
リサイクルPET原料の高付加価値化 High Value Utilization of Recycled PET

根来産業株式会社 常務取締役 根来宣幸
Negoro Sangyo Co., Ltd.
Executive Managing Director
Nobuyuki NEGORO

(2019.Mar.7)

会社概要

Company profile

Company's Name: Negoro Sangyo Co., LTD.

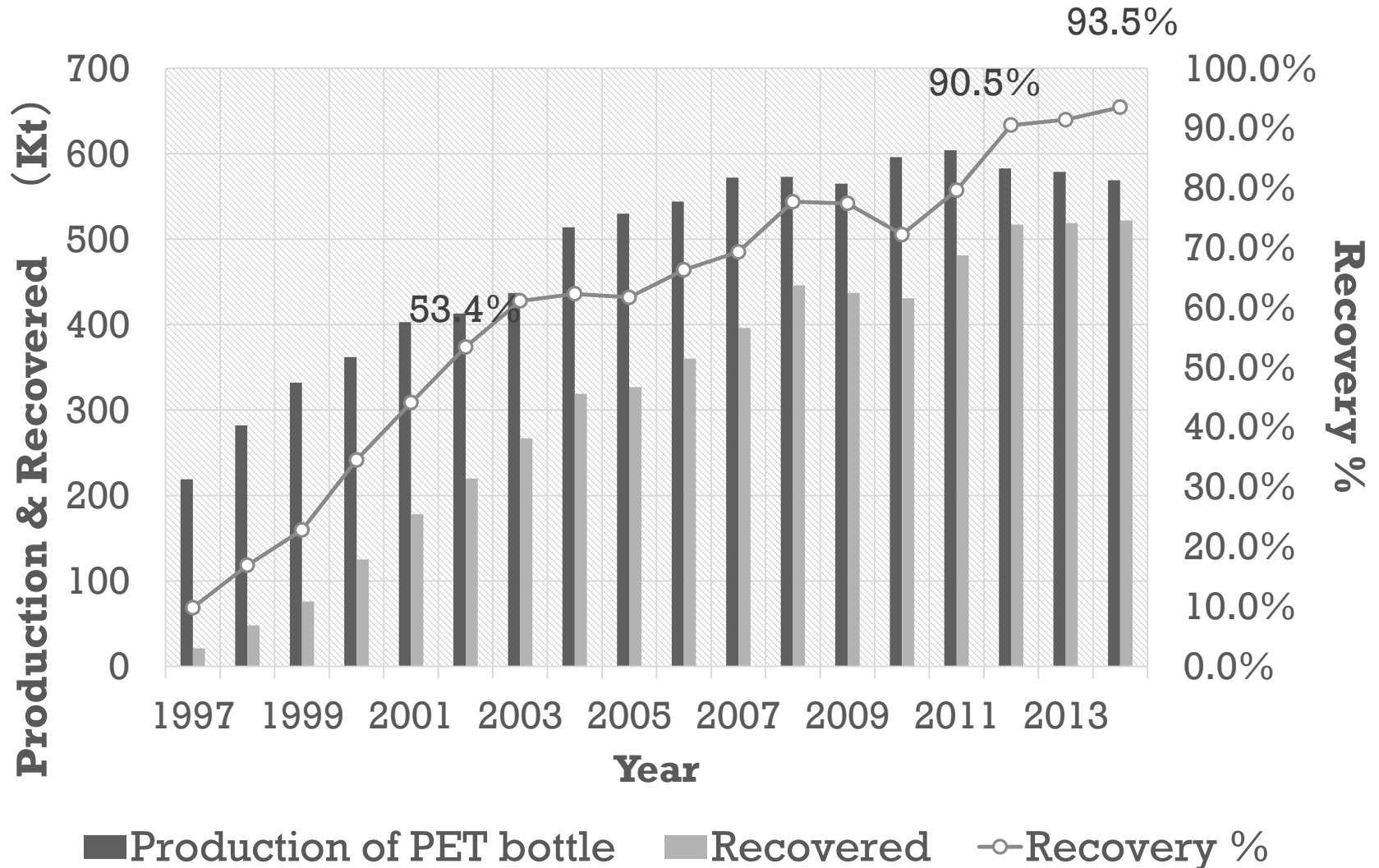
Established: 1972 in OSAKA

Office: Kaizuka, Osaka JAPAN

Related Factory: Nara Japan, Samutprakarn Thailand

