



HERMES

Sustainable and Liveable Cities and Urban Areas

SBE19
Graz

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Integrated evaluation of energy and emission reduction potential and management strategies for urban road systems

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Sustainable and Liveable Cities and Urban Areas

organized by JPI Urban Europe and the National Natural Science Foundation of China (NSFC)

Partners



SINTEF



NTNU – Trondheim
Norwegian University of
Science and Technology



How can our expertise contribute?

More than 275 million tons of asphalt are produced every year in Europe alone.

This equals approximately 30 million tons of CO_{2eq} emissions from the production of asphalt for maintenance and rehabilitation alone.

Global warming potential (GWP) up to 60 000 tons of CO_{2eq} per lane km over a 50 year time period.



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Sustainable and Liveable Cities and Urban Areas

Integrated evaluation of energy and emission reduction potential and management strategies for urban road systems

Duration

March 2019 - February 2022

Budget

1,1 mln €

The goal of HERMES project is to provide a methodology enabling the selection of the best available technology and strategy with the lowest cost for the environment and society.

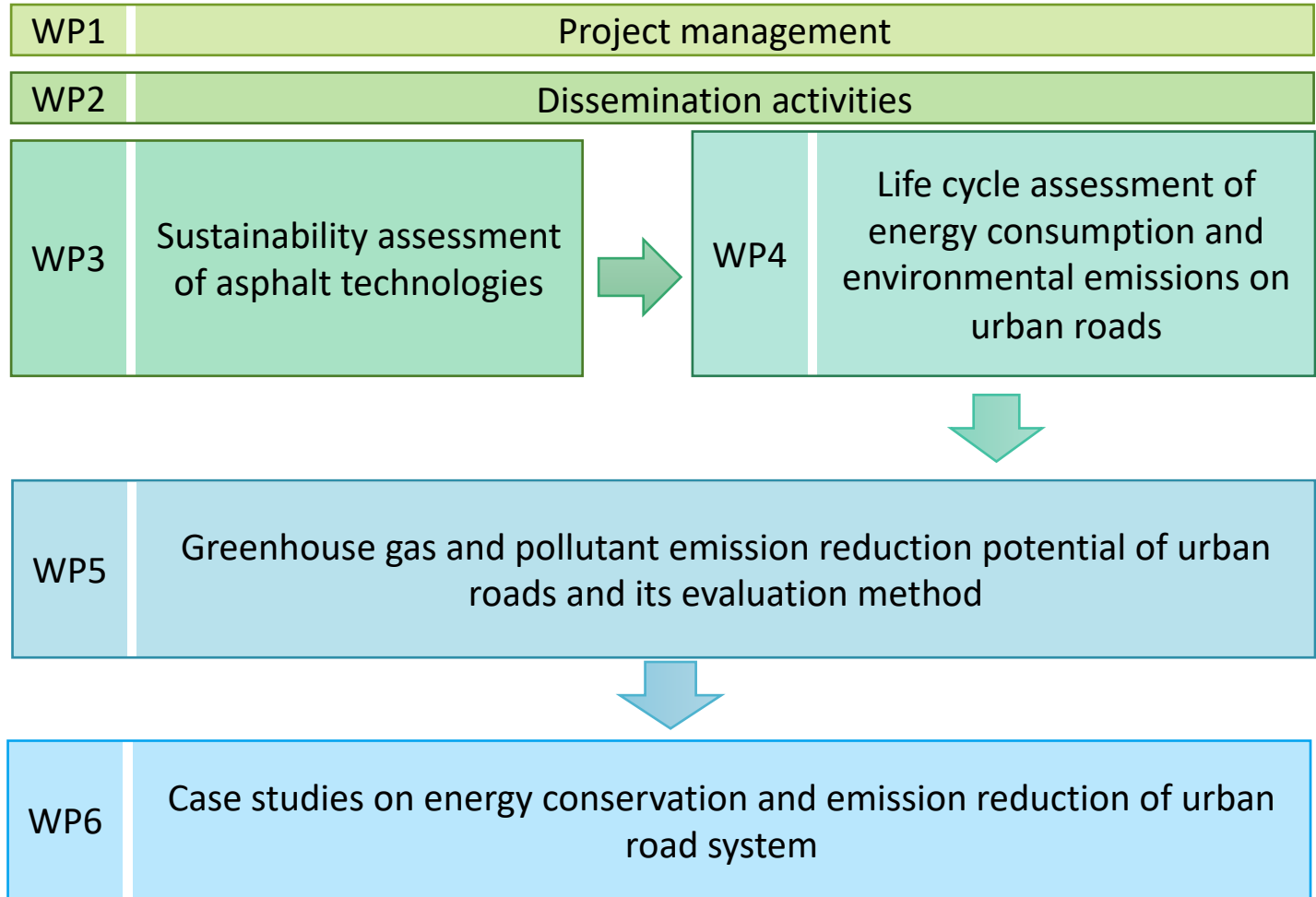
Taking into account: local conditions, regulations, restrictions and technology availability together with environmental factors, financial investment and local boundary conditions.

For both road owners, policy makers and contractors.

How can we achieve the goal?

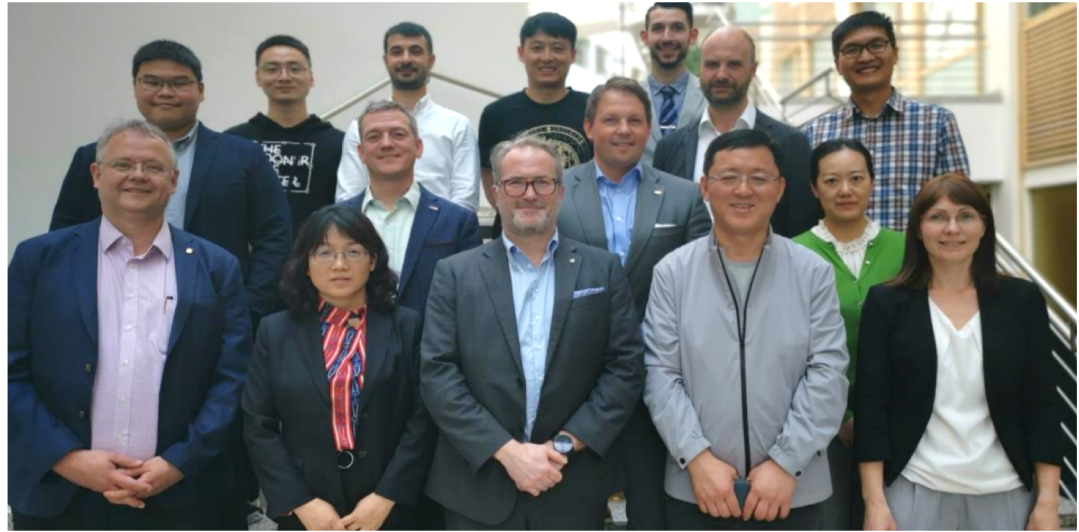
- Developing an accurate energy and environmental emissions dynamics inventory
- Constructing a full life cycle model of urban road system
- Understanding the key influencing factors and evolutionary trends of urban road energy consumption and environmental emissions
- Exploring the potential and cost of reducing emissions under different policies

WP organization



Expected impact

- To analyse effective ways of assessing environmental impact of both present and future urban road systems
- To enable a connection between stakeholders of road construction projects, policy maker practices and sustainability assessments.
- To challenge the national and international policy making systems (like that of the European Union)
- To address the difficulty of bridging between the local complexity of specific plans and projects, and the abstract methodological complexity of sustainability assessments
- To contribute to a trans-national perspective



Thank you !

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jpi-urbaneurope.eu/project/hermes/