



 Nippon Recycle Center Corp.

Nippon Recycle Center Corp.

To cultivate recycle initiatives.

2 September, 2010



Company Profile



- Establishment : November, 1976
- Capital : ¥50,000,000
- No. of Employees : 67
- CEO : Yasuji Masuda



History of NRC

1976 Nov	Established.
1977 Oct	Kashiwara Plant completed.
1987 Apr	JVC established in Korea.
1988 Aug	Korea Plant completed.
1998 Aug	Korea JVC terminated. Tsukuda Plant completed.
1999 Feb	Nakajima Plant completed.
2002 Mar	ISO14001 obtained for Tsukuda Plant.
2005 Apr	Haramachi Warehouse opened.
2006 Sep	ISO14001 obtained for Nakajima Plant.
2008 Apr	Analysis Laboratory completed.
2009 Oct	Taiwa Warehouse opened.



Facilities

- HQ : Osaka
- Tsukuda Plant : Osaka
- Nakajima Plant : Osaka
- Haramachi Warehouse : Aichi
- Taiwa Warehouse : Miyagi



Headquarters



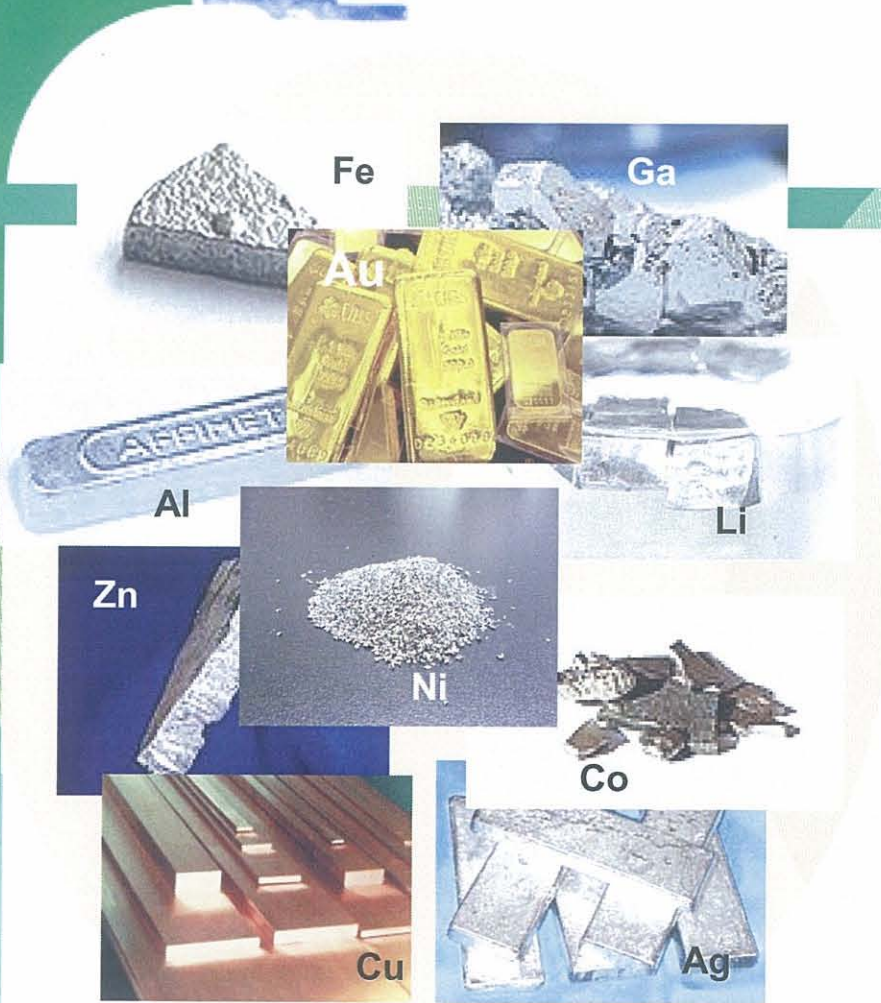
Tsukuda Plant



Nakajima Plant



Metal Resources Nippon Recycle Center Corp.

