

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

Citation for published version (APA):

Hoeke, S., Ragas, A., Krikke, H. R., Löhr, A. J., & van Wijnen, J. (2022). *Quantifying tire wear emissions for entire life cycle, using supply chain management and Material Flow Analysis*. Poster session presented at SETAC Europe 32nd annual meeting, Copenhagen, Denmark.

Document status and date:

Published: 16/05/2022

Document Version:

Early version, also known as pre-print

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

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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

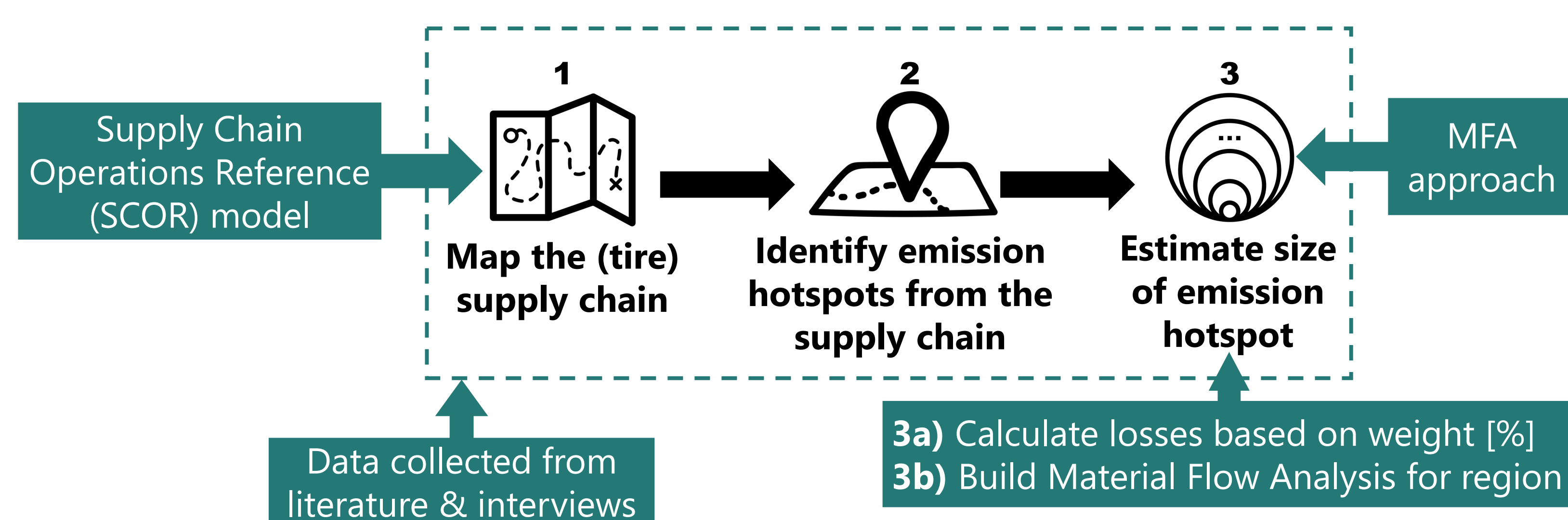
- Globally, tire wear is responsible for approximately 50% of the total amount of **primary microplastics** released to the environment^{1,2}.
- Also other stages of the tire's lifecycle are responsible for microplastic emissions³.
- To **reduce the environmental impact**, it is essential to understand 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

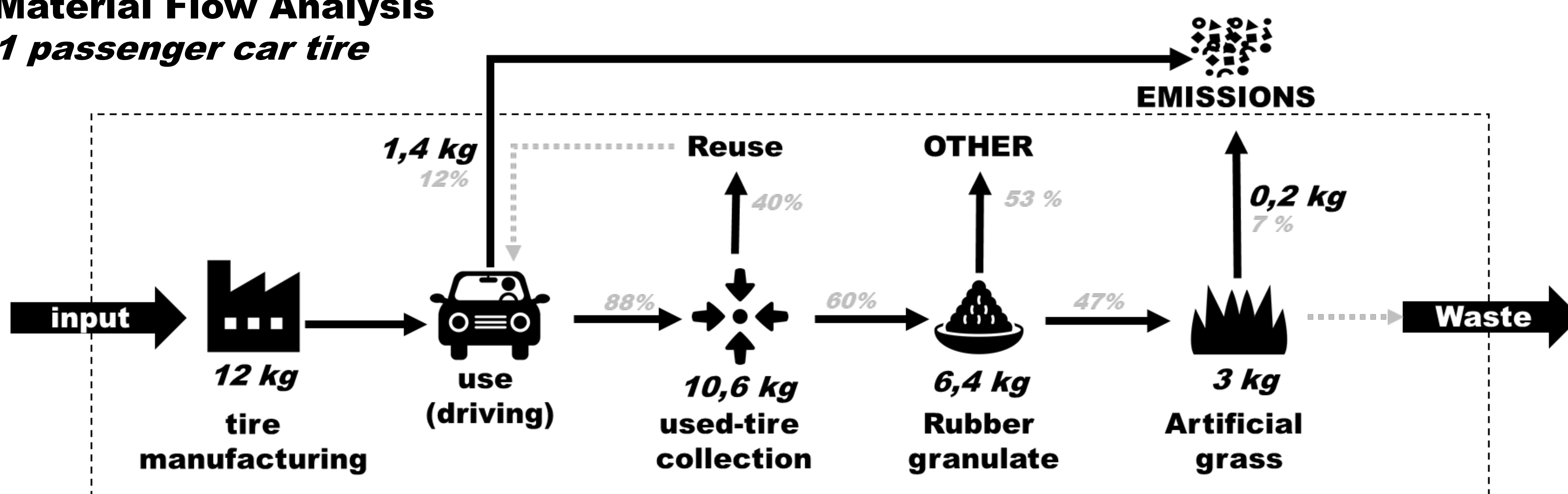
- Quantify the remaining emissions hotspots
- Model the spatial distribution of emissions in rivers
- Test efficacy of mitigation measures
- Establish a supply chain-wide stakeholder network

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:

