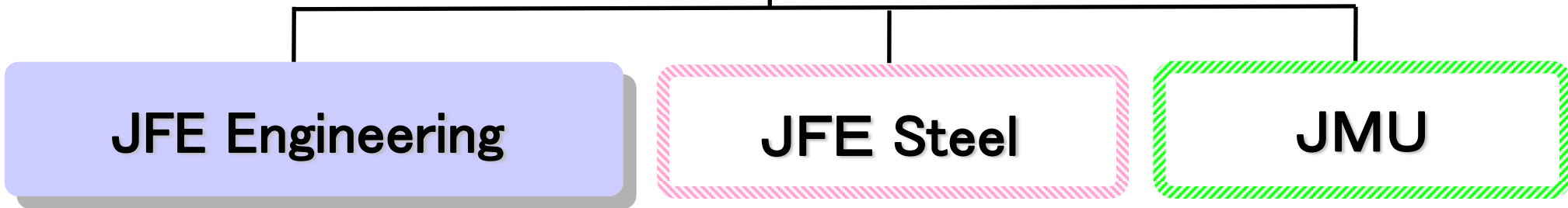
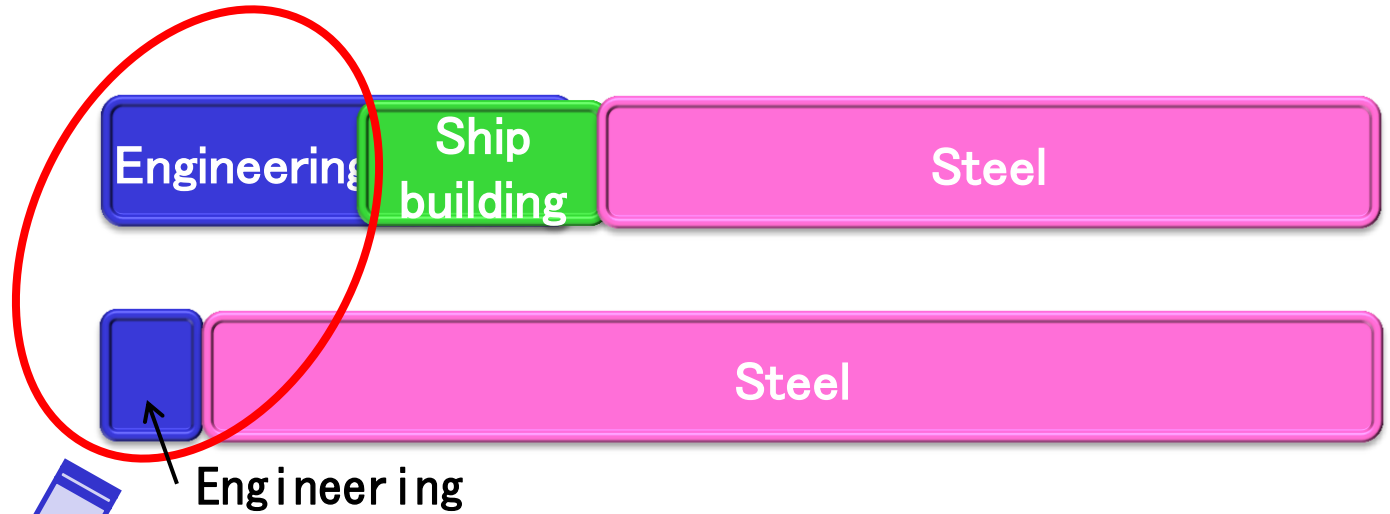


JFE's Contribution to Environmental City



2013.1.31
JFE Engineering Corporation

JFE's fields of business



Established in 2003

JFE's Fields of Business



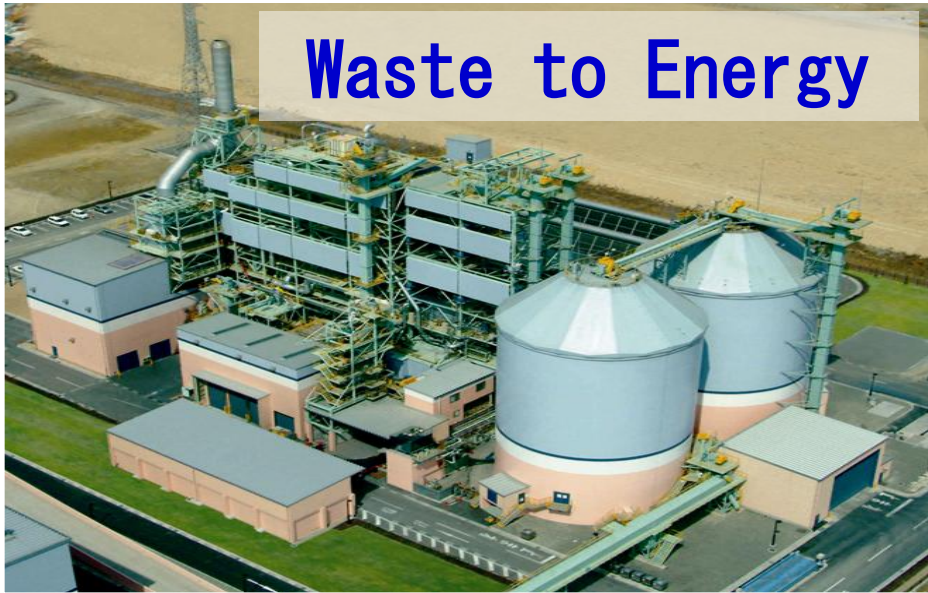
Energy

Environment

Steel Structure

Industrial machinery

Main Products



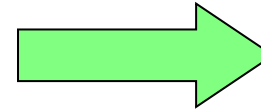
Contribution to Environmental City

- Renewable Energy / Energy Saving
 - ◇ CHS Air Conditioning System
 - ◇ Geothermal Air Conditioning System
 - ◇ Rapid Charger for Electric Vehicle
- Recycling
 - ◇ Resource Recycling
 - ◇ Kawasaki ECO Town

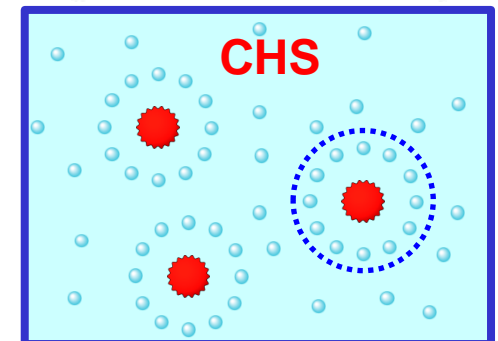
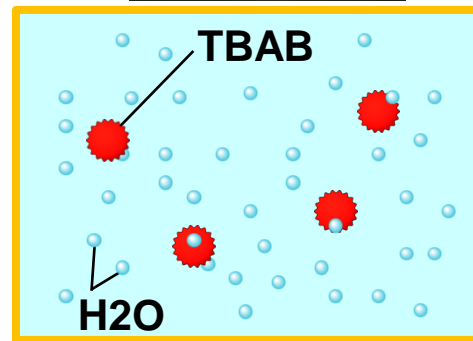
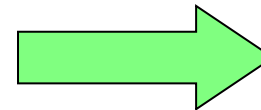
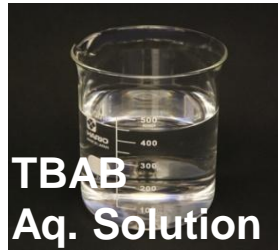
CHS* Air Conditioning System

12°C  cooling  7°C

Water



CHS



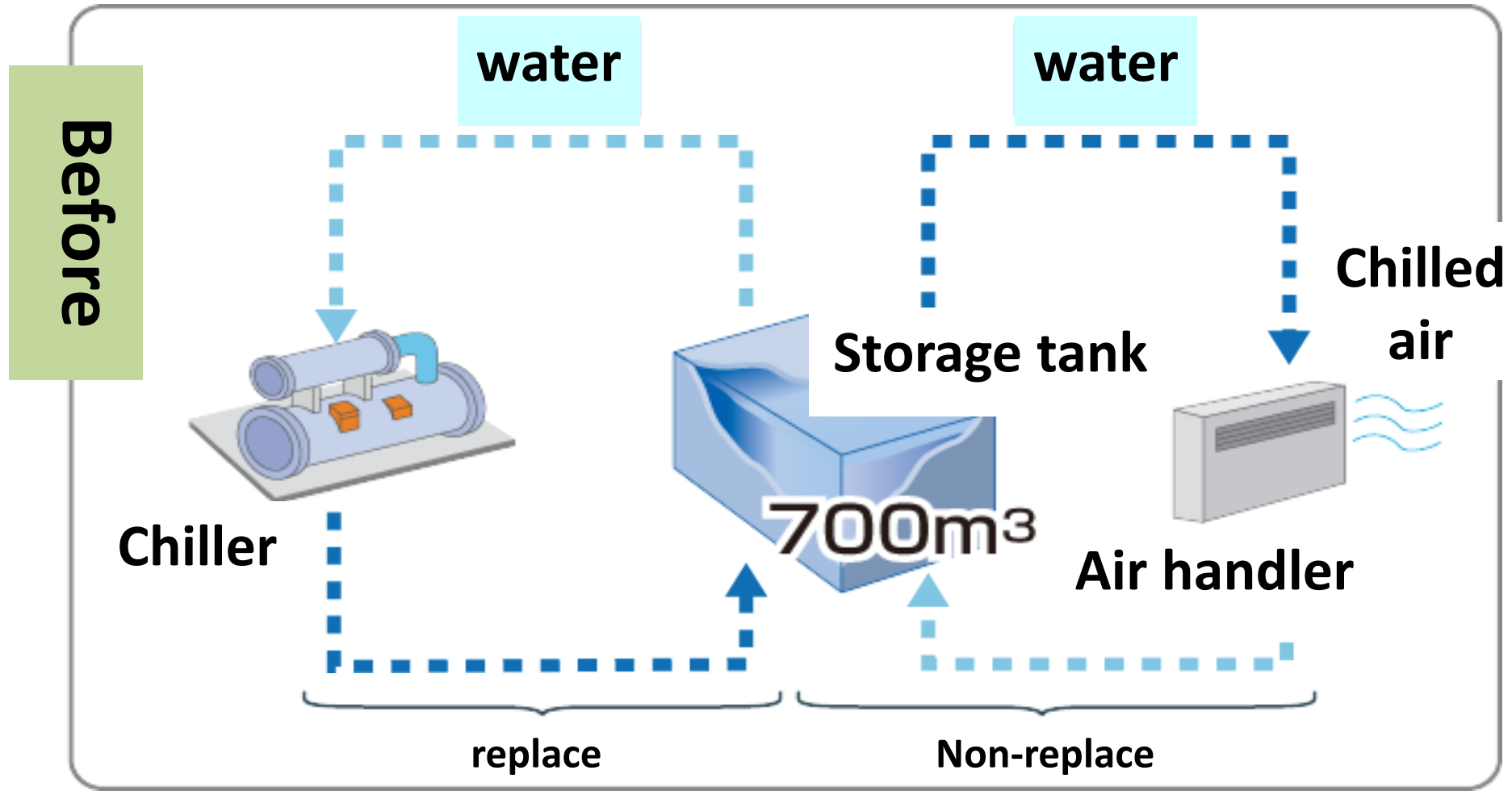
Thermal density more than double that of chilled water

*CHS: Clathrate Hydrate Slurry

Installation of CHS Air-conditioning System



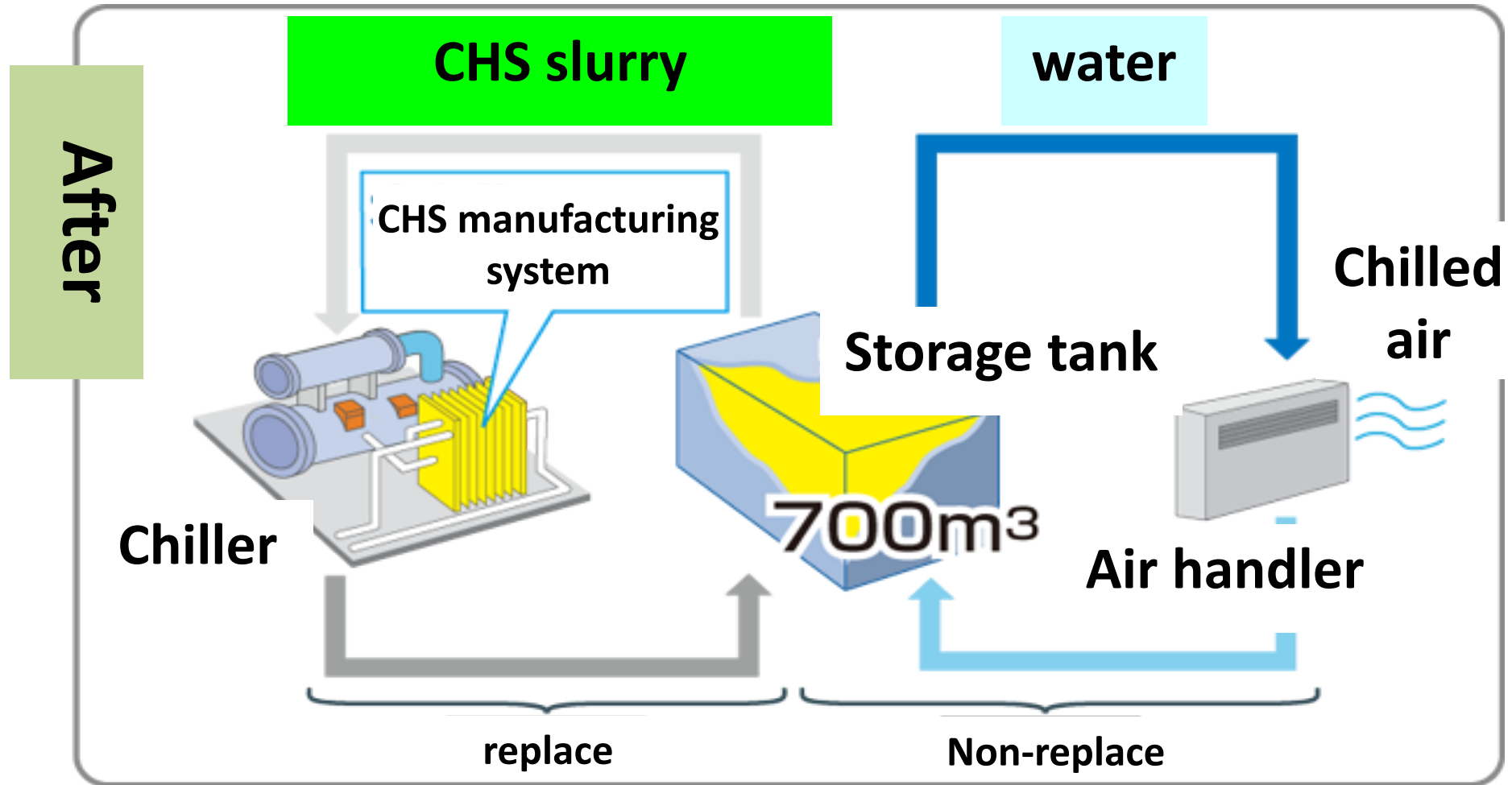
~Kawasaki Azalea* Underground Mall~



*Kawasaki Azalea: 3rd biggest under ground mall in Japan
(shops: 150, area: 57, 000m²)

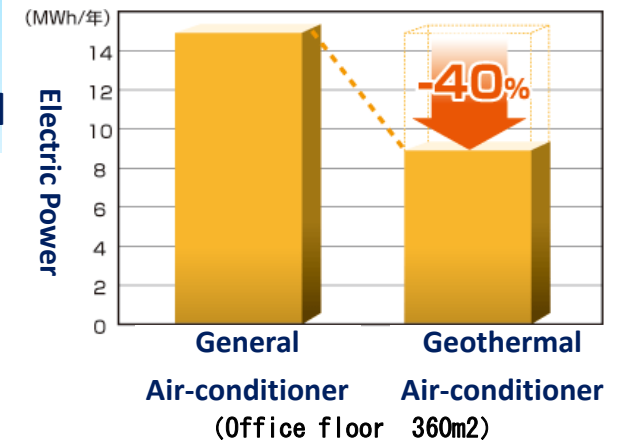
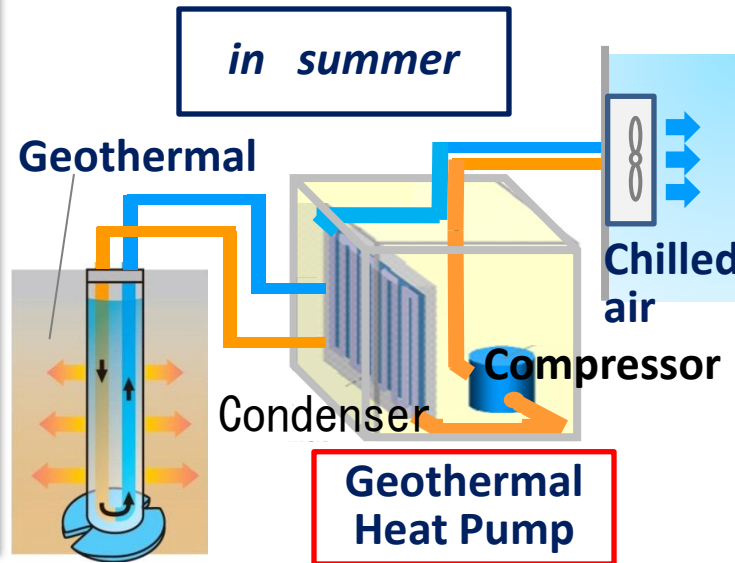
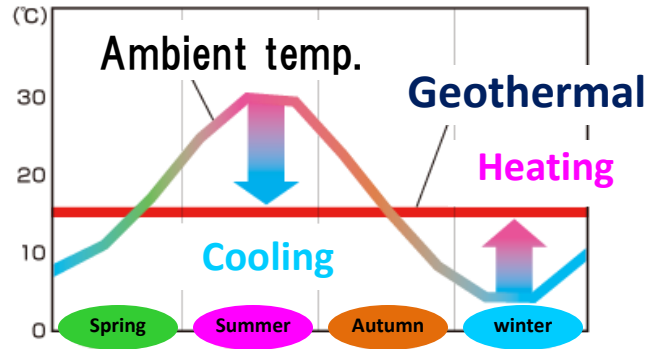
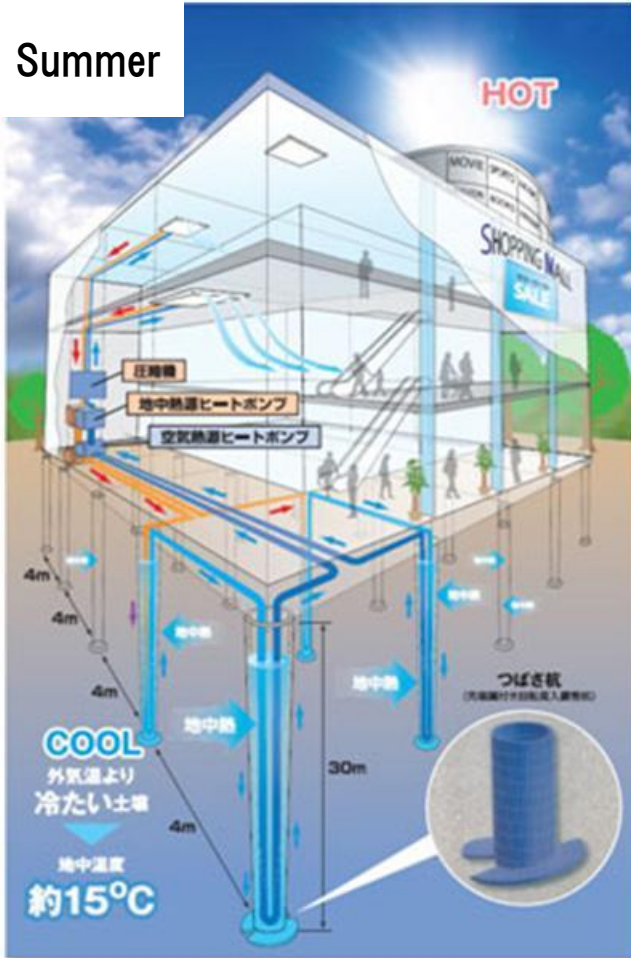
Installation of CHS Air-conditioning System

