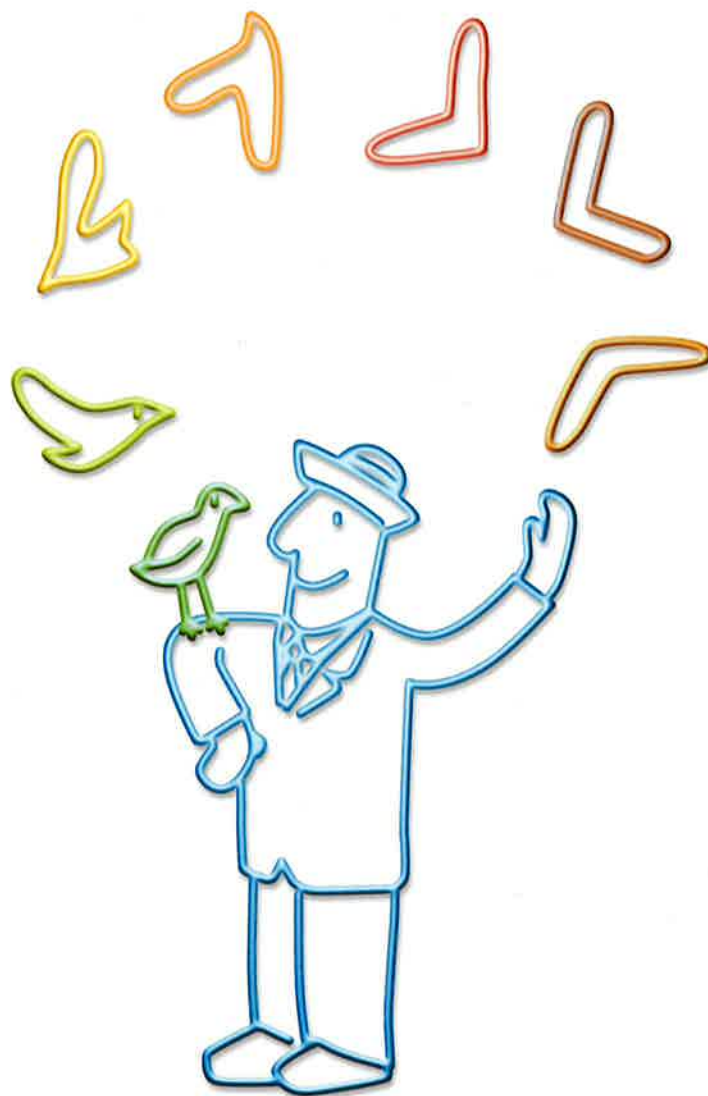


Direct Melting System

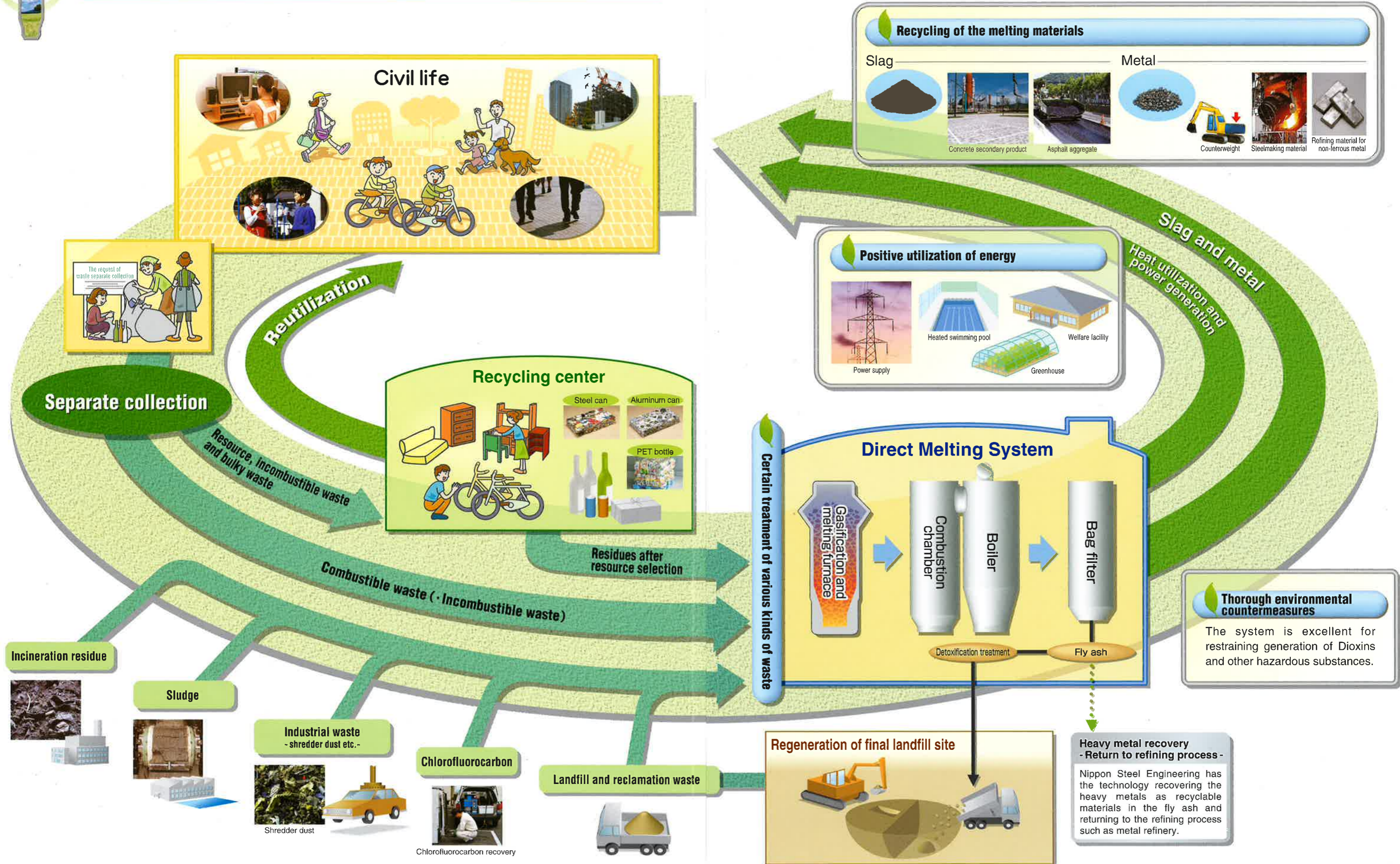
Shaft furnace type gasification and melting furnace



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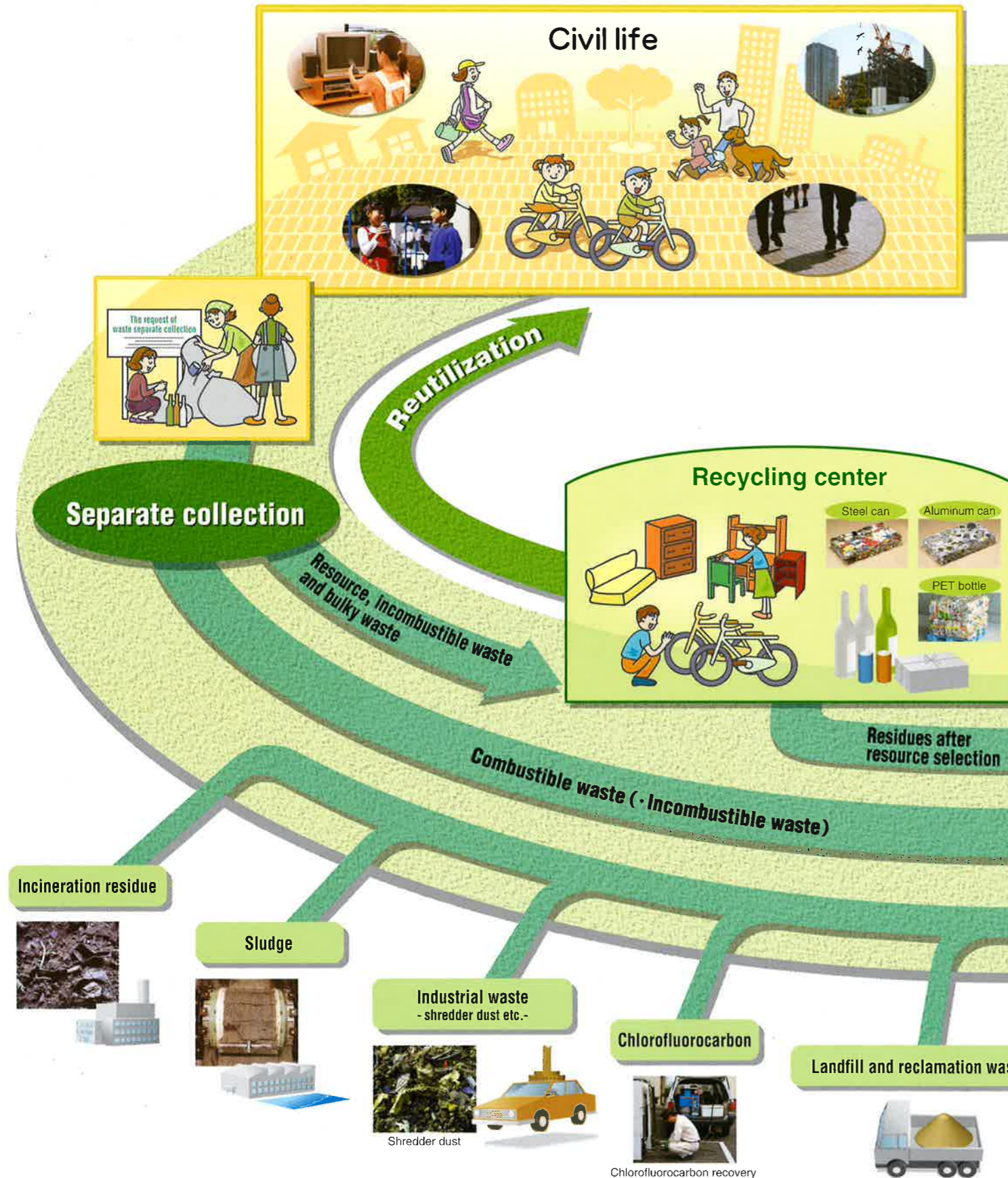


