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# NEED FOR DATA, RECYCLING

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**Stena Sphere**  
**Privately owned**

**Turnover: 5 billion €**



**Stena AB**

**Stena Metall AB**



# Stena Metall AB

- Operations at 250 locations in 12 countries
- Net sales 2.5 billion €
- Number of employees, 3500

## - Stena Aluminium AB

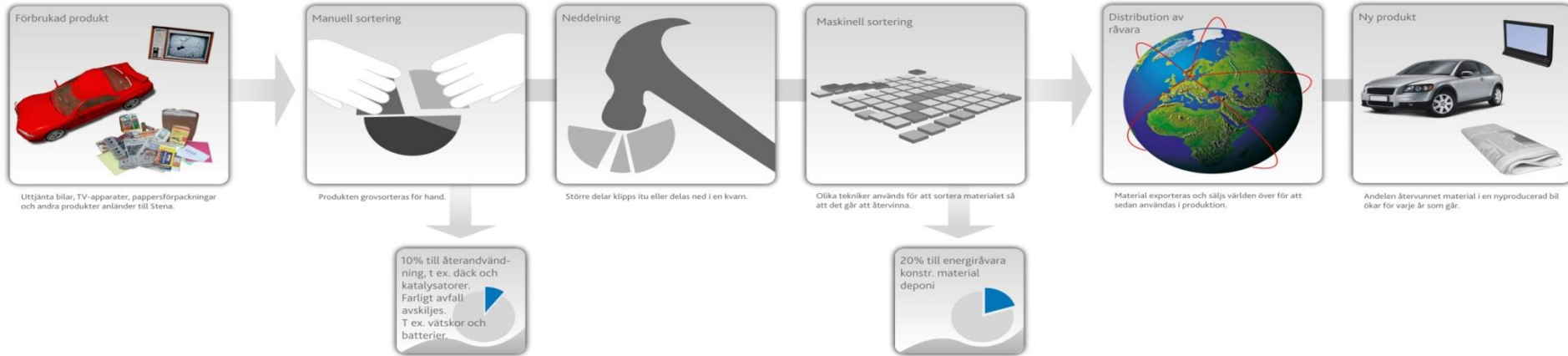
## - Stena Recycling, Sw, Dk, No, Fi, Po

- 9 car shredders
- Non Ferrous material sorting-plants
- Cable Recycling plants
- Plastics sorting plants
- Transformer / Capacitor recycling plant
- Hazardous waste treatment plants
- Paper recycling plants

## - Stena Technoworld, WEEE-

Recycling, Sw, Dk, No, Fi, Po, It, De

# The Recycling Process



## SIS, Separate – Identify - Sort

# Financial and Environmental value

<u>Element</u>	<u>GWP (Prim. Prod.)</u>	<u>Value (€/kg)</u>
Au	12,500 kg CO <sub>2</sub> /kg	34,000
Pd	4,000	20,000
Ta	260	200
Ag	200	500
In	100	0.5
W	13	30
Co	8	20

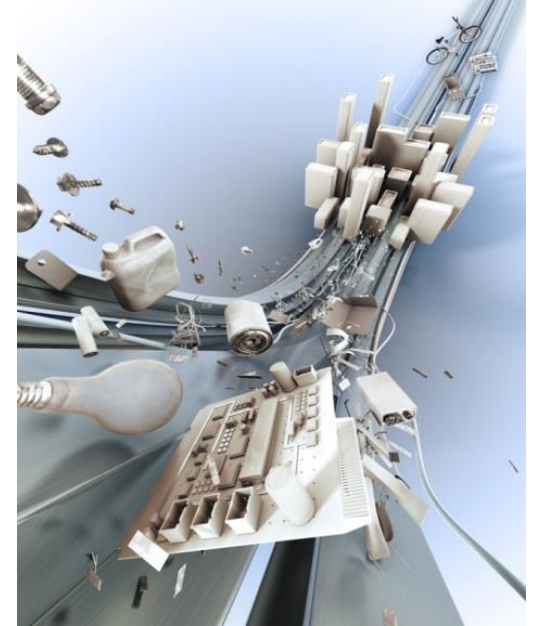


# Need for data from recyclers perspective

**1. Inbound**

**2. Production**

**3. Outbound**



# Data needed for e.g.

- |   |   |  |
|---|---|--|
| 1 | Working conditions, occupational health | Carbon fibers, solvents (LIB), Pyrotech. (ELV) |
| 2 | Production planning                     | What, how much and when ?                      |
| 3 | Business case calculations, internal    | Board approval , investments                   |
| 4 | Business case calculations, external    | Value/cost- in/out, EPR, Offers,               |



- 1 Lower concentrations of REE/CRM, but in more and different type of products
- 2 Market (cost/prize) not enough for increased recycling
- 3 Design with raw material, “Clean enough”
- 4 “CE-marking” (Total footprint) of all products put on market.
- 5 Recycling goal related to societal value, not weight %.
- 6 Functional sale, not selling products.
- 7 Intermediate storage, landfilling only for some HW
- 8 Replace MSWI with gasification/pyrolysis
- 9 Standardization needed

# Summery/ Needed actions





Questions or Comments ?

IT STARTS HERE.



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