

Promoting circular economy at the global level

With the financial support of the National Natural Science Foundation of China, the research team led by Professor Geng Yong (耿涌) at Shanghai Jiao Tong University, urged that circular economy should be promoted at the global level. The finding of this study was published in *Nature* (2019, 565: 153—155).

The rapid economic development and increasing population have resulted in soaring demand on natural resources and more environmental emissions. However, the current production and consumption model is still linear and only 6% of materials are recycled at the global level. Consequently, it is critical for the whole world to promote circular economy so that the overall resource efficiency can be improved.

Some progress has been made in several countries. For instance, China and South Korea have operated eco-industrial parks for 20 years; the EU and Japan have legislated on eco-design, making producers more responsible for the after-use of their products and boosted markets for secondary materials. In the US, some states and companies have set up networks for sharing and recycling resources. Brazil and India have informal recycling systems. But the sum of all these efforts remains tiny. Projects operate in isolation and have not shifted the behemoths of global industry.

Under such a circumstance, it is necessary to call for a global initiative to advance the circular economy. It should be led by the United Nations and involve the G20 and World Economic Forum, industry and citizen-oriented organizations. It should gather data, trigger learning, draw lessons and share experiences on how businesses and people use and recycle resources, such as the establishment of a global platform and database, international standard on circular economy. In addition, policies, missions and incentives should be developed to spread circular economy practices worldwide, including voluntary regulatory and reporting initiatives and international agreement on sustainable resource management.

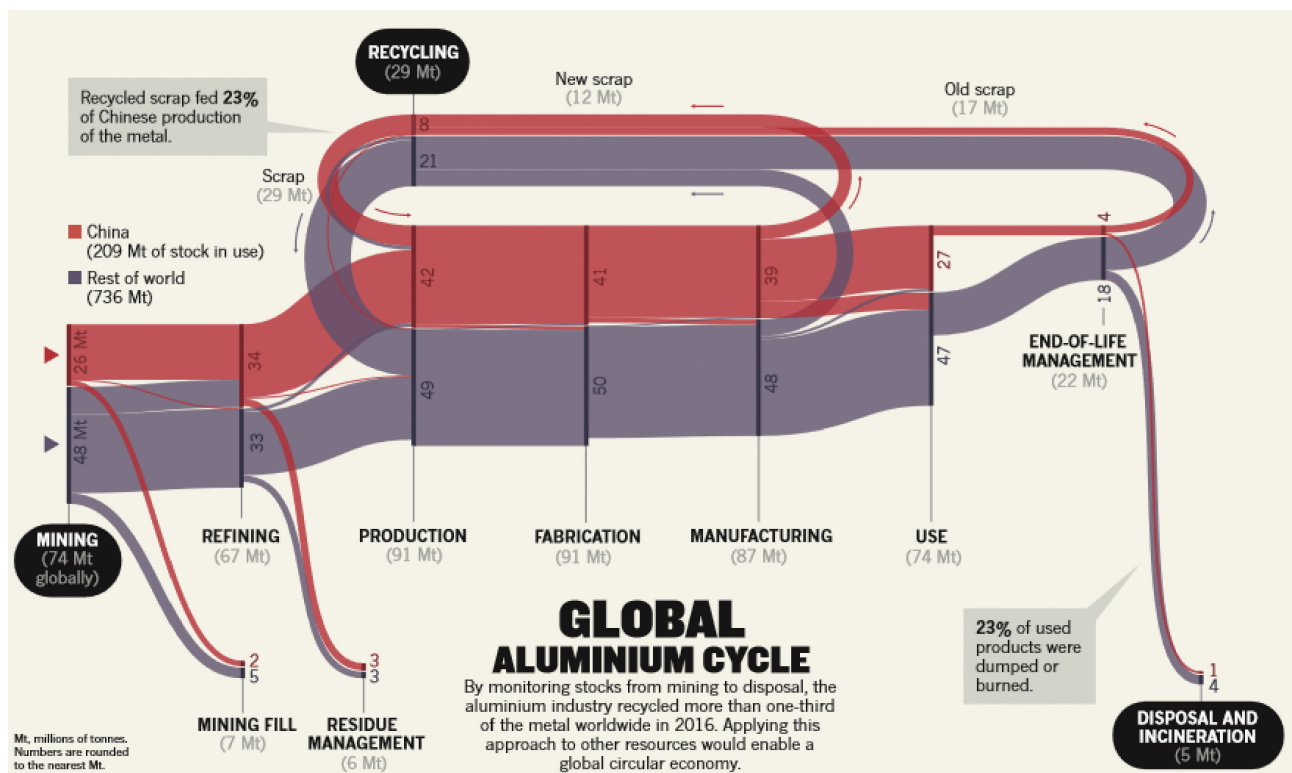


Figure Global aluminum cycle for the year 2016.