



# Where are the users of e-scooters coming from?

An ex-post impact analysis of Norfolk, UK

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**Interreg**   
2 Seas Mers Zeeën  
**MOBI-MIX**  
European Regional Development Fund

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POLIS Annual Conference 2022, Nov 23<sup>th</sup> / Dec 1<sup>st</sup>, Brussels  
Session 2G

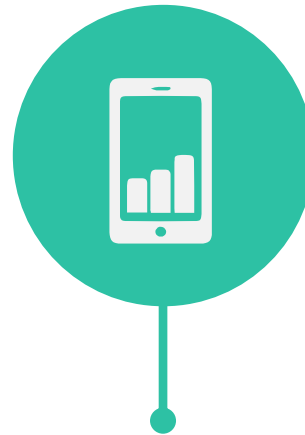
# Why a new methodology?

**“If the drawbacks [of e-scooters] exceed the advantages, we will stop the free-floating model”** – David Belliard (Paris’ Deputy Mayor for Transports)



## Reluctant cities

Cities can make or break shared mobility



## Providers

Companies often ask for favorable treatment

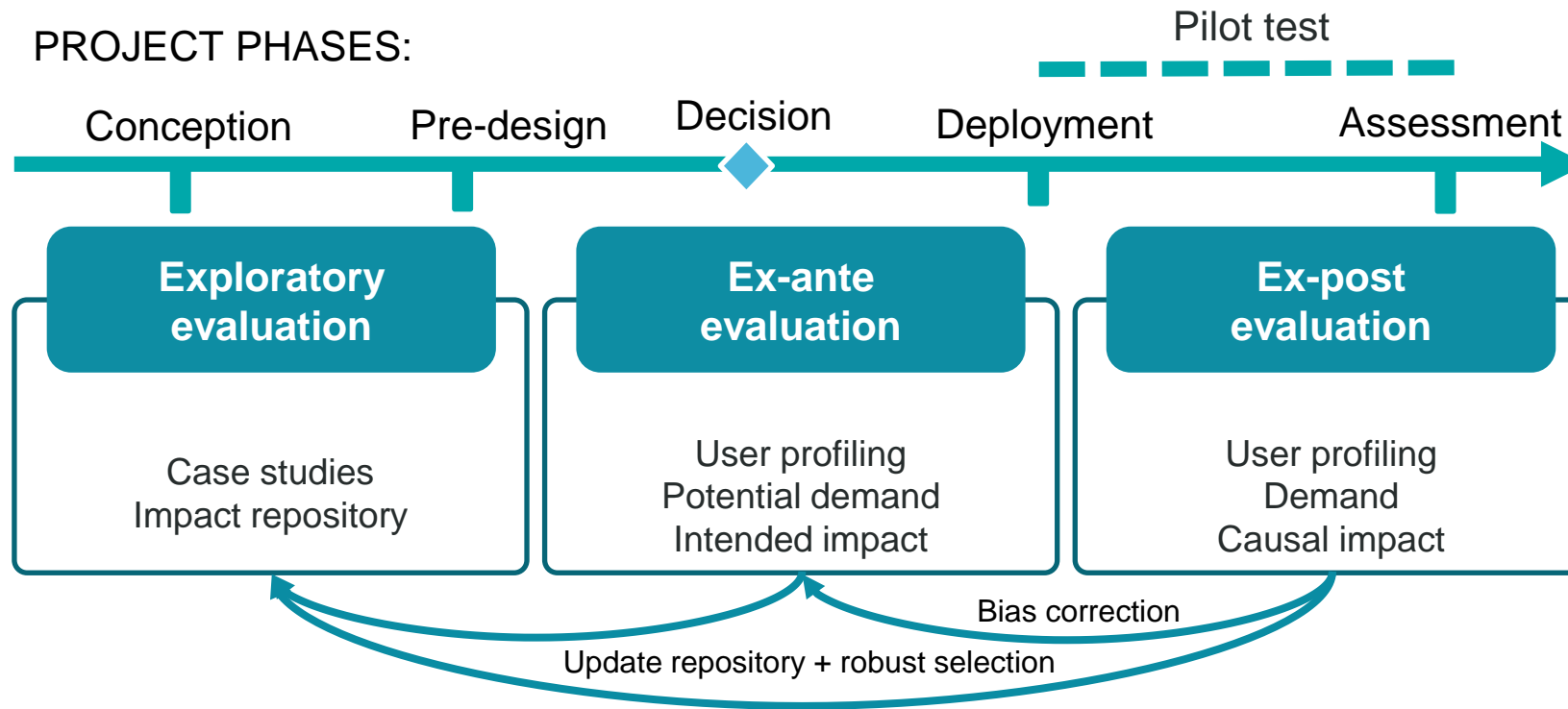


## Unclear benefits

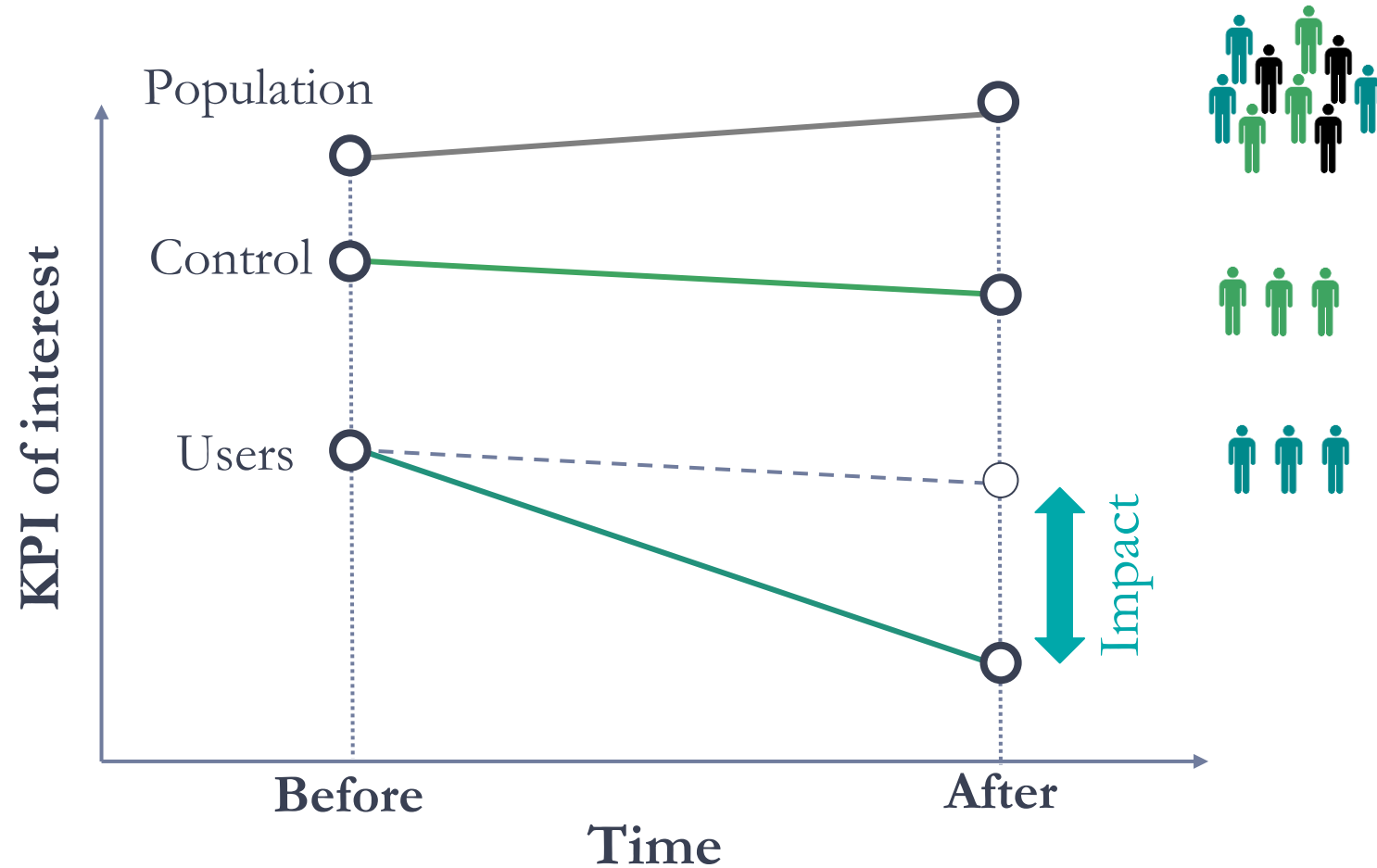
Social benefits of shared mobility are still unclear

# Helping cities with implementation

How can we assist along the implementation decision process?



# The rationale behind



# Norfolk (UK)

2

Years

+290

E-Scooters

+6k

Active users





# Impact evaluation

Using survey-based evidence specific to the city to estimate the **impact** of the solution at trial

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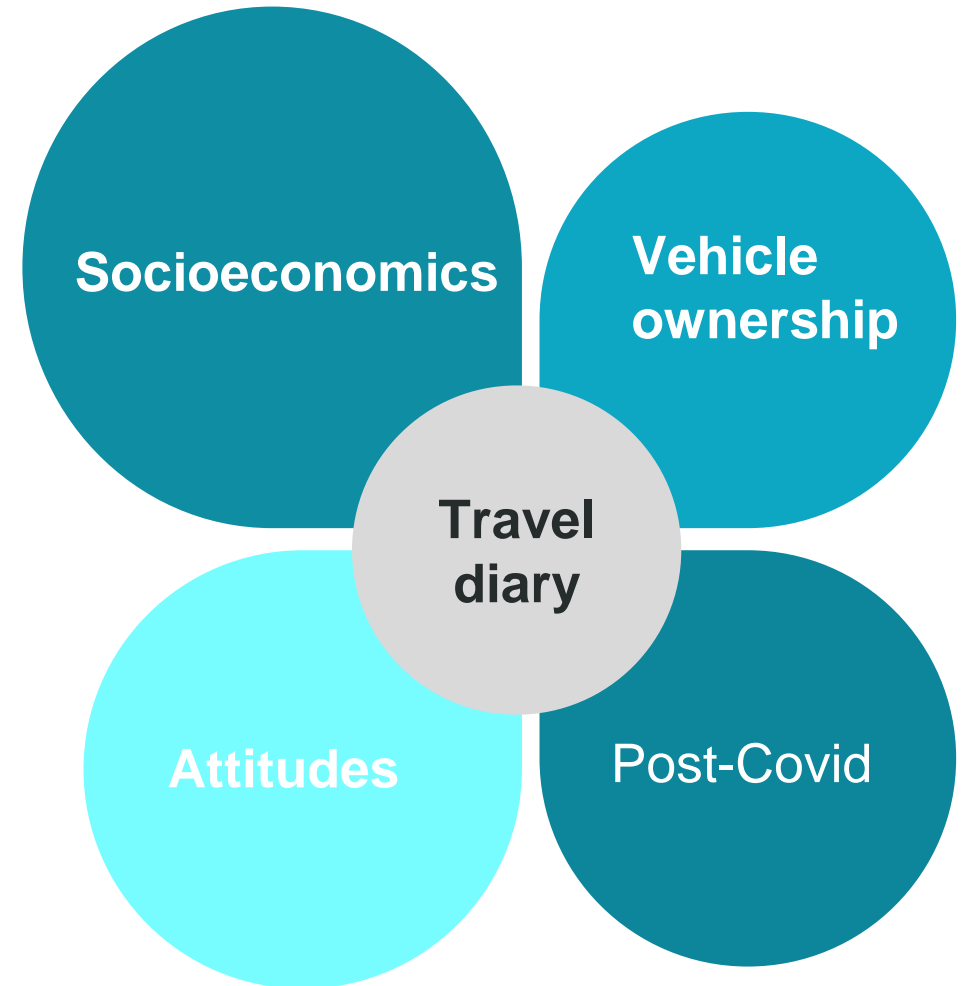
# City- & NMS-specific data

We conduct a **travel survey** to potential users of the New Mobility Service (NMS) the city is trying to implement.

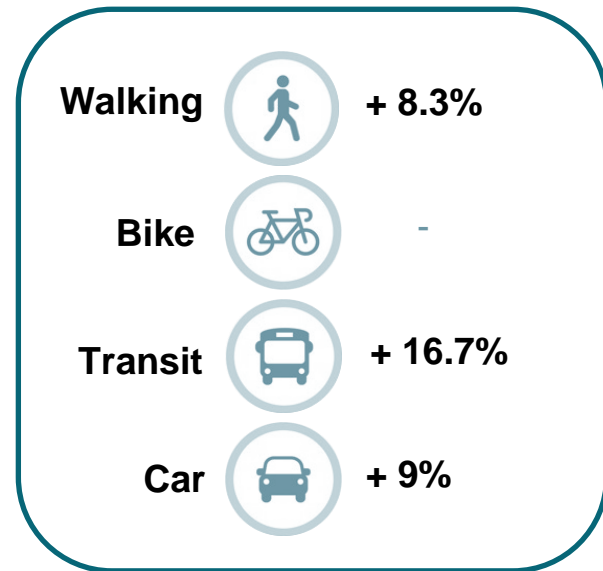
The scope it to learn more about:

- Potential demand (user profiles)
- How potential users intend to change their travel behavior and car ownership levels
- What type of trips could be most affected
- Produce a preliminary estimate of the impact of the pilot