~Kawasaki Azalea Underground Mall~



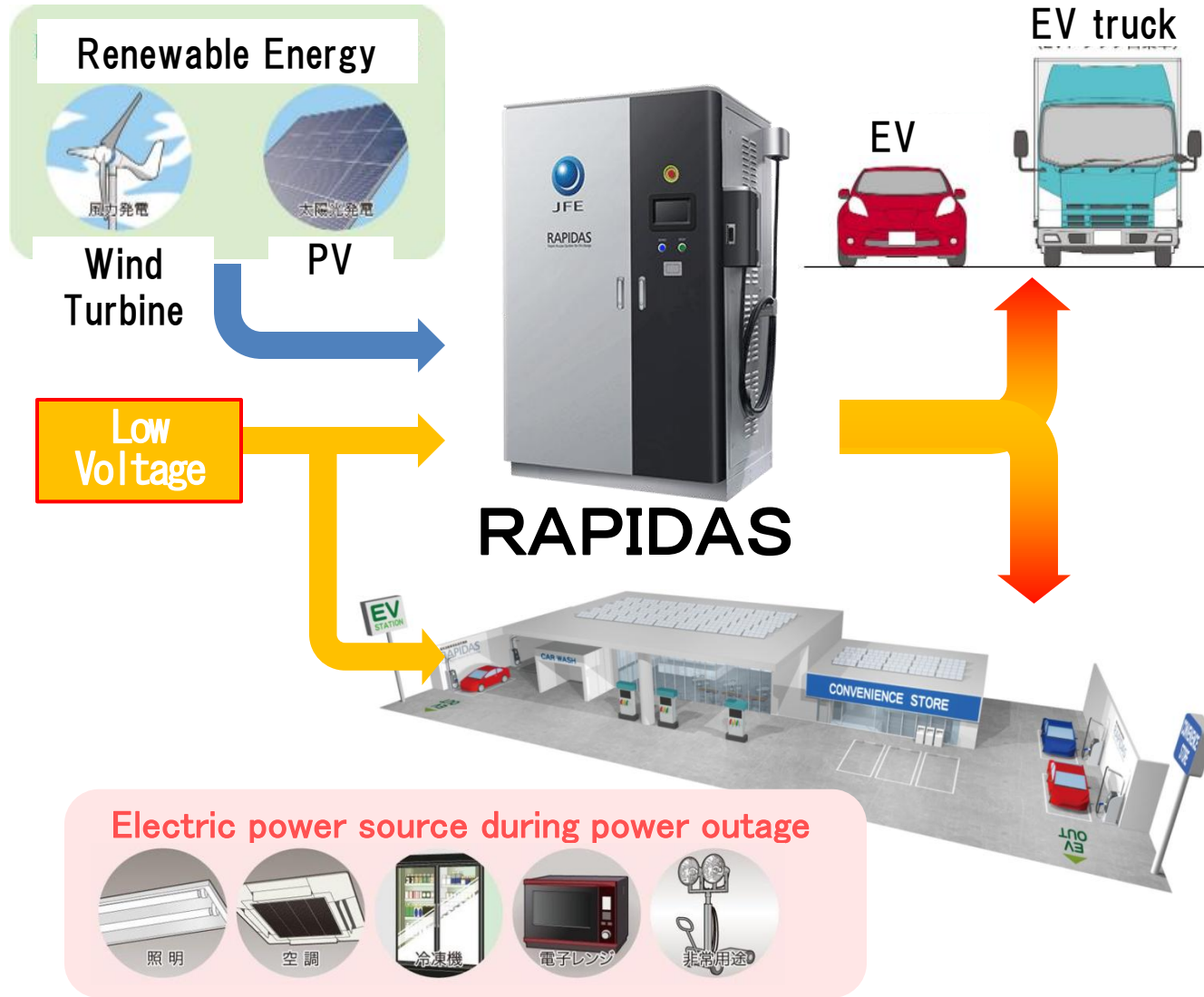
Electric power saving : **40% down**
CO2 reduction : 1,300 ton/year

Geothermal Air Conditioning System



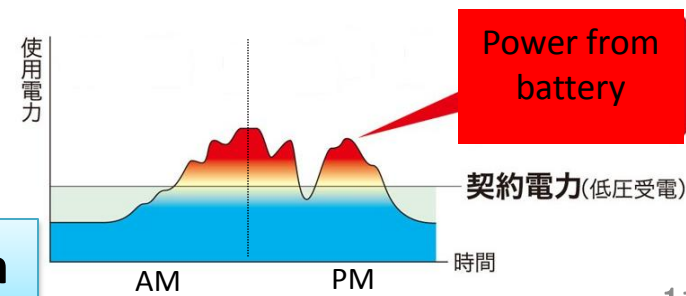
【Installation】 Minamigawara Children's Cultural Center(Kawasaki)
 Sugao Children's Cultural Center(Kawasaki) total 14sites

Rapid Charger for Electric Vehicle



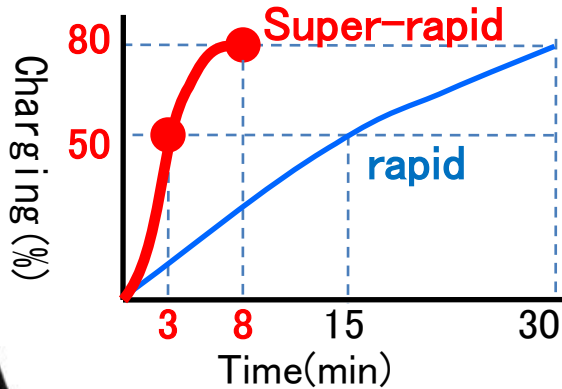
Built in Storage Battery

- Usage of electric power at night
- Peak shaving
- Can be used as an electric power source during power outage