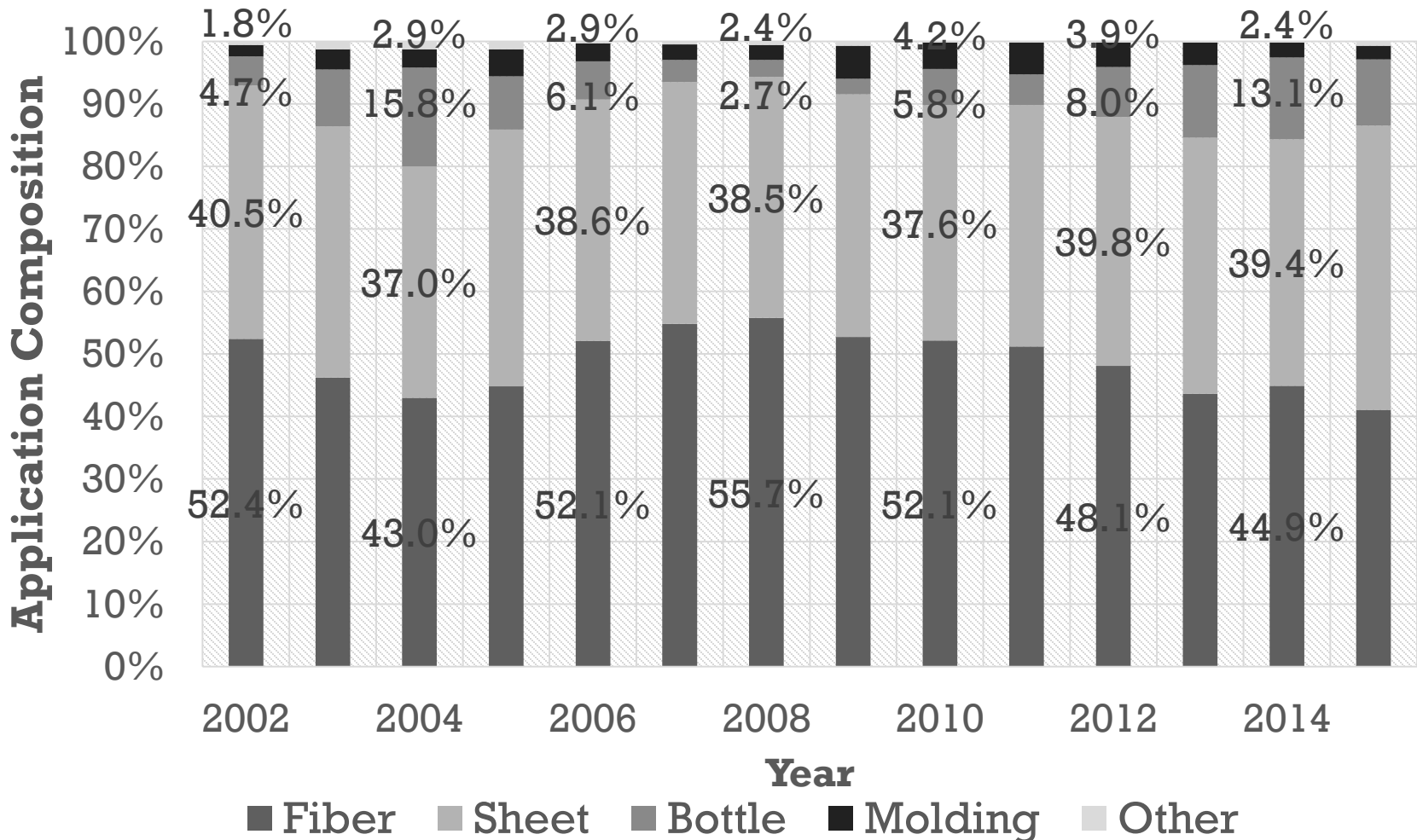
	(/annual)
① PET Pellets	4,000 t
② Polyester Fiber	3,600 t
③ Nonwoven Fabric	6,000 km ²
④ Woven Primary Backing	12,000 km ²
⑤ Tufted Carpet	7,800 km ²

The Recovery Rate (Japan)



Source : The Council for PET Bottle Recycling (Annual Report in 2012)


Application Composition (Japan)



