

# Biomas\_Energy\_Plant

Ina City, Nagano, Japan

The environment we should aim for

-Towards building a sustainable society through renewable energy

#### O Kamiina Forestry Owners' Cooperative – About the Woody Biomass Energy Plant

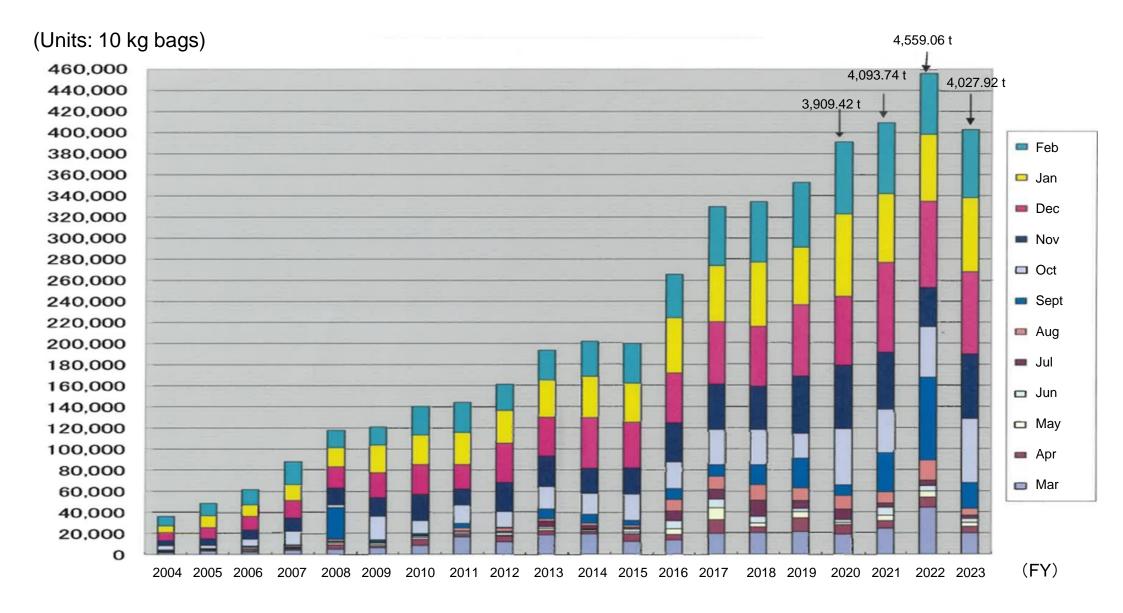
Subsidized Business: FY 2002 Prefectural Wood Supply System Development Project – Forest Energy Promotion Project (FY 2002 Special Measures Project for the Development of Facilities Utilizing Woody Biomass) Start of production: FY 2004 Products: (Japan Wood Pellet Association No. 1 certified)(10 kg bags, 500 kg flexible container bags) Raw materials: Larch, red pine (100% local materials : Japan's largest production volume)

\*FY 2024 Amount of raw wood purchased 8396 t /y : Pure No. 1 sales volume 4546 t /y

Calorie: kerosene8700Kcal/h Pure No. 1 4600Kcal/h



#### Wood Pellet Pure No. 1 – Fluctuations in Sales Volume



 $\diamond$  Types of pellet stoves and boilers, etc. and installation locations within Ina City

O Pellet Stoves (Installation locations: Private homes, schools, offices, etc.)



#### $\bigcirc$ Wood pellet-fired hot water boilers

(Installation locations: Elementary and junior high schools, nursery schools, hot springs, senior welfare facilities, etc.)



Senior Welfare Center



Nursery School



## ○ Wood Pellet Air Heaters for Agricultural Use



### $\bigcirc Wood$ pellet-fired heat conversion type

#### (Wood pellet fuel used for the heating and cooling of the building)

(Installation location: INADANI SEES Ina City Industry-Academia-Government Collaboration Center (Completed FY 2023))



## OExpansion of pellet production line

- Current annual maximum production→4500 t
  - $6:00\sim24:00$  Work in shifts

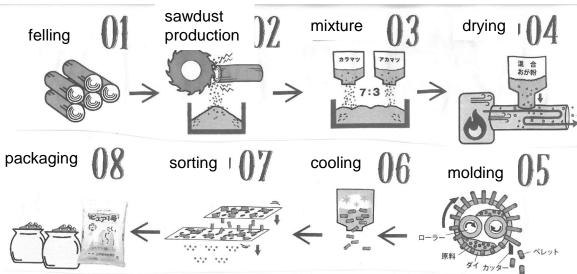
February 2025 $\sim$ Annual production plan 5500 $\sim$ 6000 t



100% fuel made from local materials Acheivements↓
①Effective use of forest resources
②Co2 reduction
③Local production for local consumption of energy

#### Pure No. 1 Manufacturing process







◇Log delivery(Mixing ratio:Red pine30% Japanese larch70%)

#### $\diamondsuit$ sawdust production





 $\bigcirc$ Mixture  $\sim$  Drying  $\sim$  molding



 $\diamondsuit$ cooling  $\sim$  Sorting  $\sim$  packaging

## **O About the Kamiina Forestry Owners' Cooperative**

Established: February 1, 1995

Area: Ina City, Komagane City, Tatsuno Town, Minowa Town, Iijima Town,

Minamiminowa Village, Nakagawa Village, Miyada Village

Representative Director/Chairman: SHIROTORI Takashi (Mayor of Ina)

Members: 12,744

Directors: 25

Auditors: 3

Staff: 29 administrative staff, 33 technical staff

Forest owned by members: 51,185 ha

Material production volume: 30,713 m<sup>3</sup>

(\*As of end FY 2024)