The system certainly supports for the recycling society





The system certainly supports for the recycling society



We pursue zero waste for final disposal and reduce environment

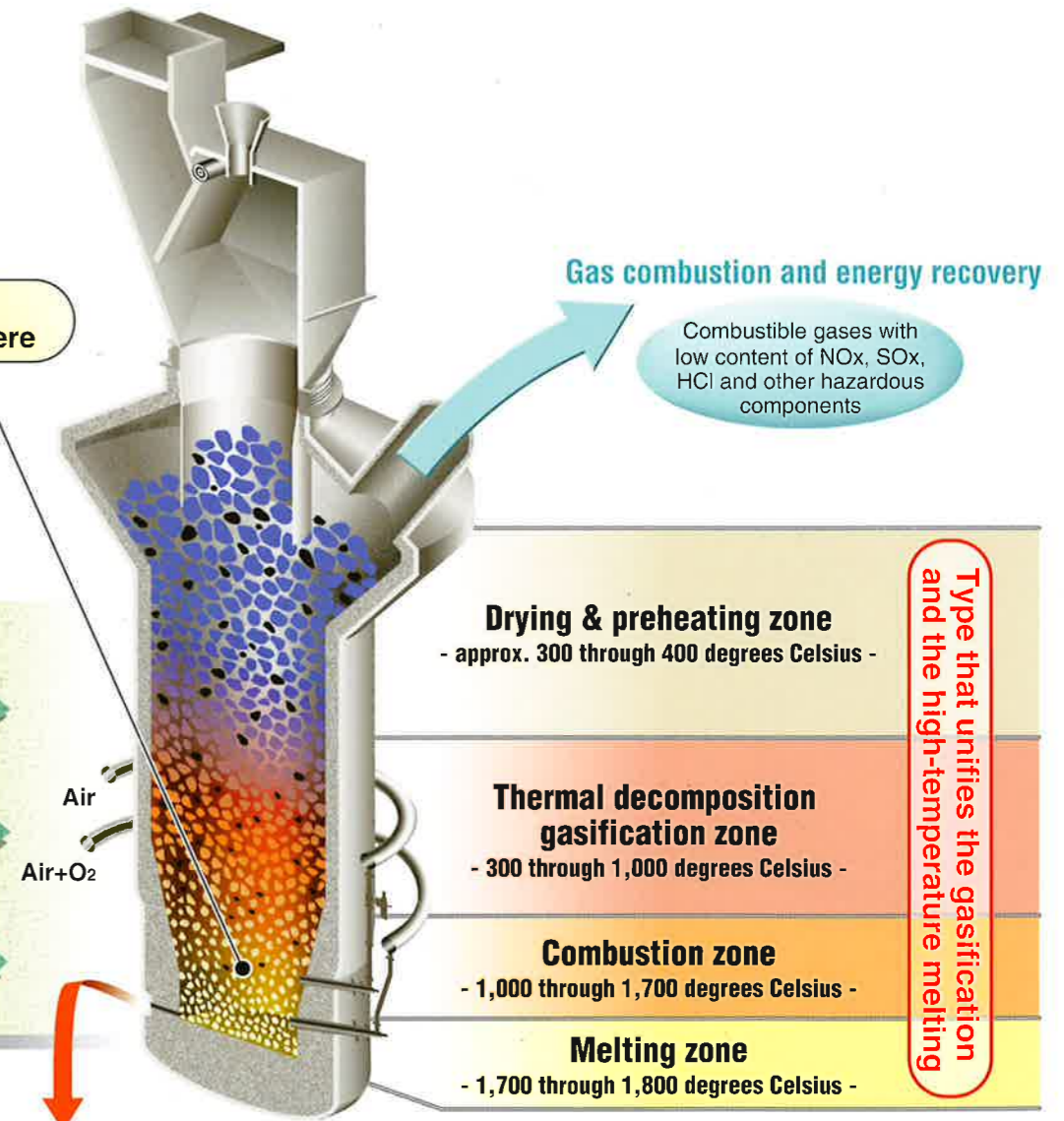
Certain treatment of various kinds of waste

- Various kinds of waste after sorting resources are melt certainly at high temperature - 1,700 to 1,800 degrees Celsius -
- This is the type that unifies the gasification and the high-temperature melting, permitting stable operations unaffected by changes in waste quality.
- There is no need for fine pretreatments such as crushing, drying and sorting, and medium sorting and so on. The waste treatment flow is simple.

Recycling of the melting materials

- Coke as a reducing agent keeps the inside of the gasification and melting furnace in a high-temperature reducing atmosphere. Thus harmful heavy metal components evaporate, with no or very little transition to the melting material side.
- The harmless and high-quality melting materials generated from the system has long been in circulation in the market.

High-temperature reducing atmosphere



Melting materials

Effective utilization of slag and metal
The slag to be generated is harmless and safety at almost same level as that in natural sand.



