Japan’s Effort in Climate Chage Countermeasures through Sustainable Forest Management and Wood Use

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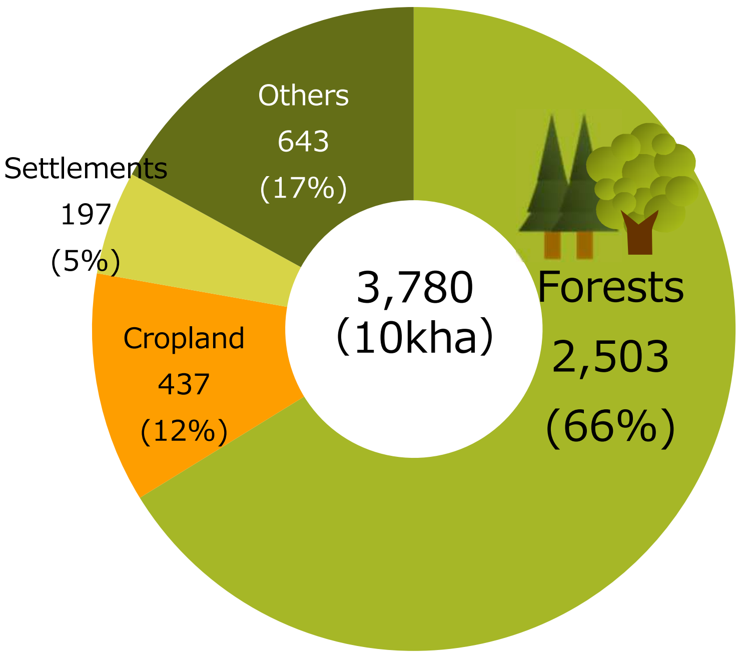
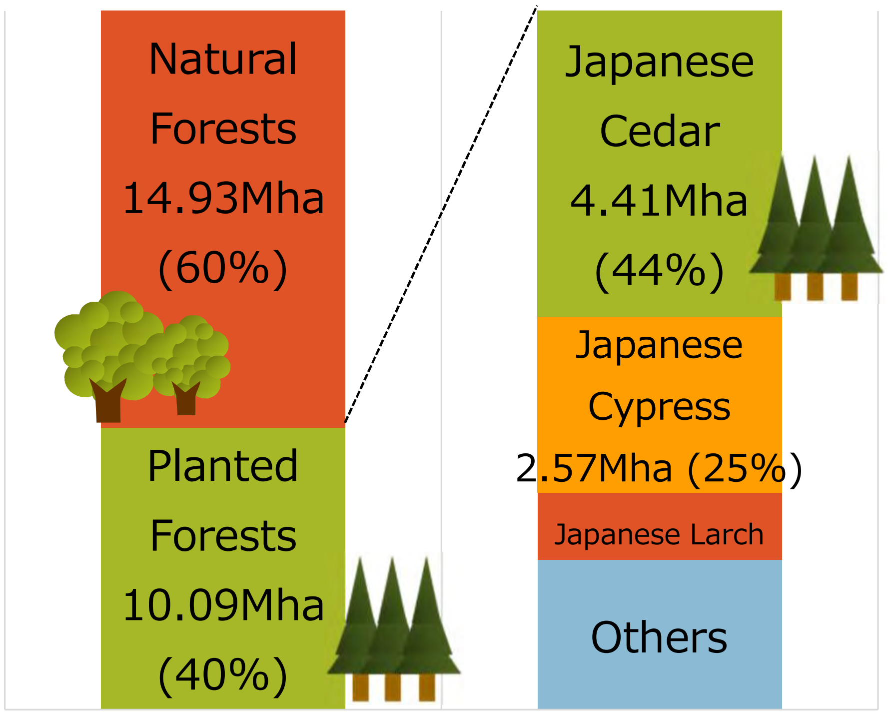
1. Forests in Japan

- **2/3 (66%) of the national land is forest areas**
- **40% of forest areas are planted forests**



Land Use in Japan

Source: Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan. “Land Area by National Land Use Classification.”



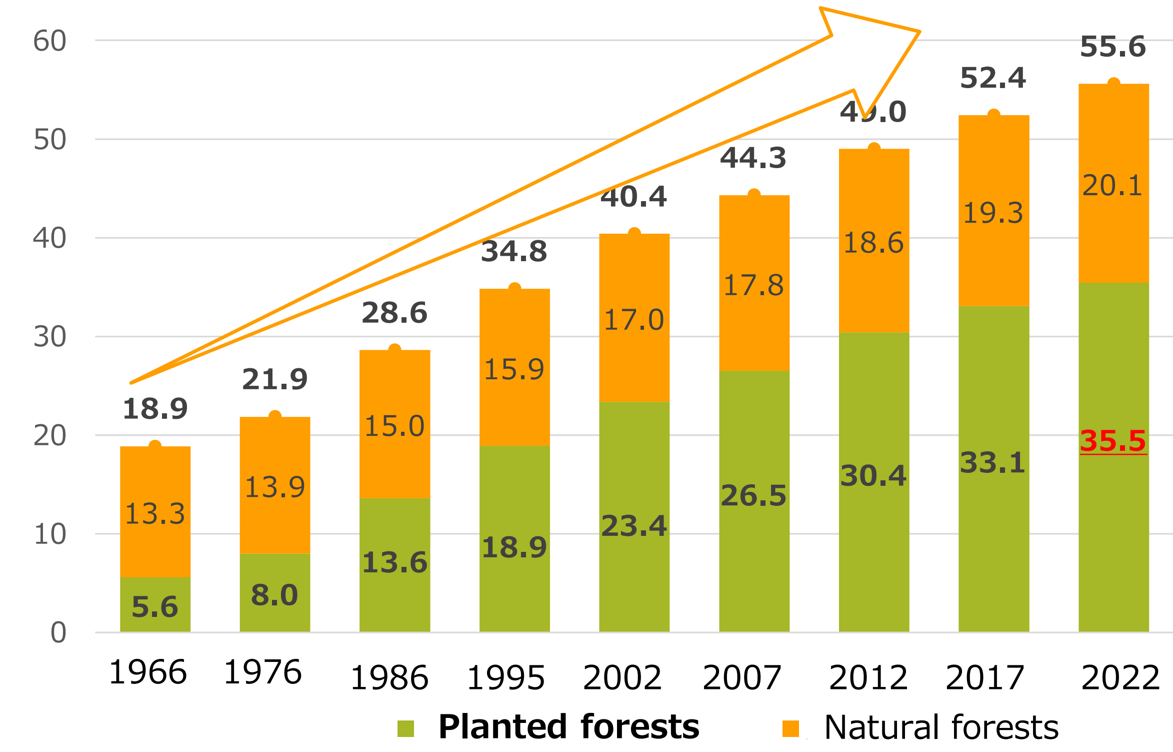
Forest Type **Area by Tree Species**

Source : Forestry Agency, Japan ” Statistical Yearbook of Forest and Forestry 2024.”

1. Forests in Japan (Forest resources)

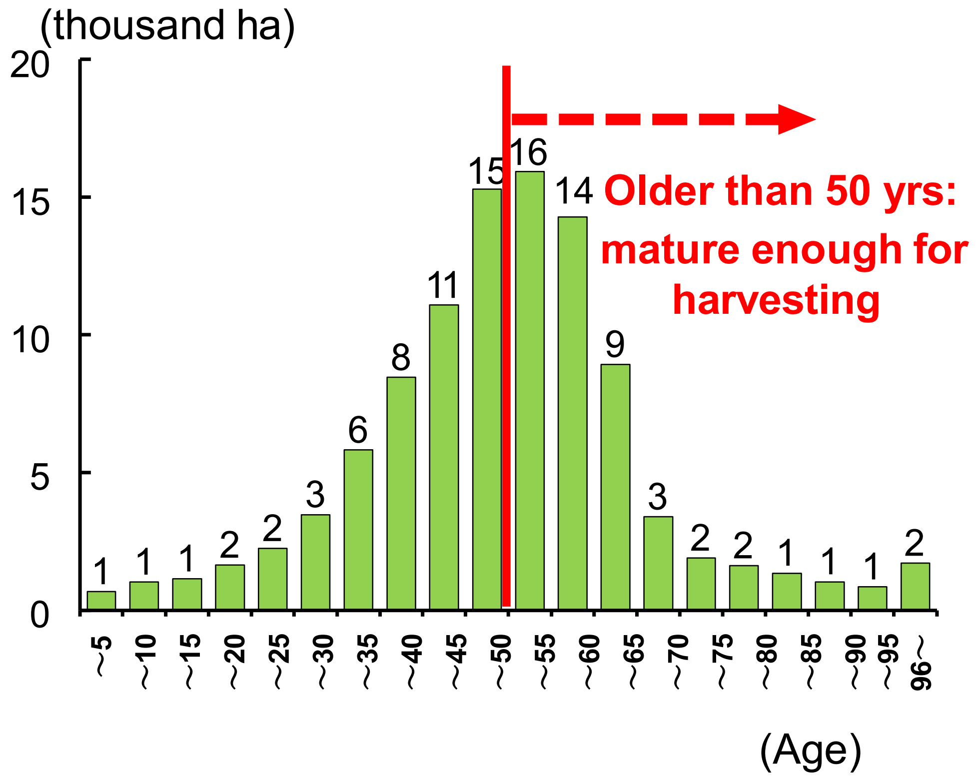
- **Volume of forest stock increasing, particularly in planted forests**
- **More than half of the plantation forests have reached harvest age**