Demonstration at Convenience Store in Kawasaki is in action

Super-Rapid Charger for Electric Vehicle

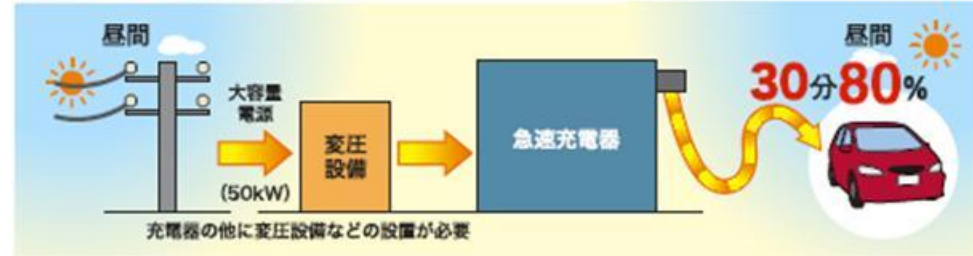


SUPER RAPIDAS

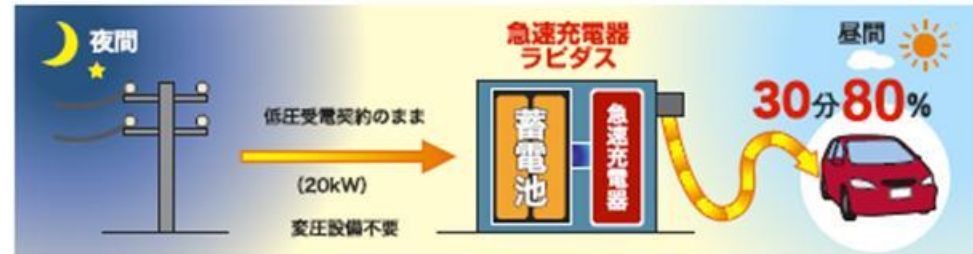
Built in large capacity battery

- 3 minutes for 50%, 8 minutes for 80% charging
- Usage of electric power at night
- Peak shaving

他社の急速充電



当社の急速充電 RAPIDAS



未来へのチャレンジ SUPER RAPIDAS

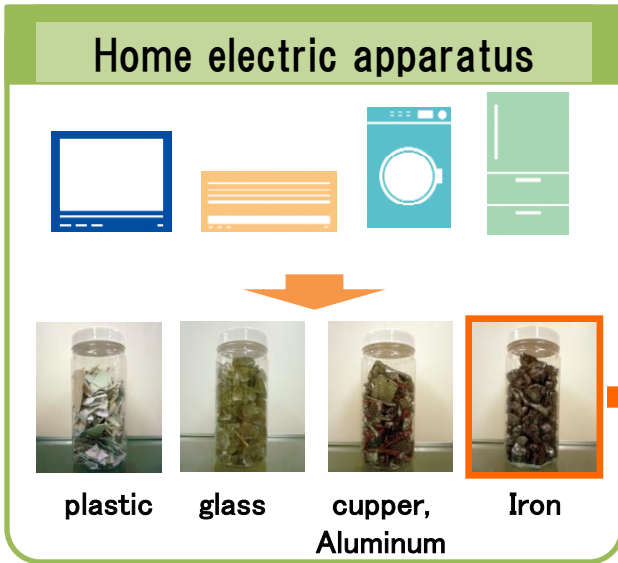
JFEは、将来に備えて3分50%のSUPER RAPIDASを開発しています。



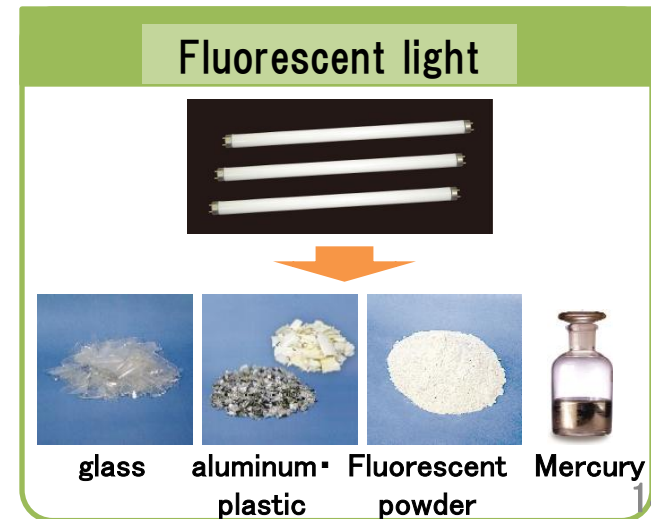
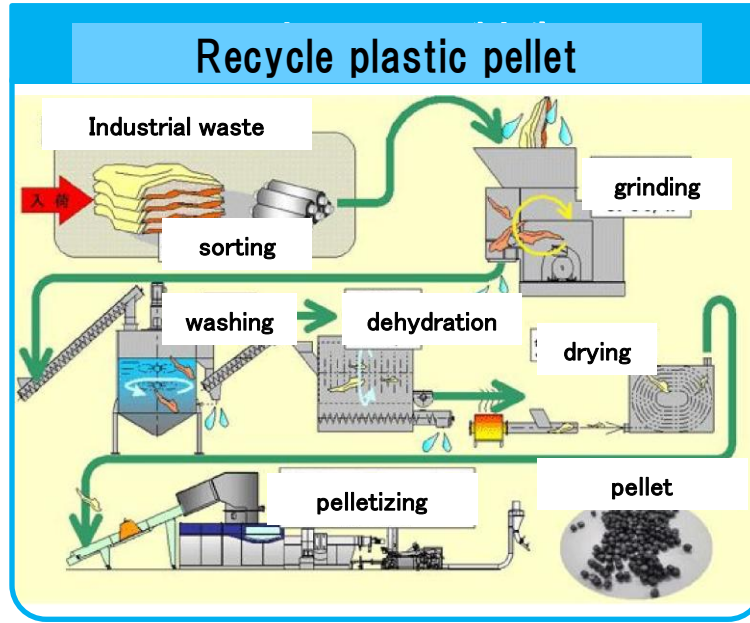
Contribution to Environmental City