Impact overall

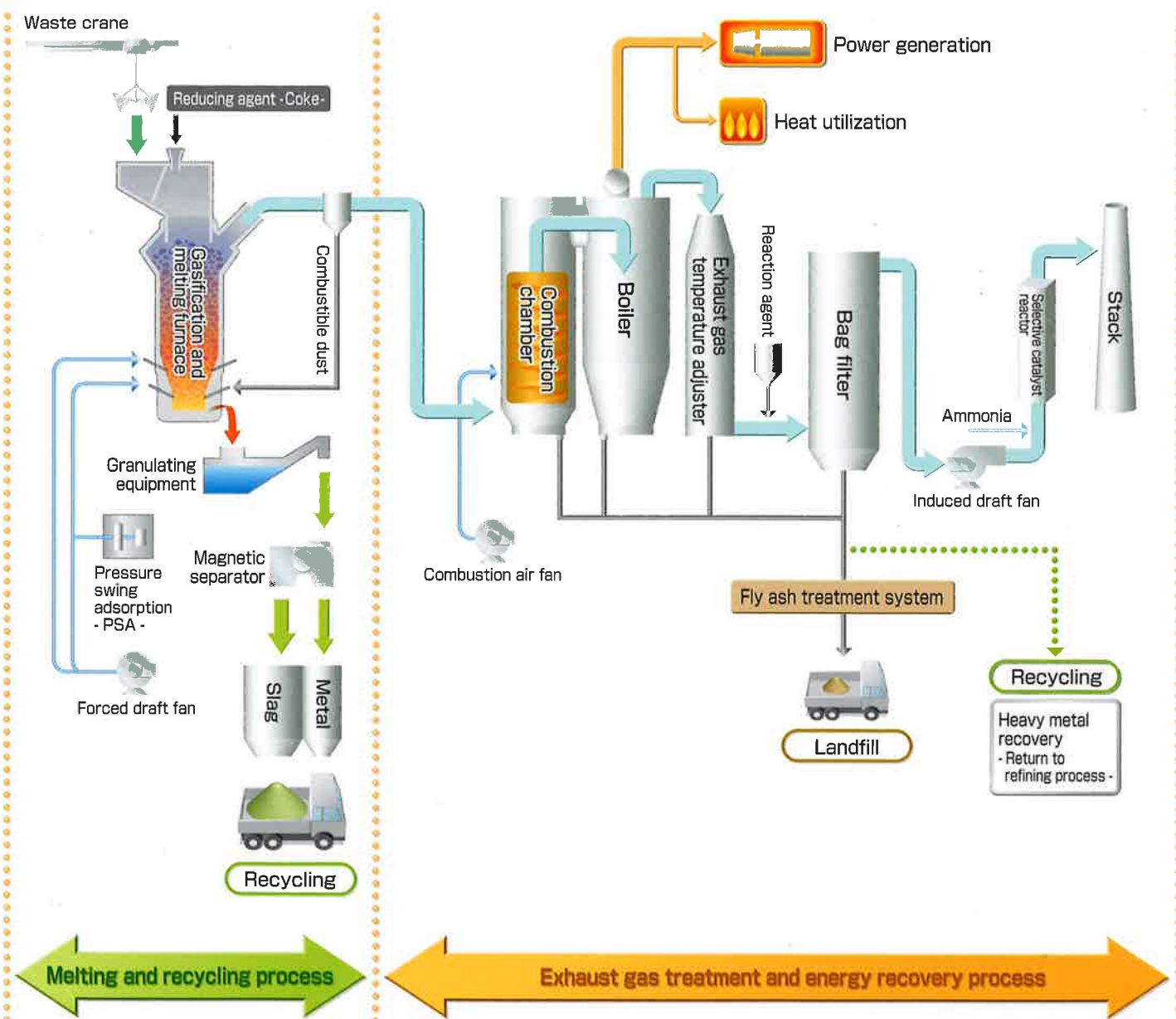
Thorough environmental countermeasures

- In the gasification and melting furnace, hazardous gases are neutralized by limestone addition, and the independent combustion chamber provides perfect combustion of thermal-decomposition gases prevent hazardous gas from generating.
- With respect to Dioxins also, regulatory standard values are very safely cleared by the systems full combustion control, in combination with the selective catalyst reactor installation or activated-carbon injection.

Positive utilization of energy

- The system is capable of maximizing the efficiency of energy from waste due to adopting the shaft type furnace with high efficient heat recovery.
- By struggling energy from waste positively, we hold the technology of high-efficiency power generation to have been proved.

Example of a process flow





Recycling society ahead

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