Change of Forest Stock



Source： Forestry Agency, Japan "Current Status of Forest Resources" (as of March 31, 2022)

Age structure of Planted Forests



2. Concept of promotion for SFM and Wood Use

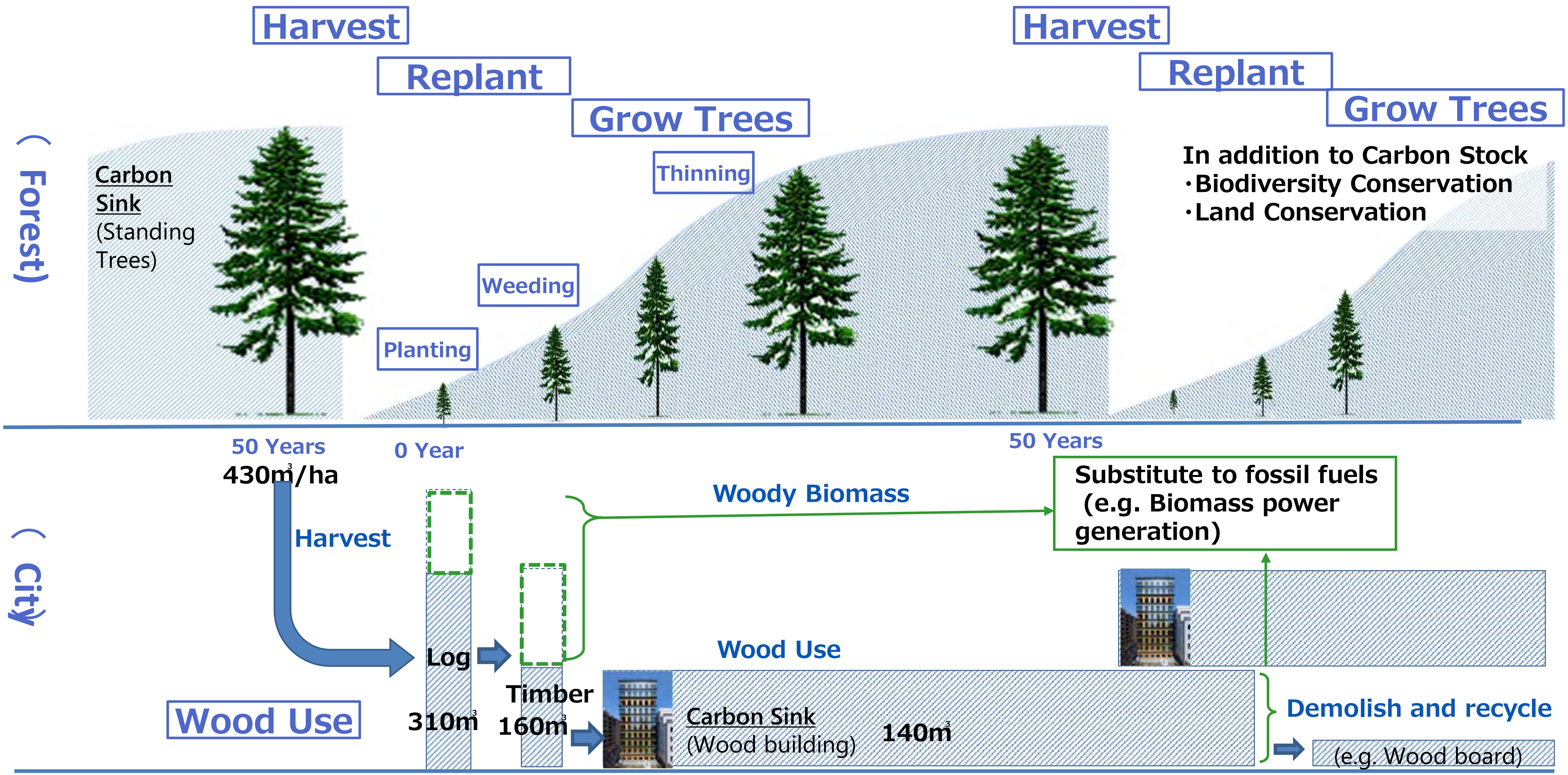
Many (planted) forests reach **utilization stage,**

