

Quantifying tire wear emissions for entire life cycle, using supply chain management and Material Flow Analysis

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Quantifying tire wear emissions for entire life cycle, using supply chain management and Material Flow Analysis

Understand root causes and pathways to support identification and prioritization of mitigation measures for reducing microplastic pollution

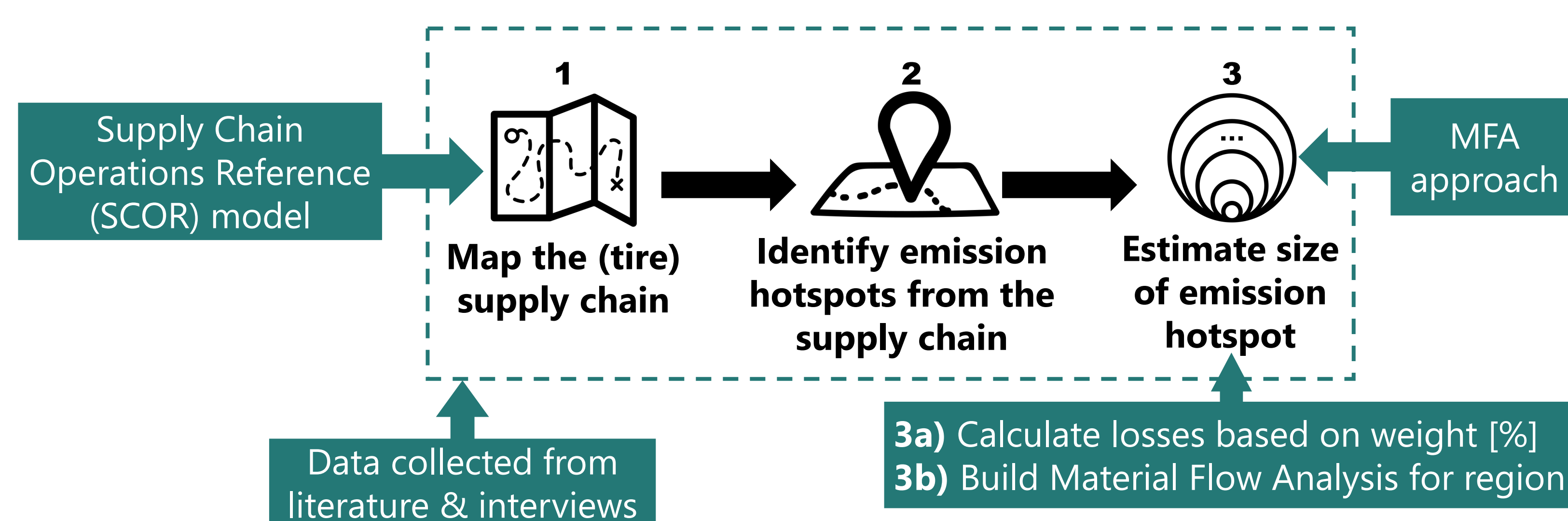
- Globally, tire wear is responsible for approximately 50% of the total amount of **primary microplastics** released to the environment^{1,2}.
- Also other stages of the tire's lifecycle are responsible for microplastic emissions³.
- To **reduce the environmental impact**, it is essential to understand the **root causes and the pathways** of microplastics.
- This study presents a **first step** to support the **identification** and **prioritization** of **mitigation measures** for reducing microplastic pollution caused by tires.

WORK IN PROGRESS

Future steps

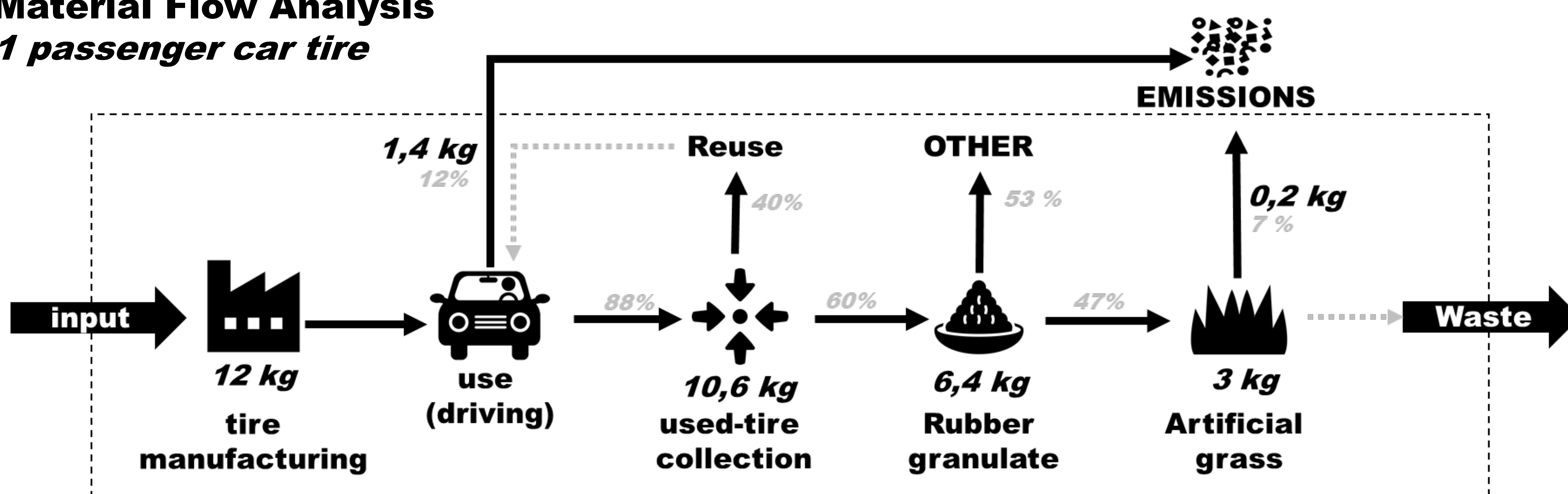
- Quantify the remaining emissions hotspots
- Model the spatial distribution of emissions in rivers
- Test efficacy of mitigation measures
- Establish a supply chain-wide stakeholder network

Combining supply chain management with environmental modelling



Results

Material Flow Analysis 1 passenger car tire



References

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The Supply Chain Map
For results check:

