

Michelin Reifenwerke AG & Co. Kga Questionnaire on end-of-life tyres (ELTs).

Date: 03.07.2023
Organisation: Michelin Tyres
Full name and designated position: Confidential
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Your personal details are strictly confidential. Thank you for your participation.

Background

A circular economy could be considered as a closed loop in which raw materials, components and products lose very little value if at all. Figure 1 shows materials recovered from recycled ELTs have wide-ranging applications. Although some applications are not represented in the image below, they include indoor and outdoor furnitures, auto-mobile components, signposts, refuse bins, wheels, sport arenas, airports, concrete manufacture, roads and building construction, roofing, interlocking tiles for courtyards, mulching in landscape management, the cement sector, children's playgrounds and footwear production. Arguably, a circular economy promotes waste prevention from the onset, it is resilient, good for business, people and our environment.

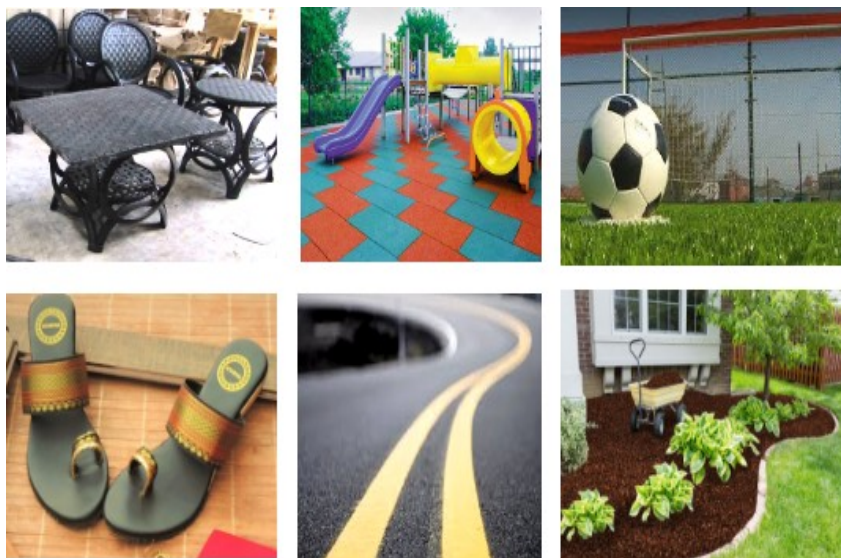


Figure 1: ELT applications.

ETRMA intervention

The European tyre and rubber manufacturers' association (ETRMA) classifies ELTs as tyres that cannot be used for their original purpose and directly go into the waste management system for recovery. Export and retread tyres are not included in the classification.

Increasing ELTs waste stream

According to a report by the Tyre Industry Project for the World Business Council for Sustainable Development (WBCSD), 1 billion ELTs are generated every year and there are currently 4 billion such tyres in landfills and stockpiles worldwide.

Your views are sought to gain insights over different scenarios for the future of ELTs. Please spend a few minutes to answer the following three questions. The result will be sent to you once the study is completed.

Question 1

Please identify what you consider to be the three most important driving forces behind ELTs applications (e.g. recycled material's market, environmental legislation, technology or innovation, global economic activity, price of substitute products such as oil and coal, etc. Please use these or your own examples).

Response

Understanding that question 1 relates to main driving forces as of today:

- a. Environmental legislation
- b. Economics (prices)
- c. Available technologies (which are limited)

Question 2

What do you think might be the three largest driving forces for changes in the management of ELTs? (Please use examples in question 1 or your own examples).

Response

Understanding that question 2 relates to main driving forces needed for change/improvement towards 100% ELT recovery:

- a. Environmental legislation
- b. Innovation/Technology
- c. Societal acceptance (change in consumers' habits)

Question 3

How might these driving forces you identified in question 2 change the system for ELTs? (e.g. systems like collection, treatment and sales, etc.).

Response

- a. Environmental legislation: by restricting certain existing recovery routes (for instance: ban of energy recovery)
- b. Innovation/Technology: by providing qualitative recycled raw materials made out of ELT
- c. Societal acceptance (change of consumers' habits): by consuming more brands/products which ensure highest rate of renewable materials