- Absorption capacity of aging forests gradually declines,

(Concept of promotion for SFM and Wood Use)

- **Harvest** the mature trees,
- **Use** the wood in buildings and other structures,
- **Replant** new seedlings and
- **Grow** healthy forests with sustainable way.

3. Carbon storage in forests / city through SFM and wood use



4. Forest and Forestry Basic Plan (June 2021, Cabinet decision)

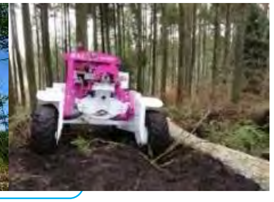
Basic Policy: Aim to Realize "Green Growth", which contributes to socio-economic and carbon neutral, through Forest Management, Forestry and Wood Industry.

Proper management and utilization of forest resources

- Proper **harvesting** and **reforestation**, with high profitability
- Establish mixed forests in unfavorable conditions
- Enhance **resilience** through forest management and disaster prevention measures
- **Strengthen forest carbon sinks** through thinning and reforestation activities


New Forestry

- Improve profitability by leveraging innovations: elite trees, machines
- **Improve income** of and **work safety** for forestry workers
- Develop forestry entities in the long term and sustainably

Strengthen wood industry

- Low-cost supply **kiln-dried JAS lumber** (large-scale sawmills)
- Produce **high unite price products** (small- and medium-mills)
- Wood use in daily life (hardwood furniture)


"Second forests" in cities

- Wood use in cities and non-residential buildings
- **fire-resistant wood** and CLT (Criss-laminated timber), standardization of wooden building design
- Promote **export** of wood products, use of biomass for heat and electricity


Create new values in rural areas

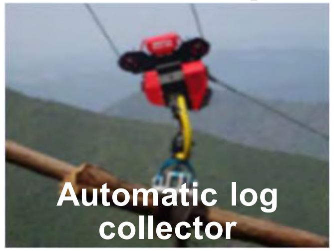
- Utilization of **local materials**: agriculture-forestry complex, mushrooms
- Maintenance and revitalization of **villages**: cooperative satoyama maintenance
- Promotion of "**forest service industry**"

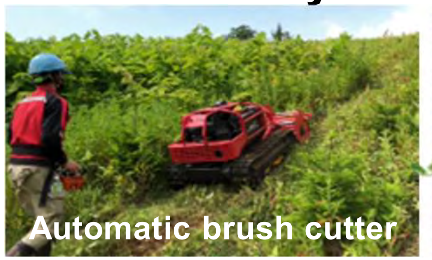

4. Leveraging innovations (Elite trees, machines)

☐New Forestry (Vision)

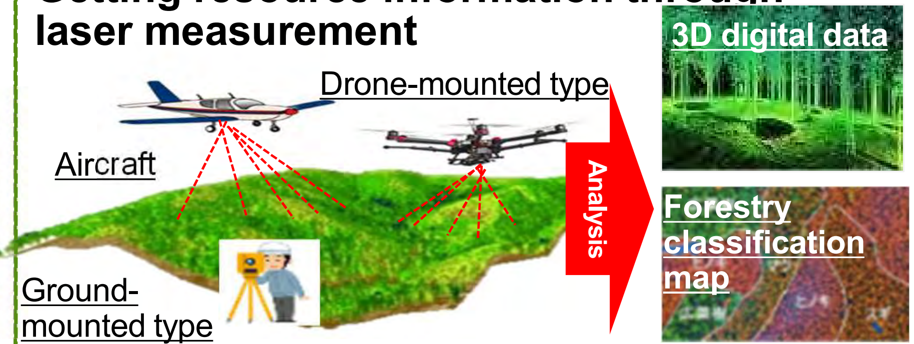
Lower costs through the use of new technologies

Automation and remote operation of forestry





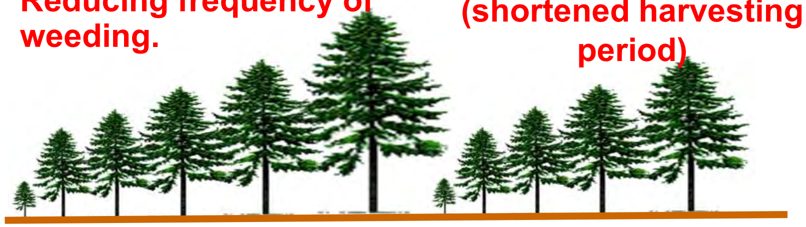
Getting resource information through laser measurement



Cost reduction through using elite seedlings (possible to shorten the harvesting periods)

Standard harvesting period
(50 years to 30 years)

Conventional varieties



Using elite seedlings and reduce operational workload

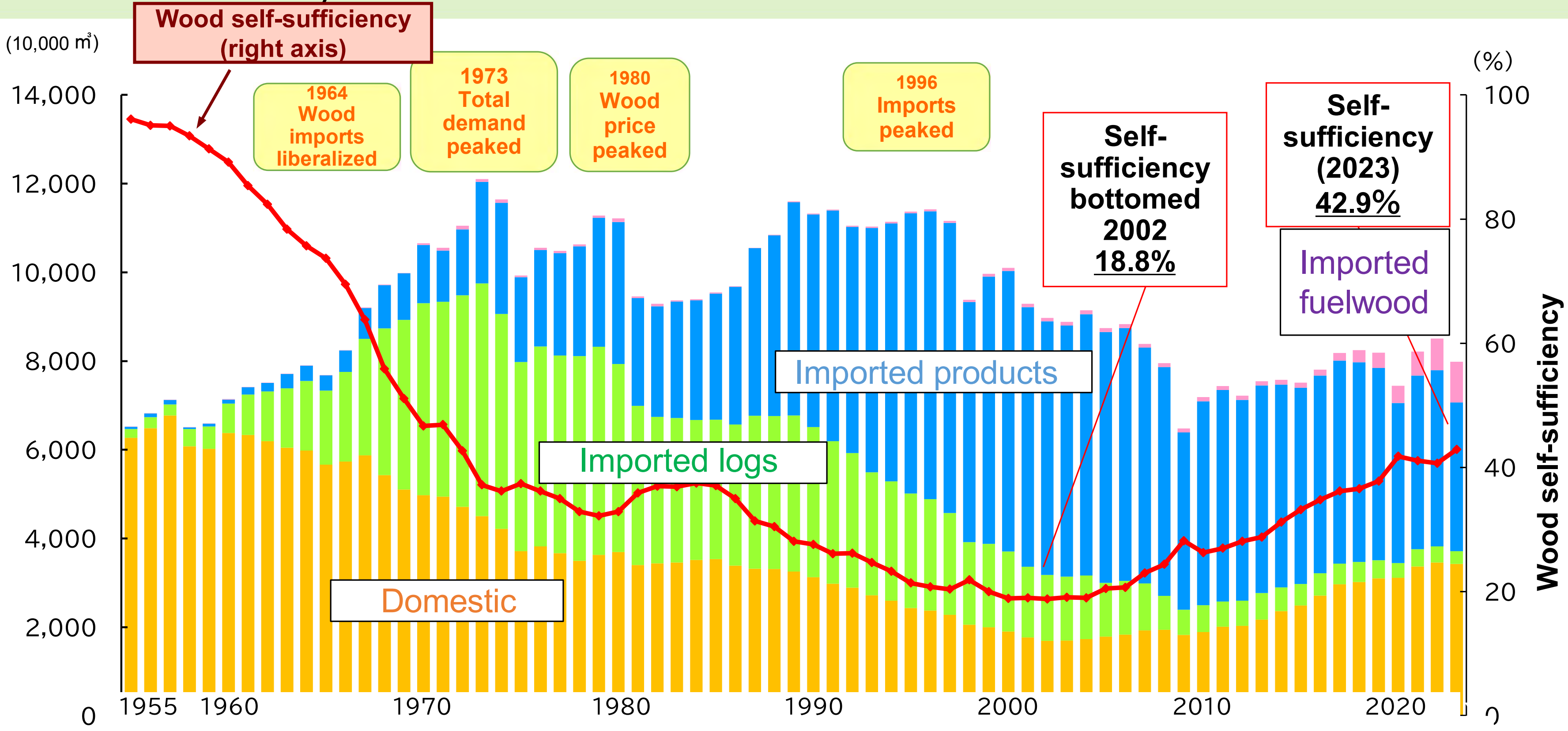
Integration of logging and planting work (Reduce workload for site preparation)