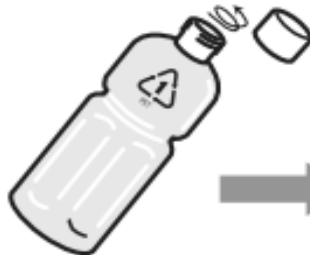
Source : The Japan Containers And Packing Recycling Association

Rules of Disposal at Garbage Collection Sites (Yokohama City)

Cans, Bottles, and Plastic PET Bottles

Collection Day	Once a Week
Disposal Procedure	Use semi-transparent bags.
Main Items	Cans and glass bottles containing food and beverages. Plastic PET bottles with the PET bottle logo  for/of beverages, sake, "mirin" cooking wine, soy sauce products (such as "mentsuyu" noodle sauce), or salad dressing (oil free)
Caution!	Place cans, bottles, and plastic PET bottles together in one bag. Paint cans → Small Metal Items (Please empty the contents completely.) Cosmetics/medicine bottles → Non-burnable Garbage

① Remove caps and labels



② Rinse the insides



③ Do not flatten cans



④ Place together in one semi-transparent bag.



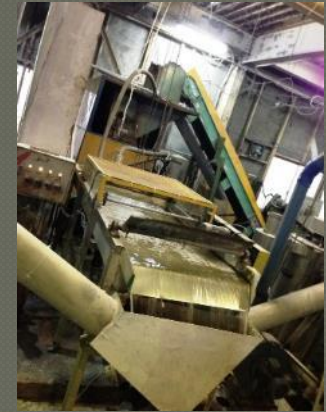
- Dispose of caps and labels of plastic PET bottles as plastic containers/packaging.
- Paper labels and other items hard to remove can be disposed of as is.
- Please dispose metal caps as small metal items.
- Please flatten lager cans and tins (such as cooking tins and coffee cans) with large openings so that other waste will not get inside.

③ Flatten plastic PET bottles

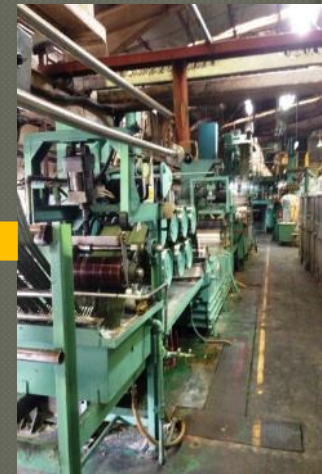
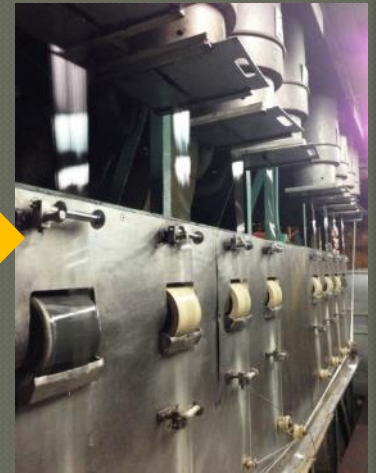


○ For better recycling, please separate plastic PET bottles properly. (31% of disposed plastic PET bottles have caps and labels attached.)

Recycling Process



Fiber Process



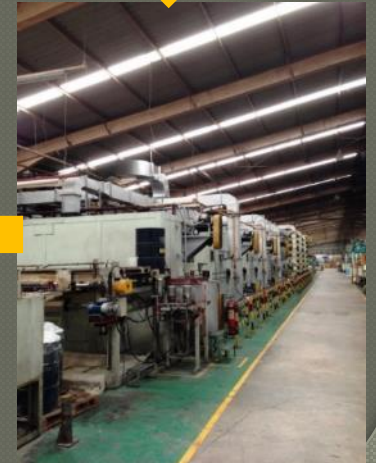
Spinning Yarn Process



Non-Woven Process



Carpet Process



Material and Products



Bottles (Kg)



Flakes (Kg)



Pellets (Kg)



Fiber (Kg)



Carpets (m²)



Yarn (Kg)



Non-Woven (m²)

Value

Bottles



THB10~13/kg

Flakes



THB20~26/kg
(+THB11.5/kg)

Pellets



THB26~32/kg
(+THB17.5/kg)

Value

Fiber



THB46~57/kg
(+THB38.5/kg)

*Can use only THB13/kg
PET bottles for this selling
price

Non-Woven Cloth



THB20/m²
200g/m²
THB102/kg
(+THB89/kg)