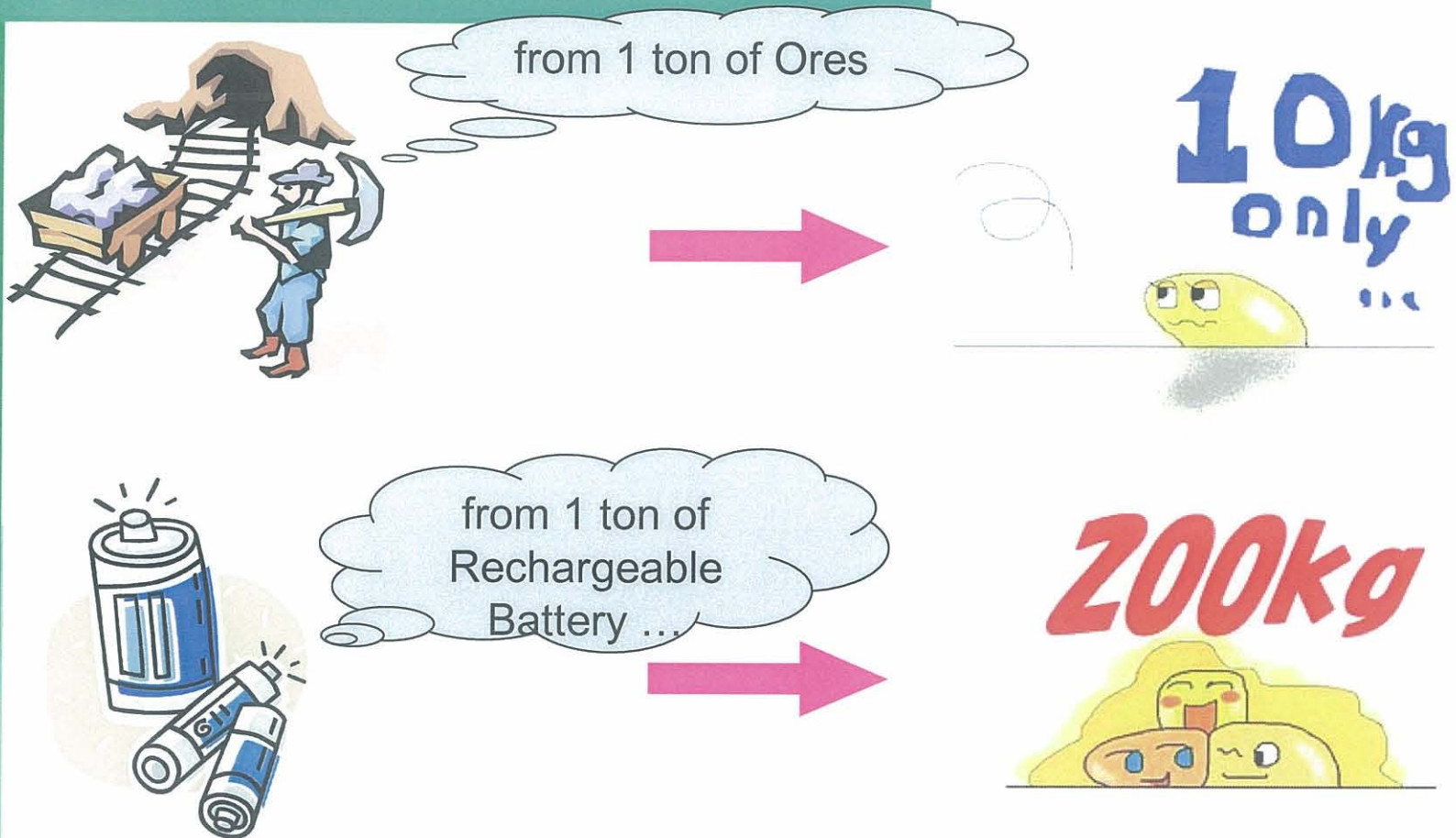


Metal

Rare Metal

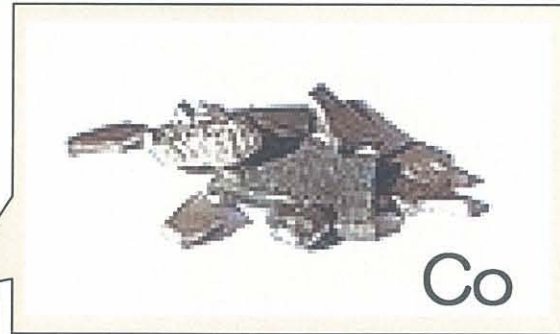
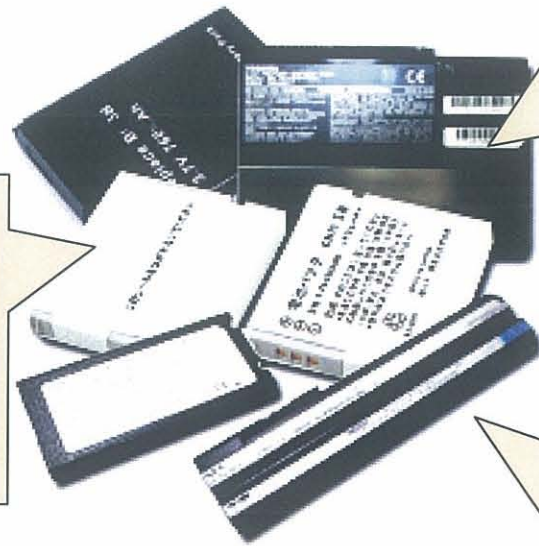
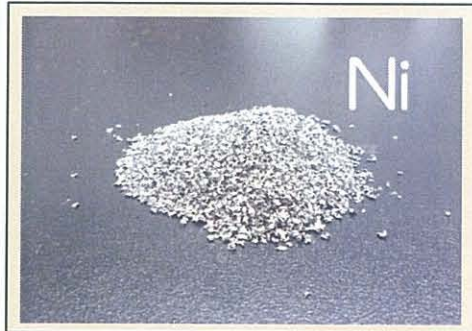