Low-density planting (reduces planting labor and seedling)costs

Source: Forestry Agency,Current Situation of forests and forestry in Japan

5. Trends in Wood Demand in Japan

- **Total Wood Demand in 2023 was 80 million m³**
- **Domestic wood supply** bottomed out **in 2002 (17 million m³**), total demand was 90 **million m³**
- **Domestic wood supply recovered** to **34 million m³ in 2023** because of **increased forest resources** and **technical development in wood industry** including small-diameter timer use for plywood.
- The Wood self-sufficiency rate increased from 18.8% in 2002 to 42.9 % in 2023



Source：Wood Supply and Demand Chart, Forestry Agency

6. Legislation to Promote wooden Construction

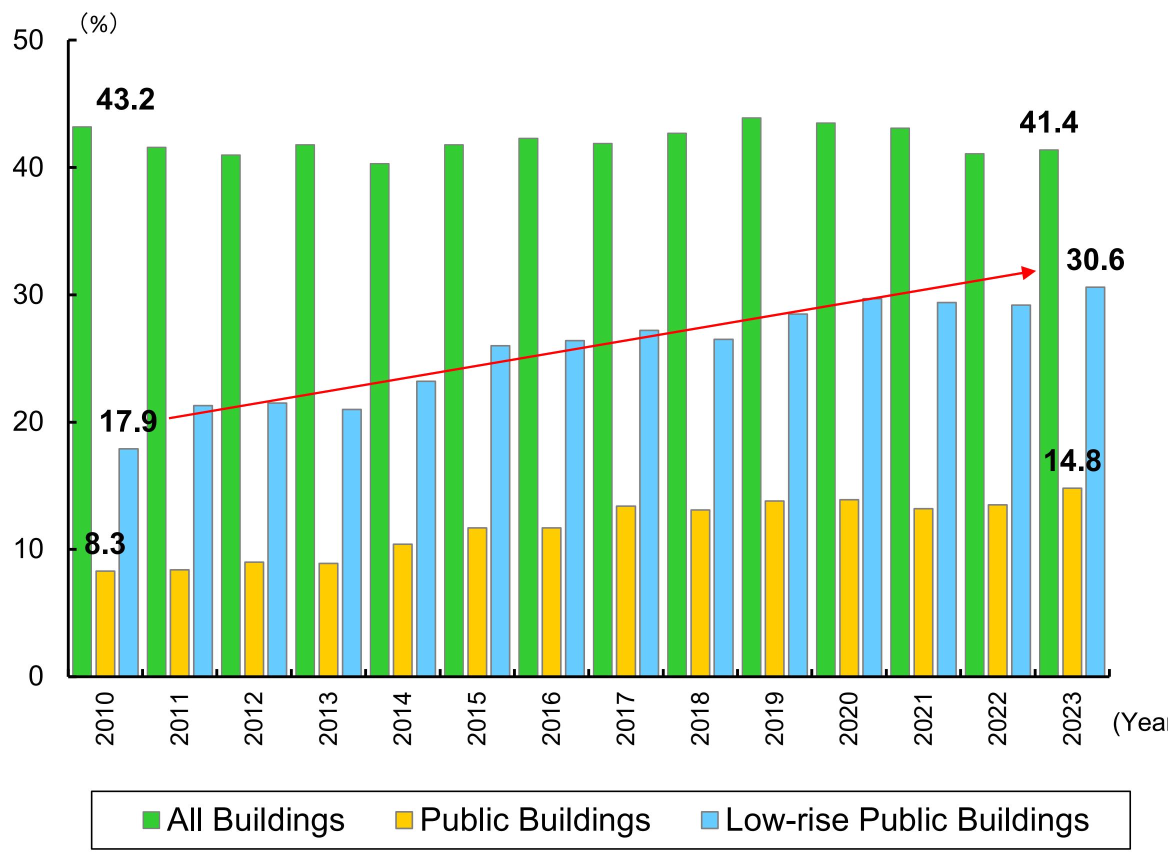
- In 2010, the **"Act for Promotion of Wood Use in Public Buildings" was enacted**.

  →The ratio of wooden structure in **low-rise public building increased** from 18% in 2010 to 31% in 2023.

- The Act was amended and renamed the **"Act for Promotion of Use in Buildings to Contribute to the Realization of Decarbonized Society"** in 2021.