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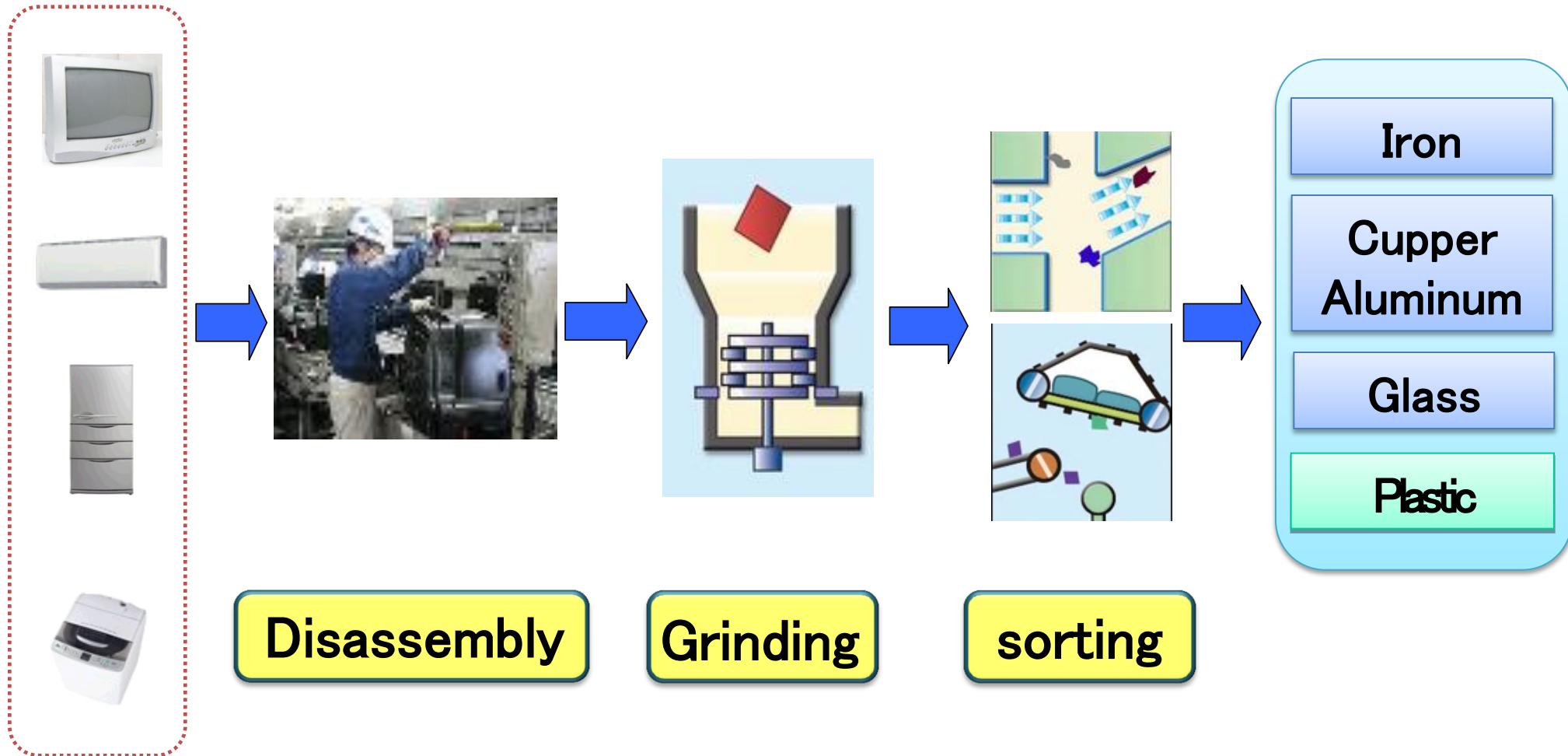
Resource Recycling of JFE