Hidden Town Mining



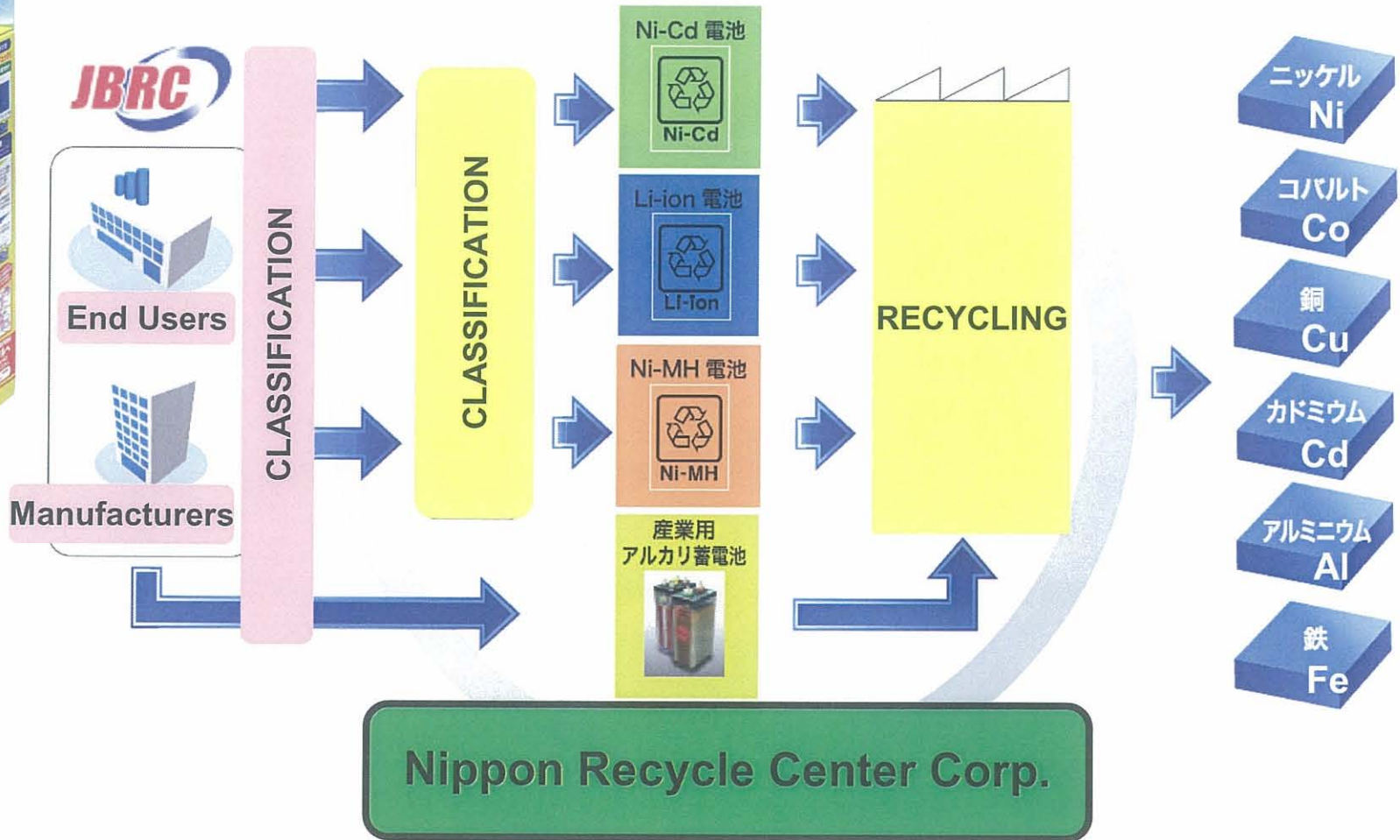


Hidden Town Mining





Business Activities Nippon Recycle Center Corp.





Collection in Japan

- JBRC was established in April 2001 to promote the collection & recovery activities of the manufacturers, distributors & importers.
- To contract with JBRC on consignment basis especially for the SOHO-use rechargeable batteries to promote recycling activities.
- To place the recycle boxes for discarded batteries at home-electricity shops.
- To collect the rechargeable batteries used for emergency exit lamp, mobile phone etc. directly from the companies, distributors & manufacturers, who have established the routine route.
- ◆ To collect the production residue and rejects directly from the battery manufacturers.



Classification



Ni-Cd Battery



Ni-MH Battery

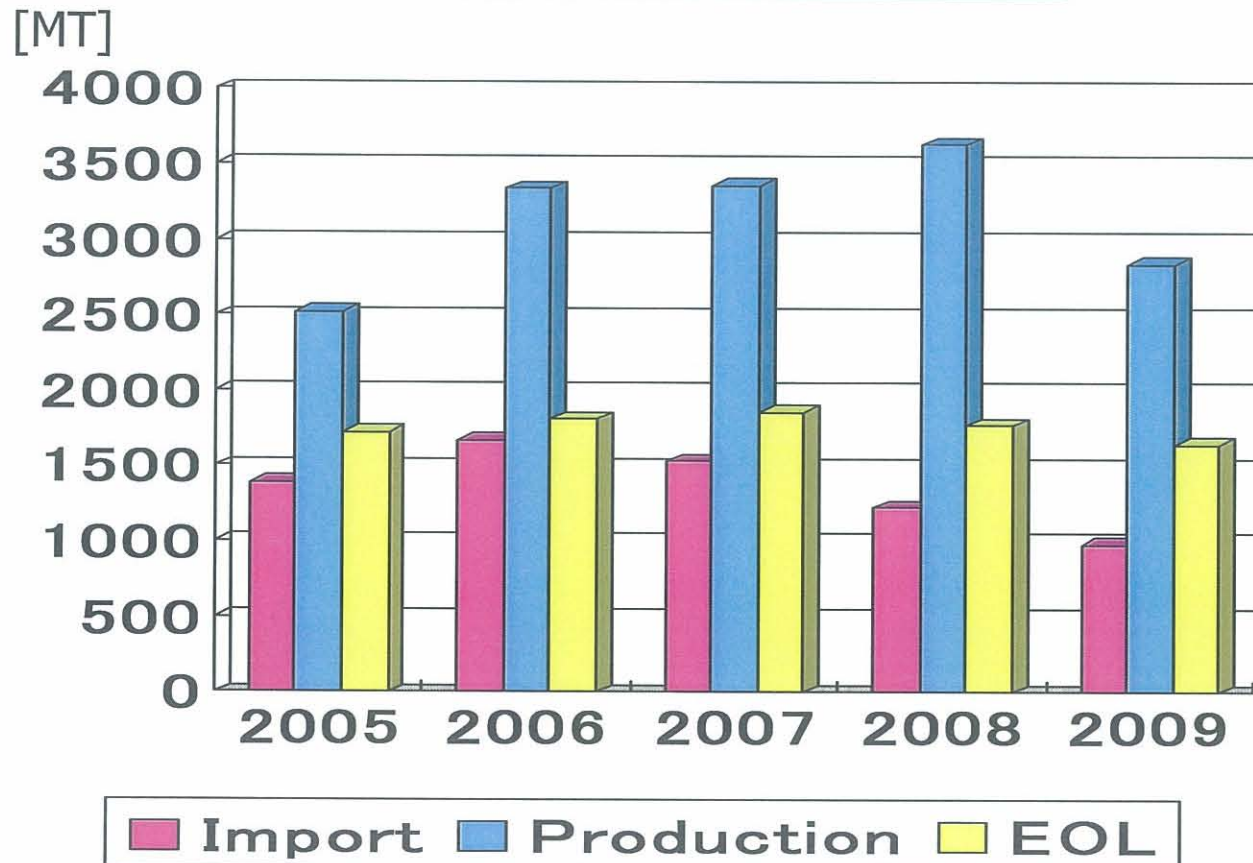


Li-Ion Battery





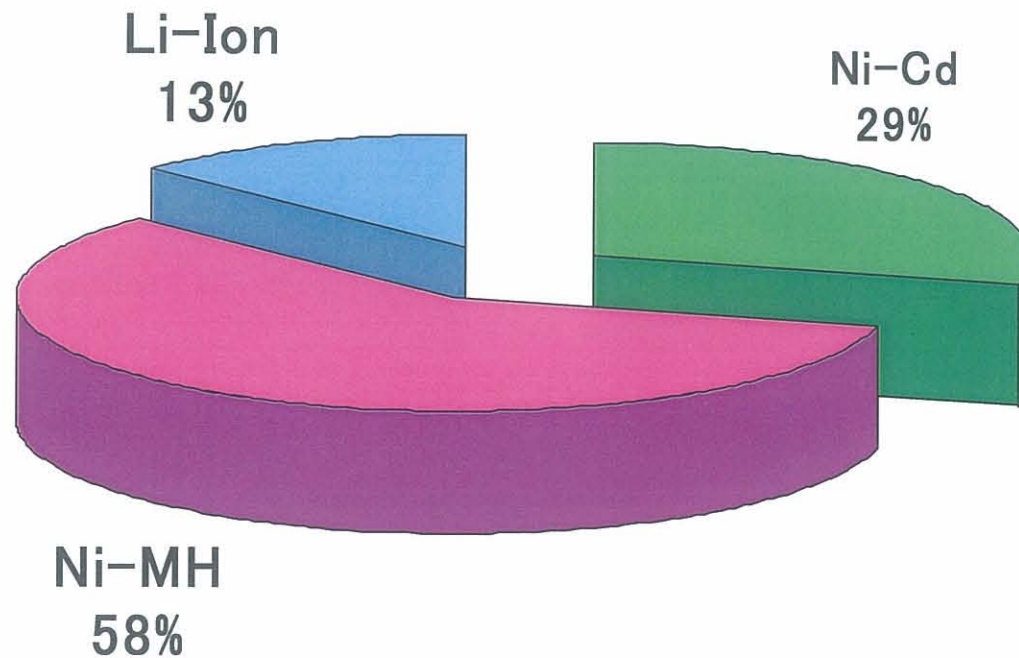
Collection Status by NRC





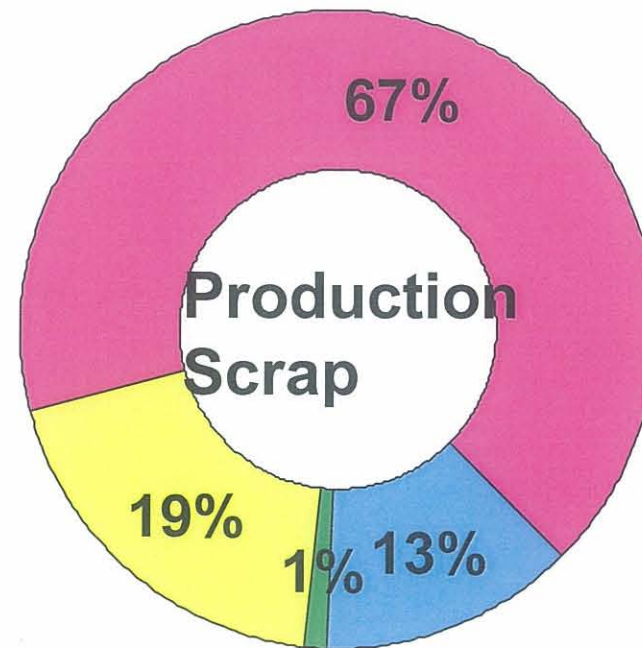
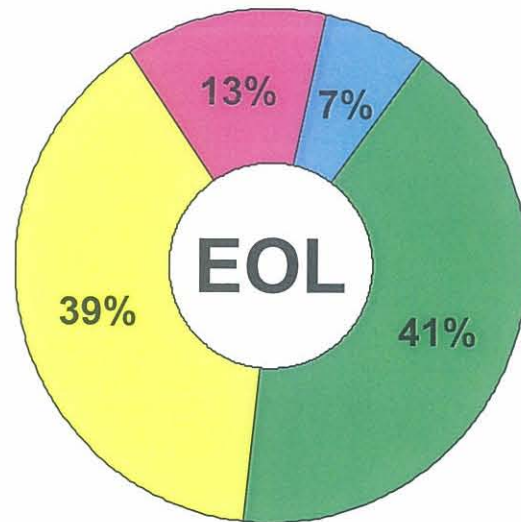
Collection Status by NRC

2009 Result





Collection Status by NRC







Principal Customers

- Battery Association of Japan
- GS Yuasa Corporation
- Hitachi Maxell Co., Ltd.
- Honda Motor Co., Ltd.
- Japan Airlines International
- JBRC
- Kansai Catalyst Co., Ltd.
- KDDI Corporation
- Mitsubishi Materials Corporation
- Mitsui Mining & Smelting Co., Ltd.
- Nomura Kohsan Co., Ltd.
- NTT DoCoMo Inc.
- Panasonic Corporation
- Panasonic Corporation Energy Company
- Panasonic Energy (Wuxi) Co., Ltd.
- Panasonic EV Energy Co., Ltd.
- Santoku Corporation
- Sanyo Electric Co., Ltd.
- Sanyo Energy Twicell Co., Ltd.
- Sanyo Energy (Suzhou) Co., Ltd.
- Sanyo GS Soft Energy Co., Ltd.
- Shin-Kobe Electric Machinery Co., Ltd.
- Sincere Corporation
- Softbank Corporation
- Tanaka Chemical Corporation
- The Furukawa Battery Co., Ltd.
- Toho Zinc Co., Ltd.
- Toyota Motors Corporation
- Yuasa (Tianjin) Technology Ltd.



Recycling Process



Collected Battery



Crushed Battery



Smasher

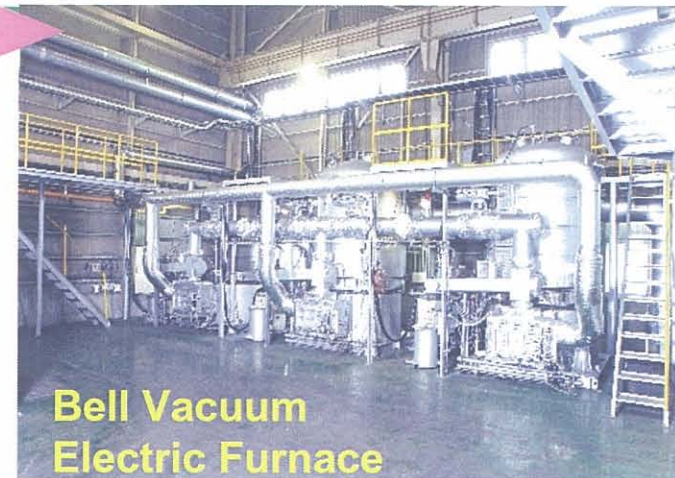




Recycling Process



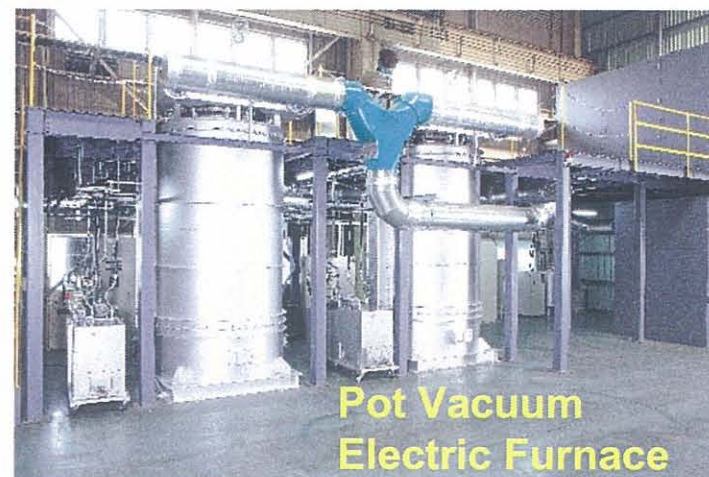
Crushed Battery



Bell Vacuum Electric Furnace



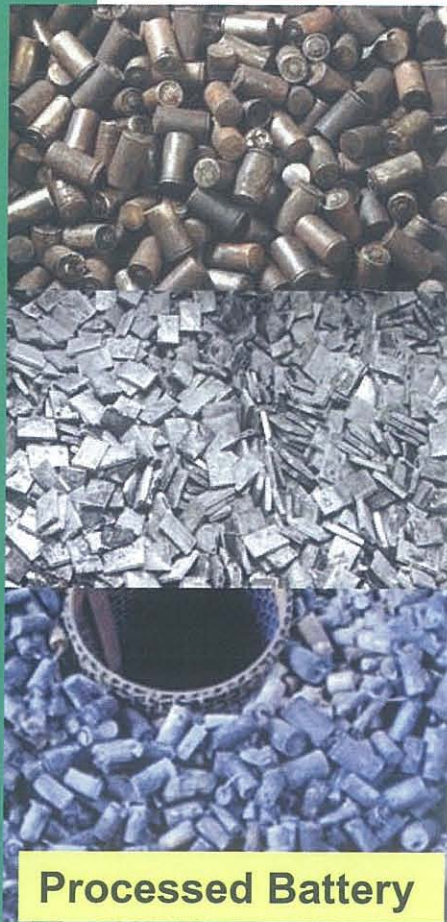
Consecutive Furnace



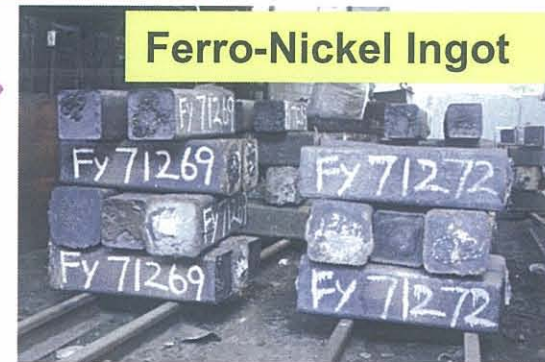
Pot Vacuum Electric Furnace



Recycling Process



Electric Melting



**Sold as Material for
Stainless Steel and
Magnetic Alloy**



Recycling Process



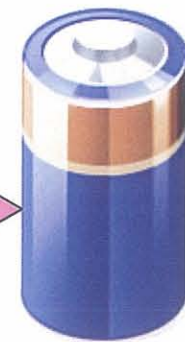
Cadmium abstracted from Ni-Cd Battery at Bell Vacuum Electric Furnace



Casting Ingots in Cadmium



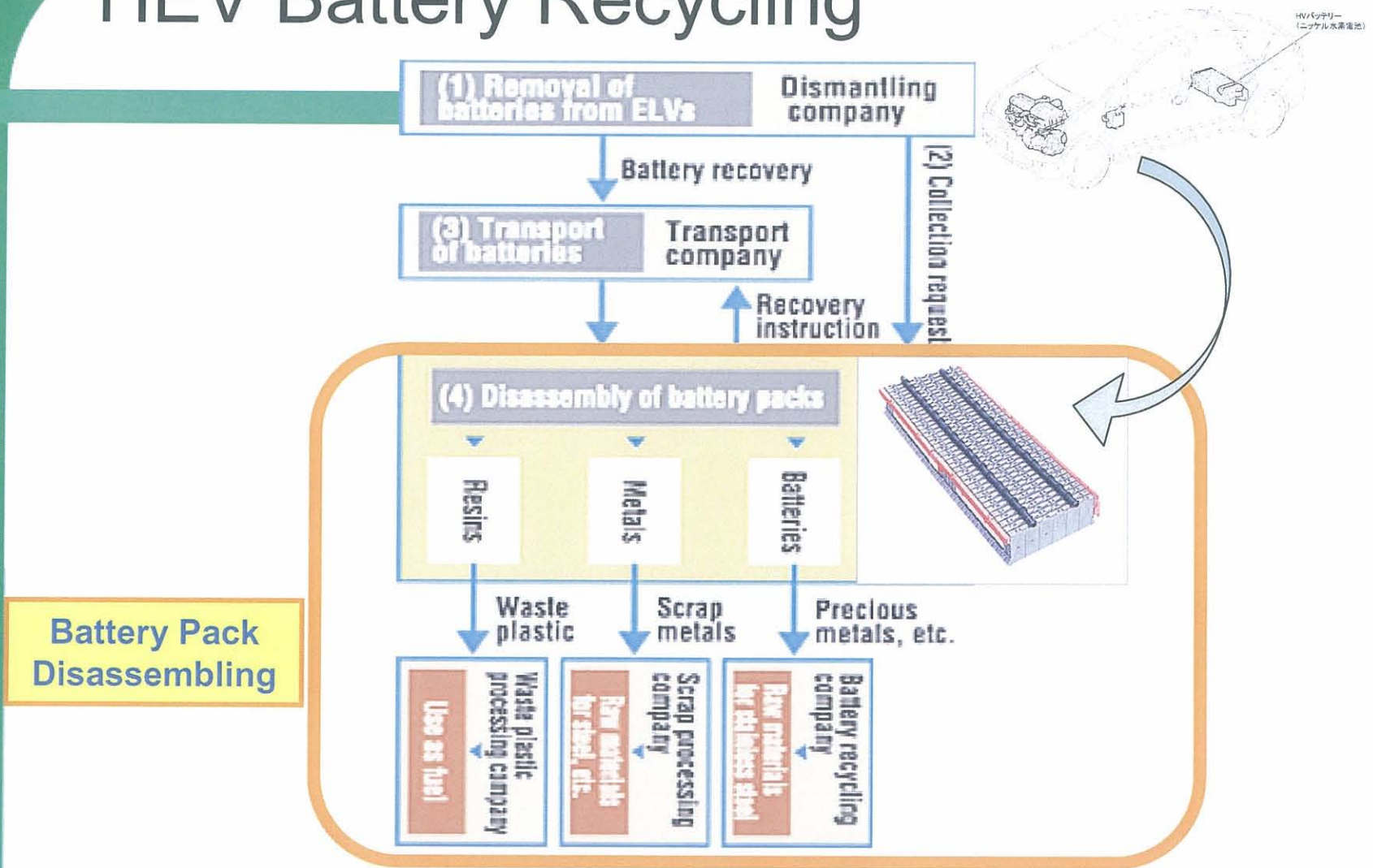
Cadmium Ingot



Ni-Cd Battery



HEV Battery Recycling





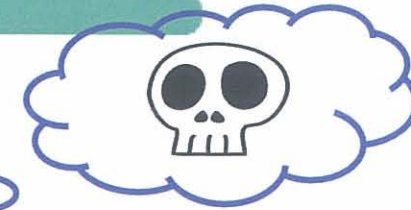
Capacity of Furnace



	Max./day	Monthly (20 days)
Vacuum Electric Furnace	6 MT	120 MT
Bell Vacuum Electric Furnace	4 MT	80 MT
Pot Vacuum Electric Furnace	4 MT	80 MT
Consecutive Dry Furnace	1.5 MT	30 MT
TOTAL	15.5 MT	310 MT