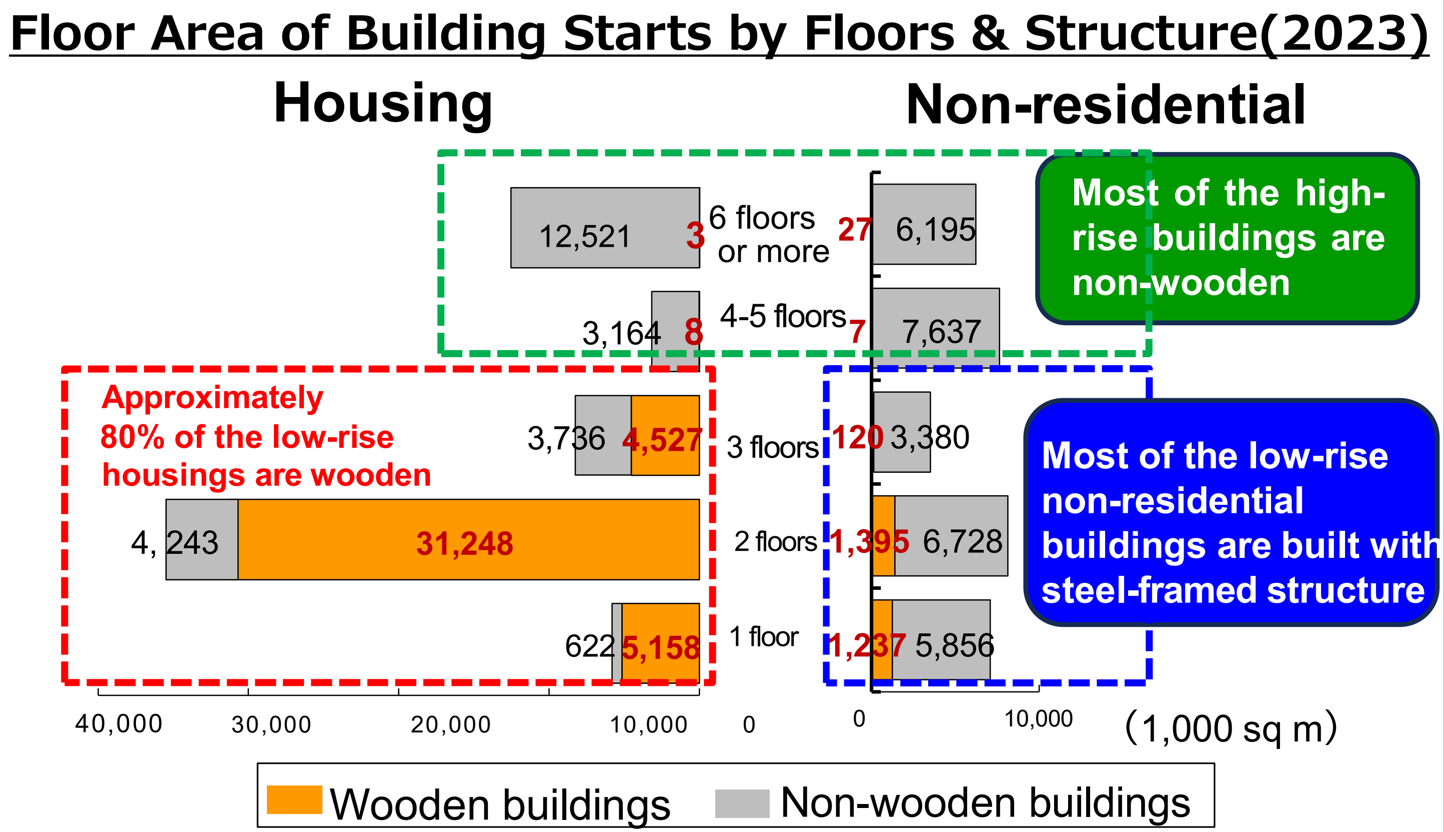
  →The **scope** of the policy was **expanded from public buildings to buildings in general**.

