

# Teisen's CO<sub>2</sub> Reduction and EV Firefighting Vehicles



### (i)-1 Kanuma Factory (started supplying solar power generation system in 2023)



Annual electricity consumption 3,074,369 kWh (2022 result)

Annual power generation

608,724 kWh

Consumption of in-house generated power 493,061 kWh

+120,000 kWh consigned from Shimotsuke Factory (about 20% covered by solar power generation)

#### (i)-2 Shimotsuke Factory



Annual electricity consumption 603,432 kWh (2022 result)

Annual power generation

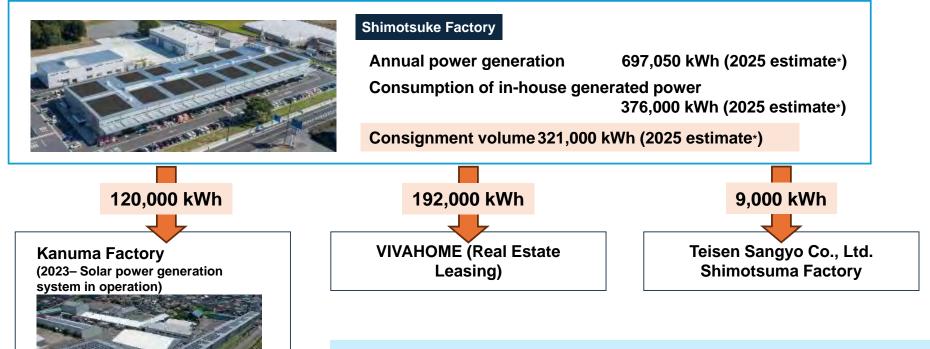
697,050 kWh (2025 estimate\*)

Consumption of in-house generated power 376,000 kWh (2025 estimate\*)

(About 62% is covered by solar power generation)

\*All figures for power generation are based on current estimates on a full-year basis

# (i)-3 CO<sub>2</sub> emission reduction effect of introducing solar power generation system (consignment) at Shimotsuke Factory



Introducing solar power generation systems at the Kanuma and Shimotsuke factories contributes approximately 998,000 kWh\* of electricity to help reduce annual CO<sub>2</sub> emissions

A reduction of approximately 446 tons of CO<sub>2</sub> (approximately 20%) is expected

Annual consumption of inhouse generated power 493,061 kWh (2024 estimate\*)





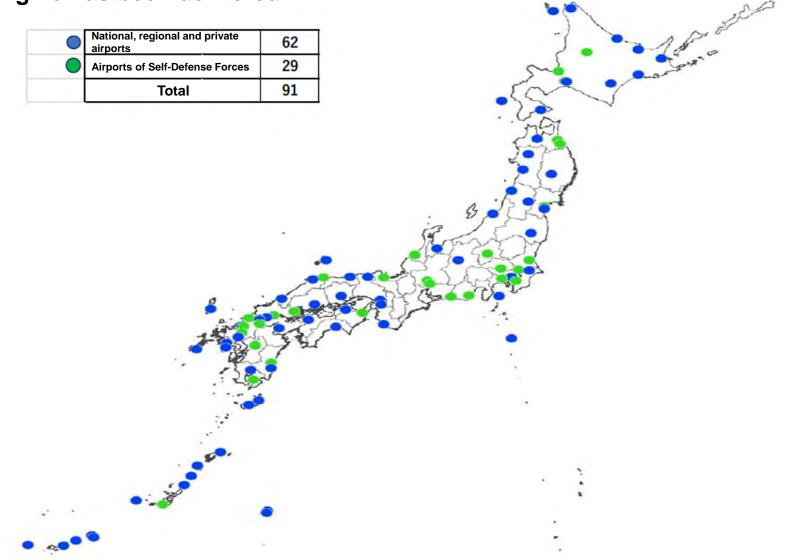


▲ Airport chemical fire engine made by Rosenbauer

January 2, 2024, at Haneda

✓ Airport
Video of the Japan Airlines plane crash

Airports where Rosenbauer airport chemical fire engine has been delivered



## EV airport chemical fire engine



◆ EV airport chemical fire engine made by Rosenbauer

## **EV** fire engine



■ EV fire engine made by Rosenbauer

# Orders received for EV fire engine made by Rosenbauer

#### **Deliveries worldwide**





Can 20 2022



P	Sep 30, 2023	Mar 29, 2024
Orders	67	76
Deliveries	26	31
Pipeline	26	34

- · RT/RTX enjoys great interest worldwide
- Start of serial production in May 2023 in Leonding, Austria
- Competitive advantages in the USA thanks to comparatively short delivery times
- Already three customers from downunder: ACT Canberra, Fire Rescue Victoria, Christchurch airport
- Victoria (Canada) orders second RTX



## Efforts to reduce carbon dioxide (CO<sub>2</sub>) with plantderived resins

- O Changing hose materials to plant-derived resins, containing 60% plant-derived ingredients
- O For every 1 kg of plant-derived resin, 1.7 kg of CO<sub>2</sub> is absorbed by plants before they are processed into resin
- O Reduction in CO<sub>2</sub> emissions from overall hose products was approximately 400 tons/year\*

\*Calculated since FY2023 results



General fire hose (20 m) Name 65 mm CO<sub>2</sub> reduction: 3.0 kg/product



Large-diameter hose for firefighting and water supply (50 m) Name 300 mm CO<sub>2</sub> reduction: 283 kg/product



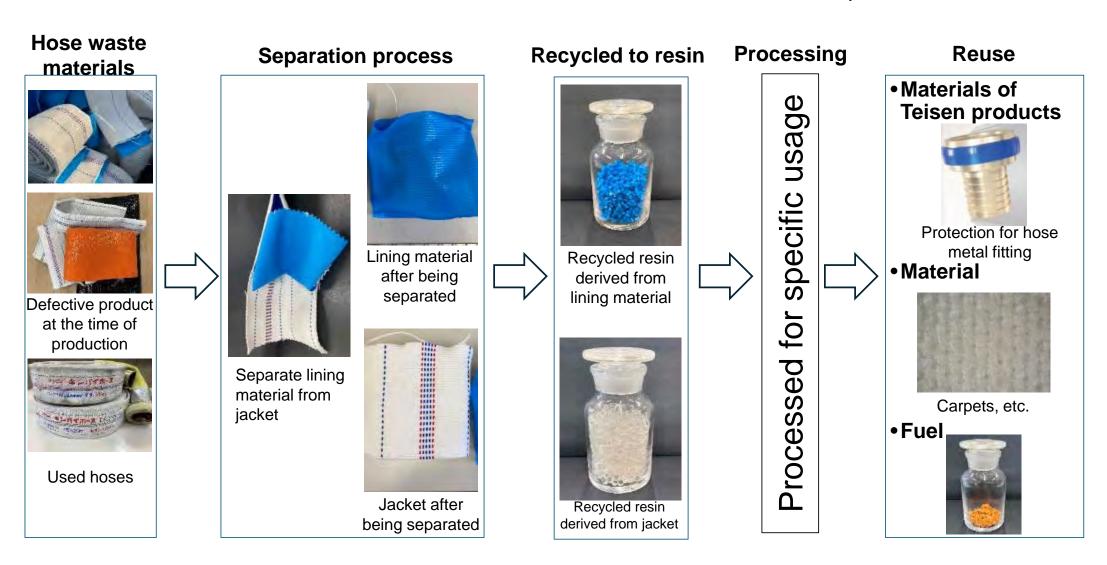
Shape-retaining hose (30 m) Name 30 mm CO<sub>2</sub> reduction: 3.0 kg/product





## Efforts to recycle fire hoses

Promote the reuse of hose waste materials and reduce waste related to hose products as a whole.





# (v) Linen flax that absorbs four times as much CO<sub>2</sub> as forests

- Linen flax plants are seeded around March, to bloom from the end of May to mid-June, and grow rapidly to about 1 meter by their harvest in August.
- The Alliance for European Flax-Linen & Hemp estimates that 3.5 tons of CO<sub>2</sub> are absorbed per hectare of linen flax farmland and 0.9 tons of raw materials are harvested per hectare.
  - Teisen imports 300 tons of raw materials annually, equivalent to 340 ha.
  - Accordingly, approximately 1,190 tons of  $CO_2$  (= 3.5 tons  $\times$  340 ha) is absorbed.
- The amount of absorption is said to be about four times that of forests.
  - In addition, linen flax does not require water for irrigation, and grows only with natural rainfall without the need to use agricultural chemicals.
  - This is why linen is called a super-sustainable fiber.













