



Increasing Recycling in the Future

Study Name: Shaping the future of copper recycling
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Research into the challenges and opportunities facing copper recycling has found that although recycling remains a major issue across the world, there are vast geographical disparities between Europe, the USA and China.

Recycling overview

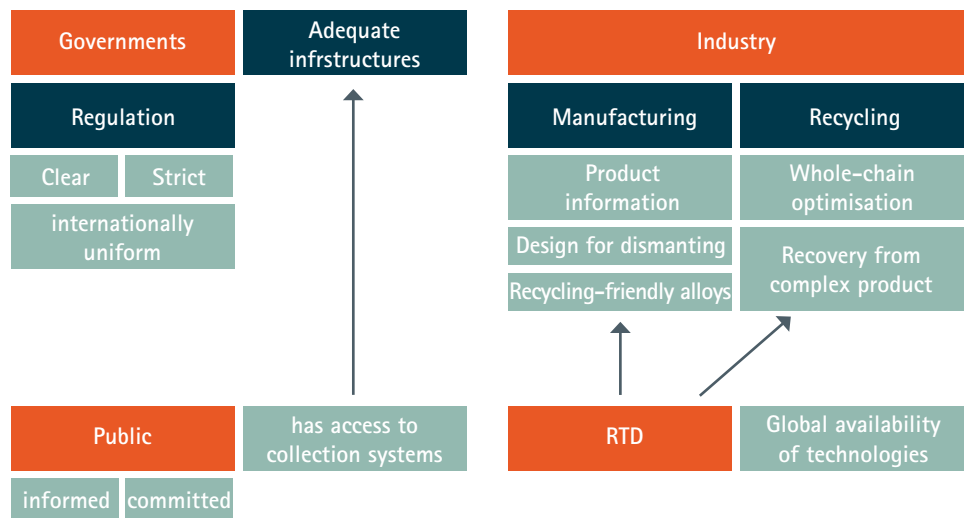
Copper demand is increasing rapidly, and as such the industry needs to deliver a greater volume of end of life recycling. The response thus far has focused on more stringent regulation and the deployment of new recycling technologies. However, the industry cannot remain static and with the invention of more complex products, greater effort will be required to maintain and improve rates of material recovery.

Geographical differences in recycling

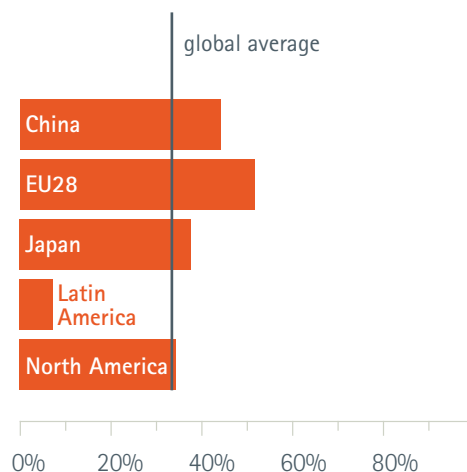
Europe: In Europe recycling systems are well advanced and supported by regulation. The industry harbours both large businesses and SME's, each performing different functions. For the consumer, recycling options are plentiful and easy to use.

USA: In the USA, and despite a well-established recycling industry, differing state regulations and an abundance of landfill hamper efforts for greater rates of recycling. These factors, combined with the long distances that materials travel before being recycled, mean that only a nascent circular economy has appeared in the country.

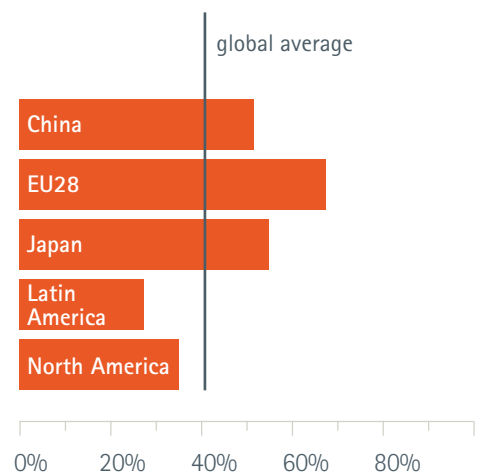
China: In China, where copper demand is very high, the government has introduced stricter regulation such as the "Green Fence", a new law halting the acceptance of poorly sorted or dirty shipments of recyclable waste from foreign exporters. However regional disparities in recycling systems continue and consumers remain unsure of how to dispose of goods correctly.



Recycling Input Rate (RIR)



End of Life Recycling Rate (EoL RR)



Circular economy

A circular economy requires the efficient use of raw materials, as well as material conservation through reuse and recycling. Copper is an inherently circular material, given that it is infinitely recyclable without loss of properties.

Future increases in recycling will require innovation in regulation, new product design to facilitate end of life recovery and industrial copper recycling process improvements, among other factors.