Ratio of wooden structure in public buildings



7. Promotion of Wood use for medium to high-rise buildings

- **80% of low-rise residential buildings are wooden structure, while most of high-rise buildings are steel or reinforced concrete.**
- **Promote development of fire-resistant wood materials & CLT to create more wood use including for high-rise building.**



Wood buildings

HULIC &New GINZA 8（2021）

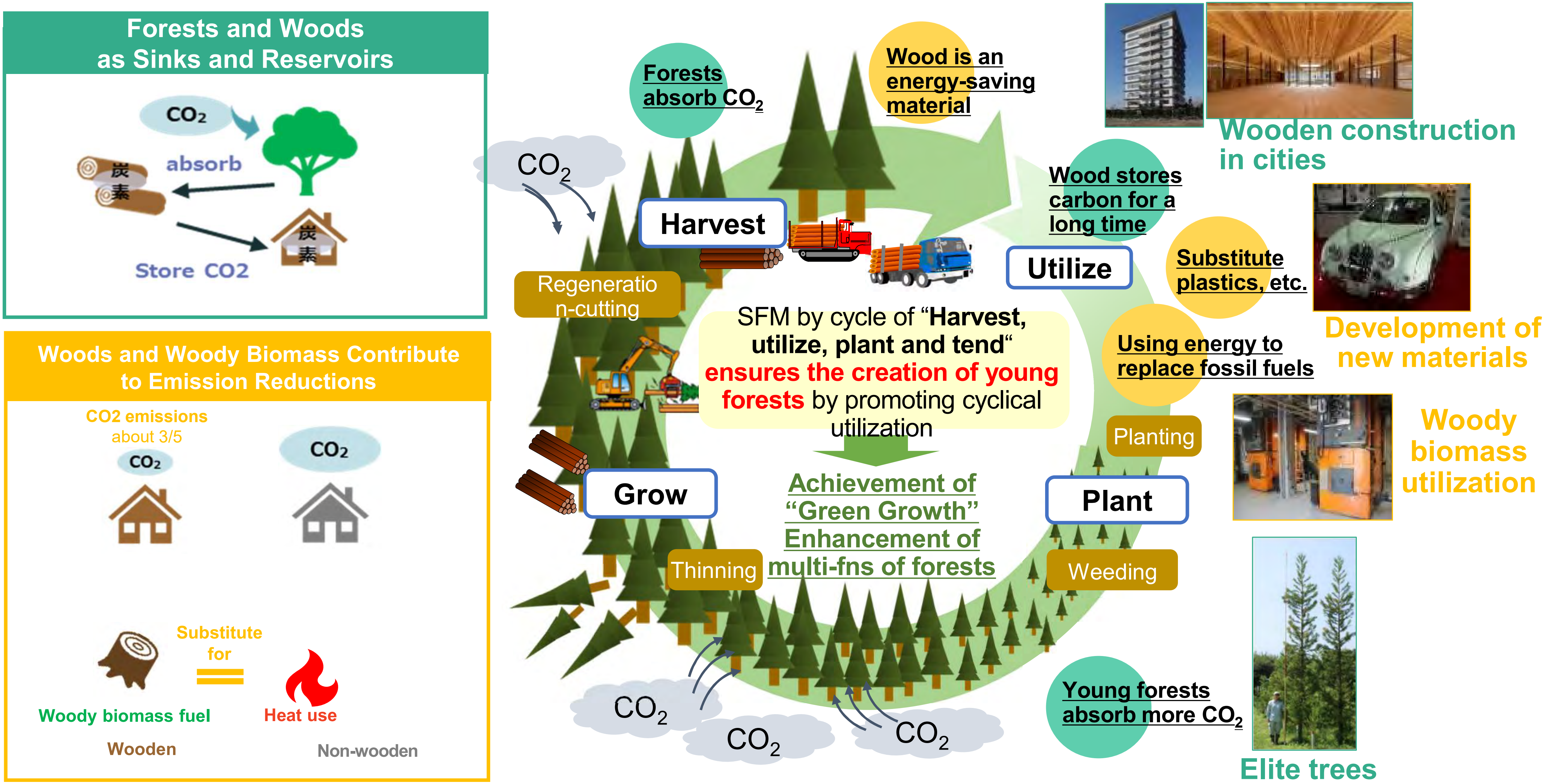
Port Plus（2022）

The Royal Park CANVAS Sapporo Oodori park（2021）

Nomura Tameikesanno Building（2023）

Source::Wood change council, Central Council for Promotion of Wood Use

8. Contribute to “Net - Zero” by SFM and using wood



Thank you very much

GREEN×EXPO 2027

International Horticultural Expo 2027 in Yokohama, Japan

Official Mascot
Tunku Tunku

Theme	**Scenery of the Future for Happiness**
Site	The former Kamiseya Communication Facility City of Yokohama, Kanagawa Prefecture
Expo Site	Approx. 100 ha
Duration	March 19, 2027 – September 26, 2027