Value

Yarn



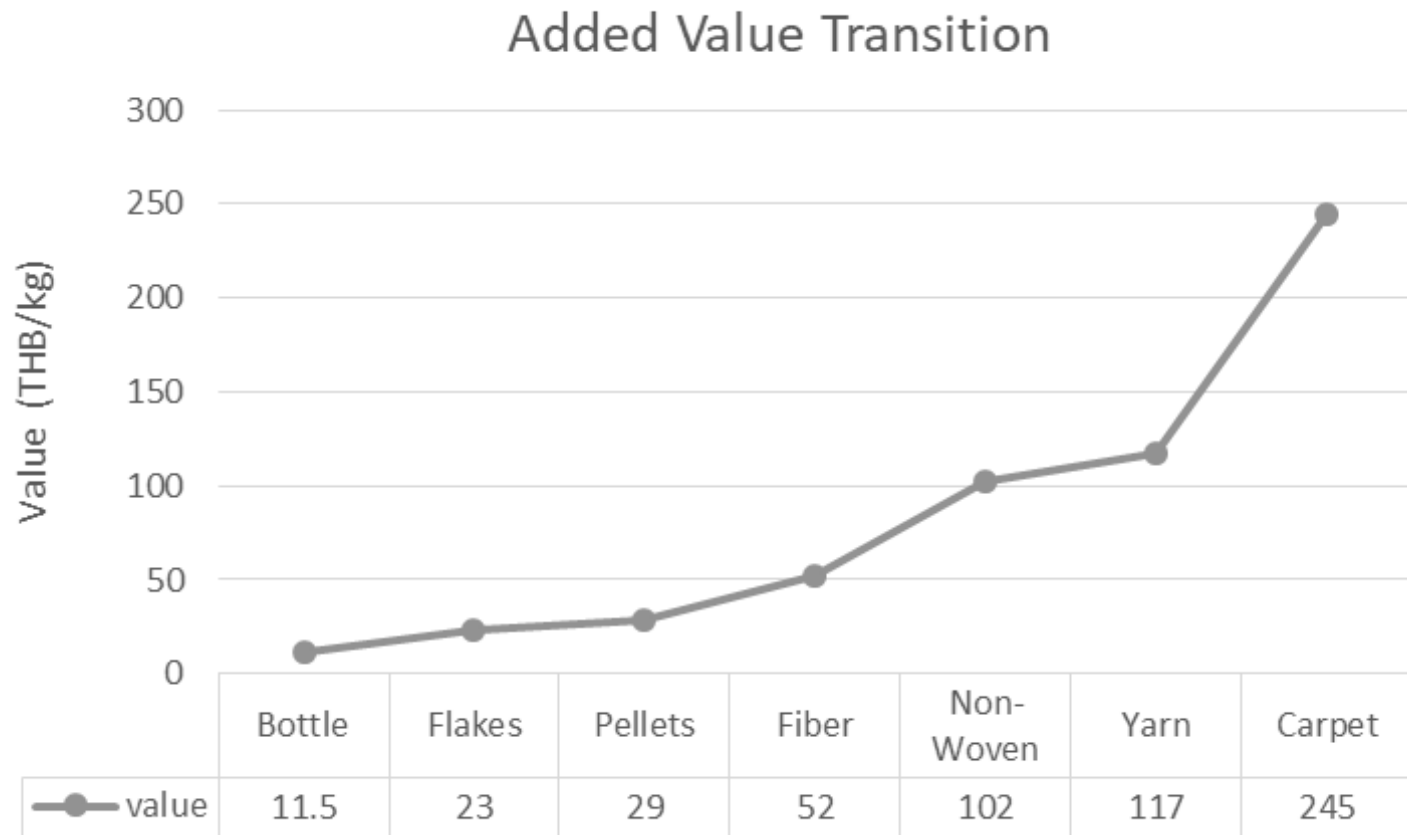
THB120~140/kg
(+THB117/kg)

Carpet



THB147/m²
*other material cost
is deducted
600g/m²
THB245/kg
(+THB232/kg)

Added Value



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- Recycling is a very costly business, but by consistently manufacturing products with high added value, it will be a business that can be fully profitable and sustainable.
 - It is difficult to cover all of them with your company, it is important to find a reliable partner.

Thank you for your attention.