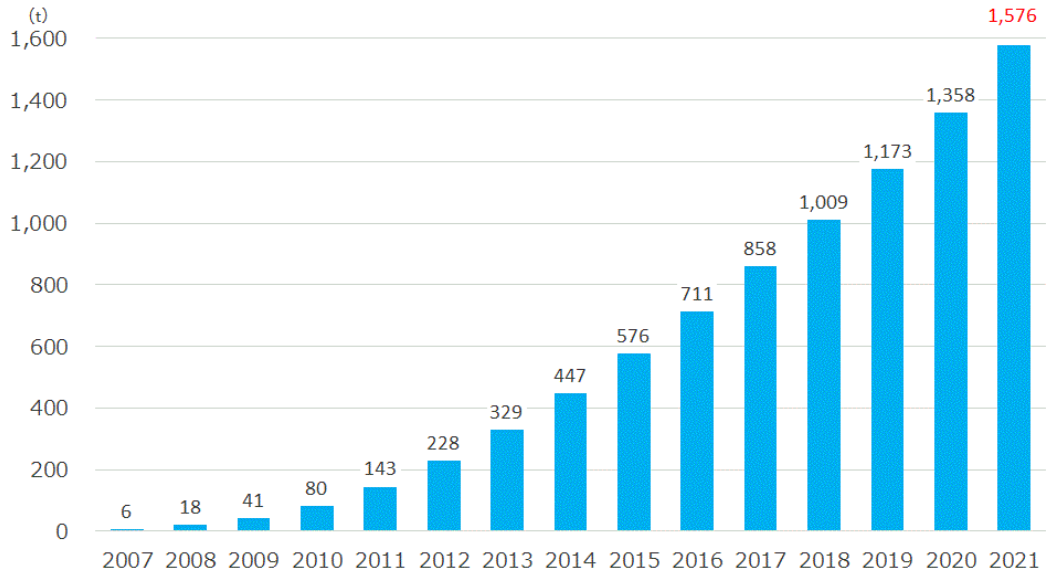
Additionally, there are "Birdwatching Club" gatherings held each month, at which employees come together on a voluntary basis to observe birds from the standpoint of conservation of biodiversity. The "Komatan" birdwatching club of Hiratsuka and Oiso provides the guidance for these monthly gatherings. Employees and locals continue to enjoy observing the now 60 different species of wild birds were recorded in 2021 (from 12 species in September 2008, when we started birding, to 55 species of wild birds were recorded as of the end of fiscal 2017) that make appearances here.

Due to the spread of COVID-19, the survey is currently conducted only at the secretariat (as of August 2022).

Monitoring of CO_2 absorption


Bird watching

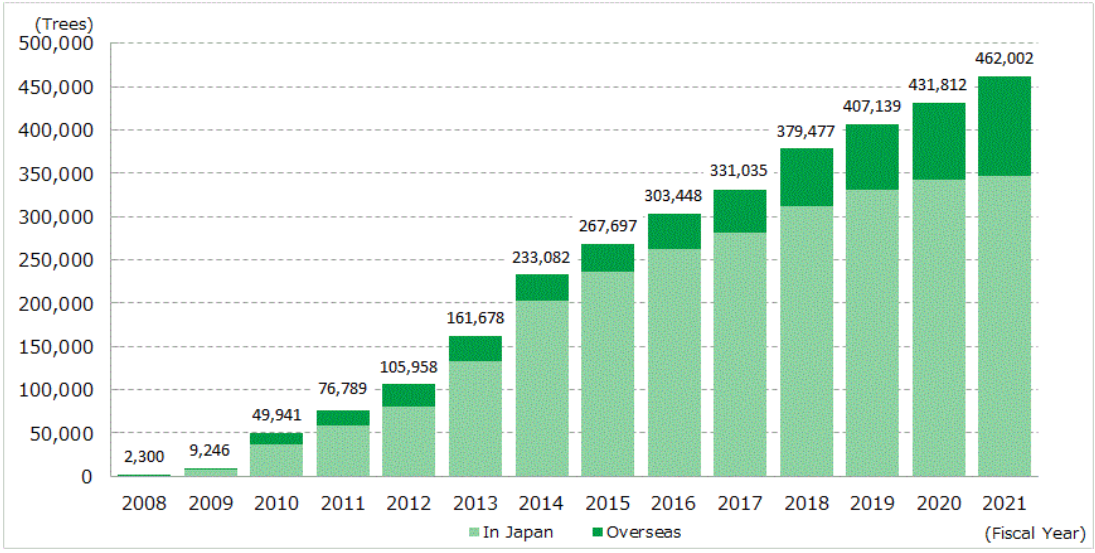
Carbon assimilation in Forever Forest Activities



Sapling donation

These seedlings that have been nurtured by hand are not only planted for our own factories and plants. We also provide them for free to a wide range of recipients including municipalities, schools, and other businesses. We also do more than simply give away the seedlings. We teach elementary school students how to plant trees, along with other such community-minded activities. The Forever Forest that has until now spread both within and outside our company can be described as follows. This includes the "Heisei no mori" in Otsuchi-cho in which some saplings were purchased.

Total seedlings provided for external organizations



Forever Forest Activities by the Numbers

628,027

The number of trees planted at our production and sales-related bases as Forever Forest tree plantings.

68,622

The number of people who have participated in tree-planting events through the end of fiscal 2021. Includes employees and their families, local residents, and more.

90

The number of different tree species for which seedlings have been planted at locations within Japan. There are different mixes of species in different places since seedlings are selected to match the environment of the land at each location. The largest number of species planted together in one location is 68. The Forever Forest Project is characterized by shorter trees mixed in with tall trees such as castanopsis, machilus thunbergii, and Japanese oak.

35

The total number of branches that have planted trees through the end of fiscal 2021 (14 branches in Japan, 21 overseas). Beyond manufacturing sites, this number also includes group companies, tire evaluation sites, and more.

60

The number of different bird species that have been observed at the Hiratsuka Factory through the end of fiscal 2021.

461,628

Total seedlings provided for external organizations.

Links

- IGES-Japanese Center for International Studies in Ecology
- NPO International Association for Restoration of Native Forest (ReNaFo)
- MORINO PROJECT
- Coastal disaster prevention forest strengthening project "Kakegawa model"
- Megri no Mori