Environmental Preservation



After-Burner

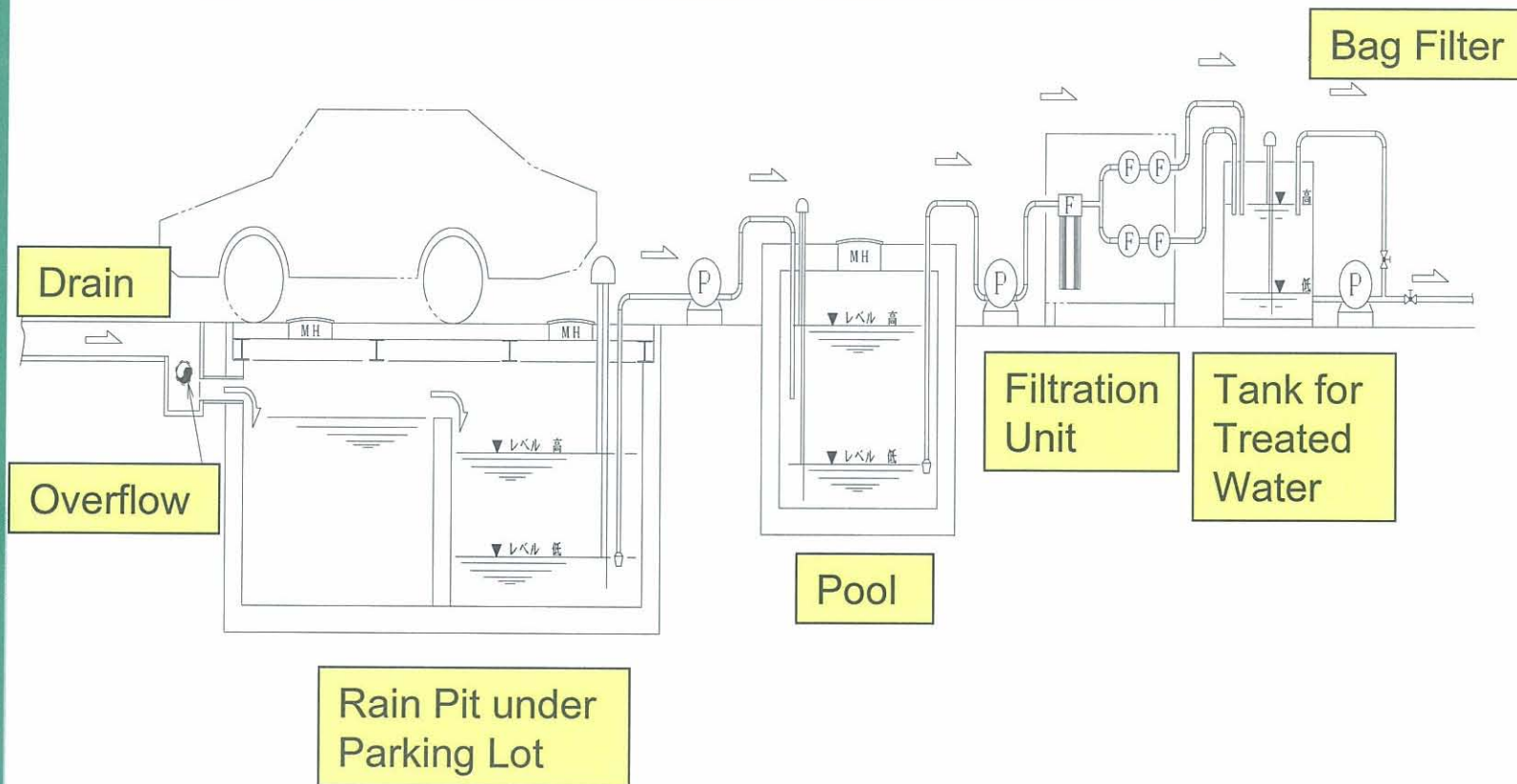
Gas Cooler

Bag Filter

Discharged
Harmlessly



Environmental Preservation





Now ...

Let's take a look Nakajima Plant!