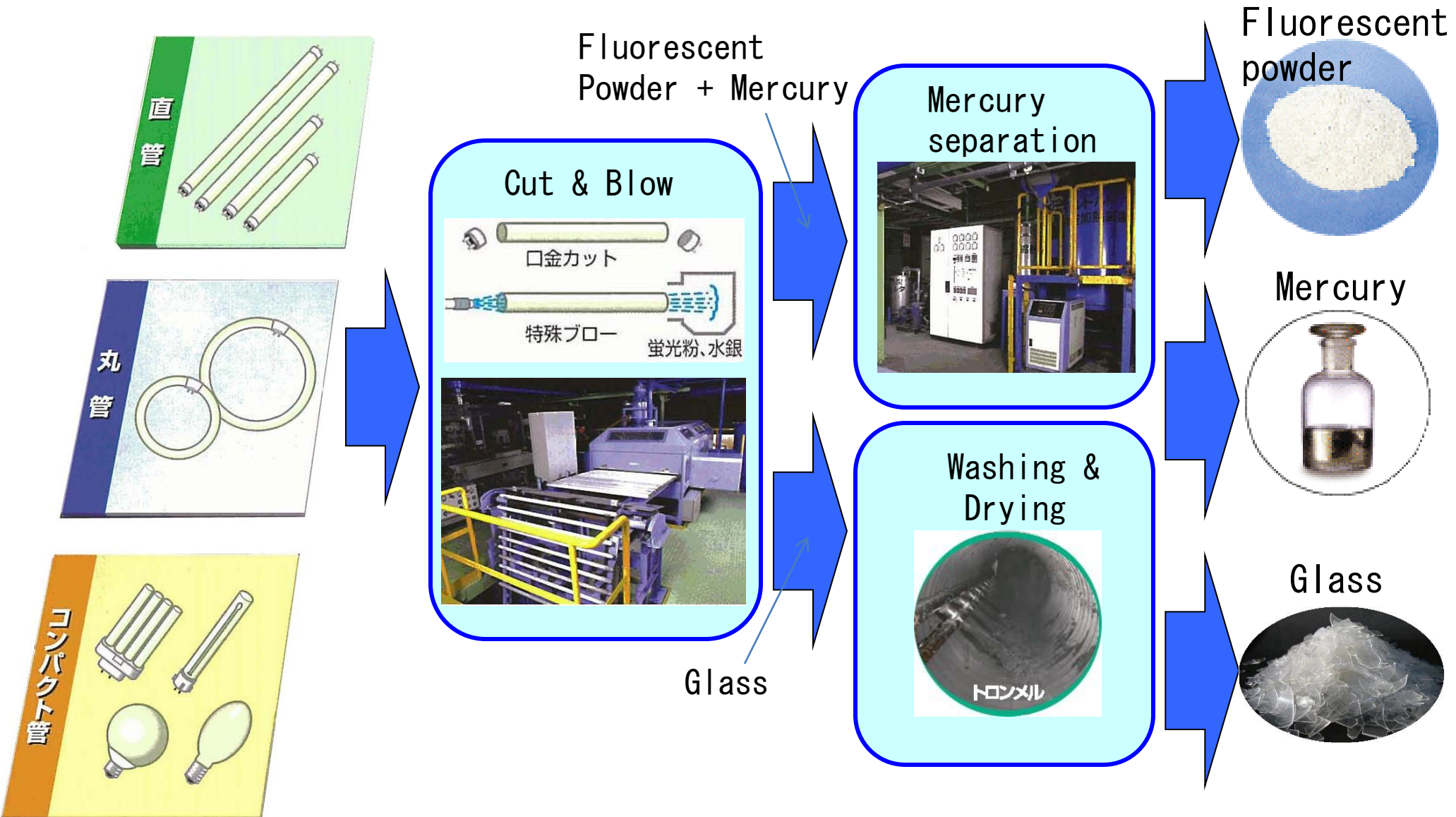
Raw materials for steel making



Recycling of home electric apparatus



Recycling of fluorescent light



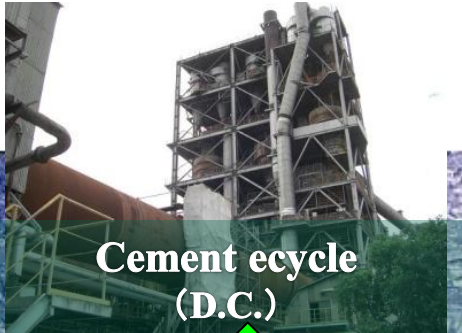
Kawasaki ECO Town

Kawasaki ECO Town

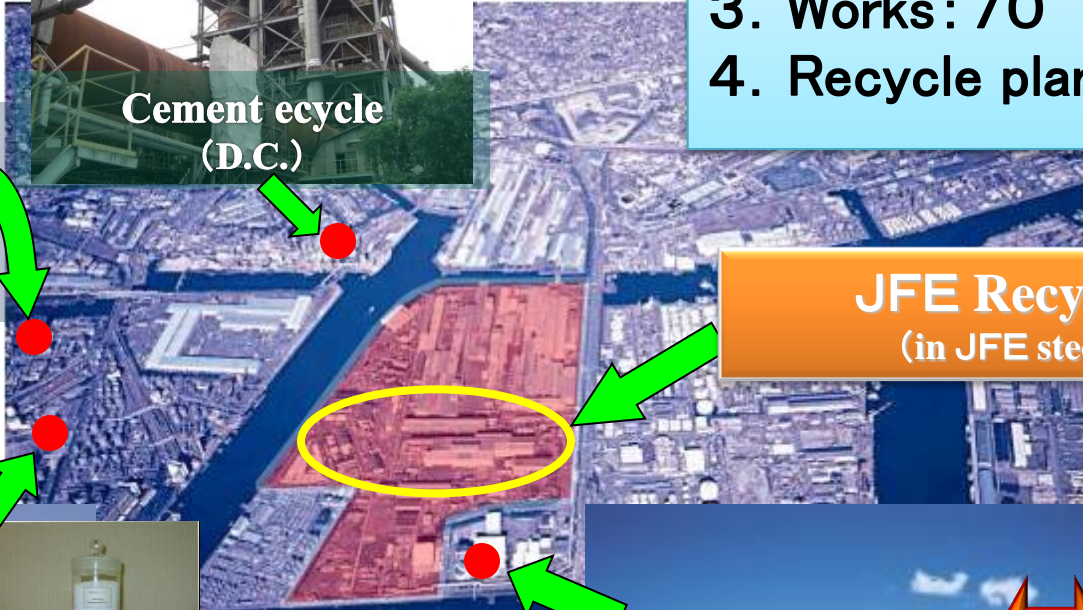
- 1. Area : 2, 800ha
- 2. Working person : 30, 000
- 3. Works : 70
- 4. Recycle plant : 15



Plastic recycle to raw material for ammonium production (Showa Denko)



Cement cycle (D.C.)



JFE Recycle Zone (in JFE steel works)



PET bottle recycle (Pet Refine Technology)



Waste paper recycle (San-ei Regurator)

• Electric Power from steel works
• Usage of recycle water from sewage plant

At last

Sky Park (Singapore)

Size	L 340m x W 40m
Steel Weight	8,000t
Completion	2010



~Contribution to Environmental City~

Thank you for your kind attention



JFE