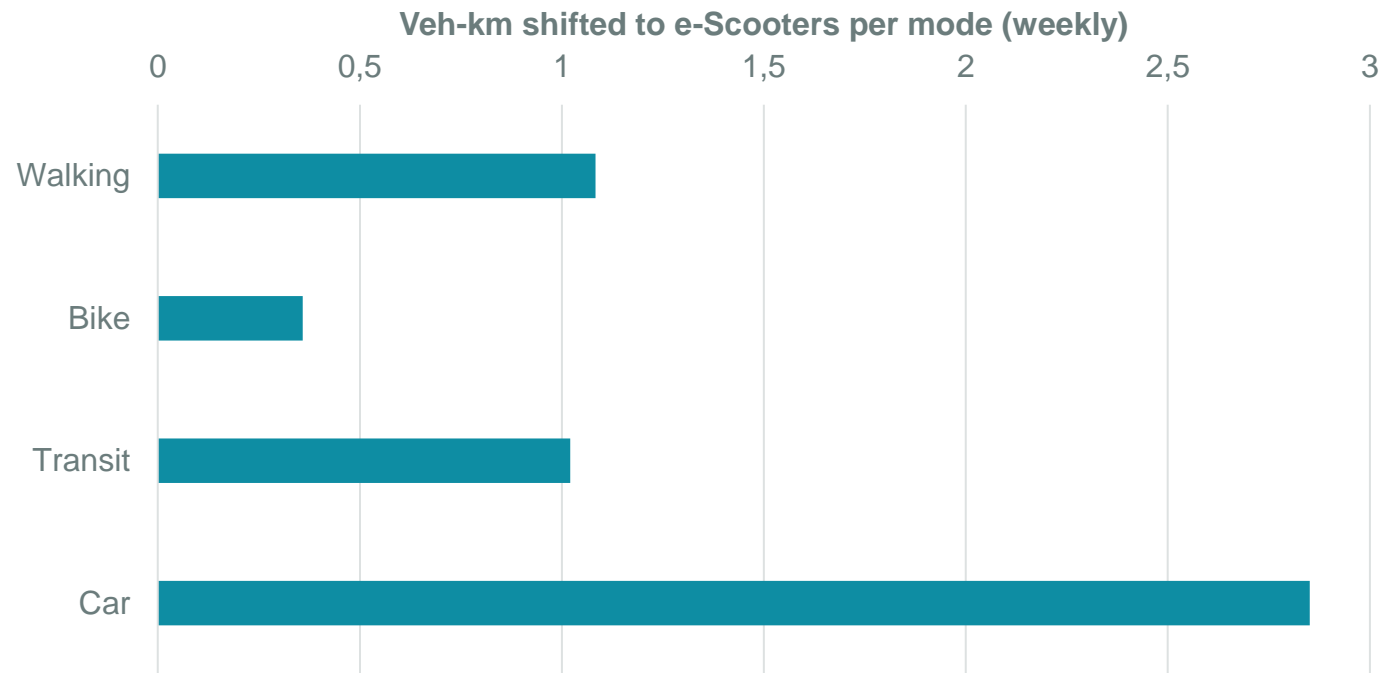
Panel survey content



# How much would it change travel behavior?



No effect on car ownership



Note: Only including respondents that would join the e-Scooter service



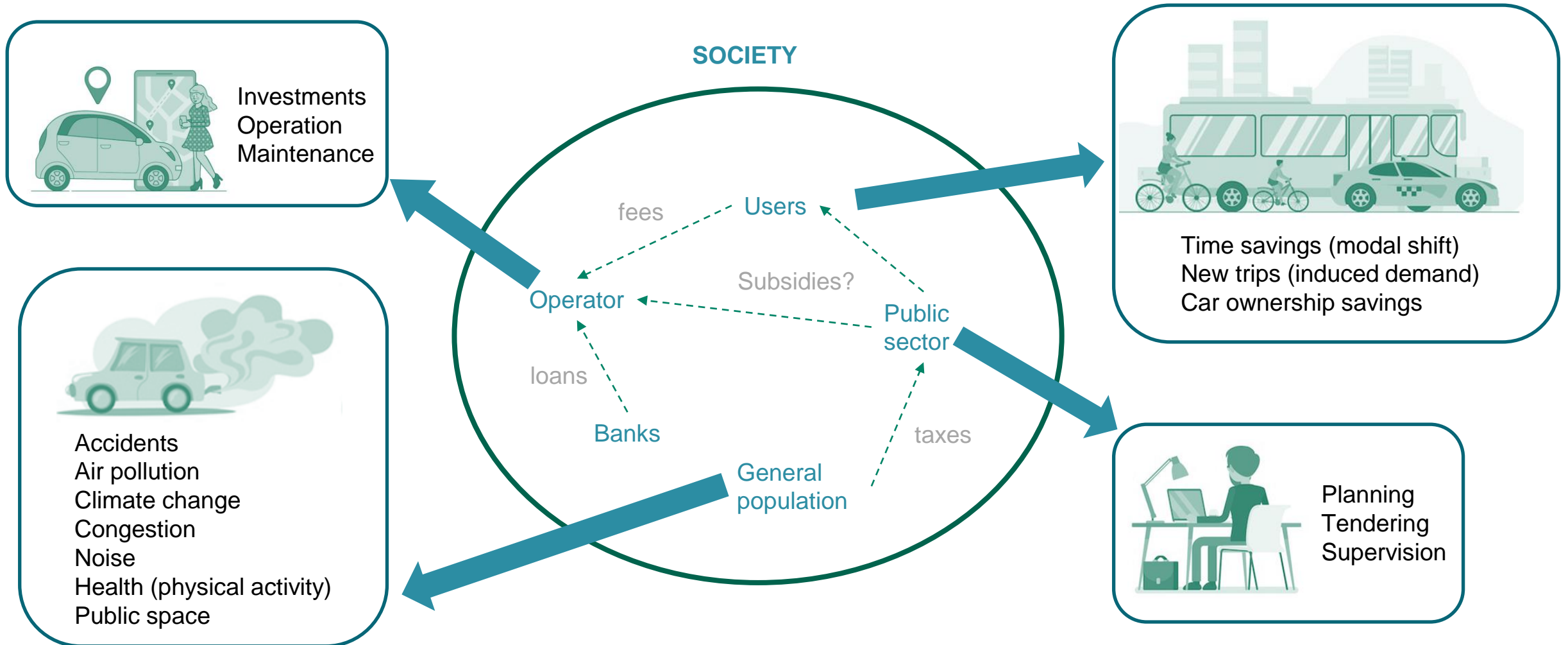
# Cost-Benefit Analysis

Moving from impact assessment to  
program evaluation for better decision  
making

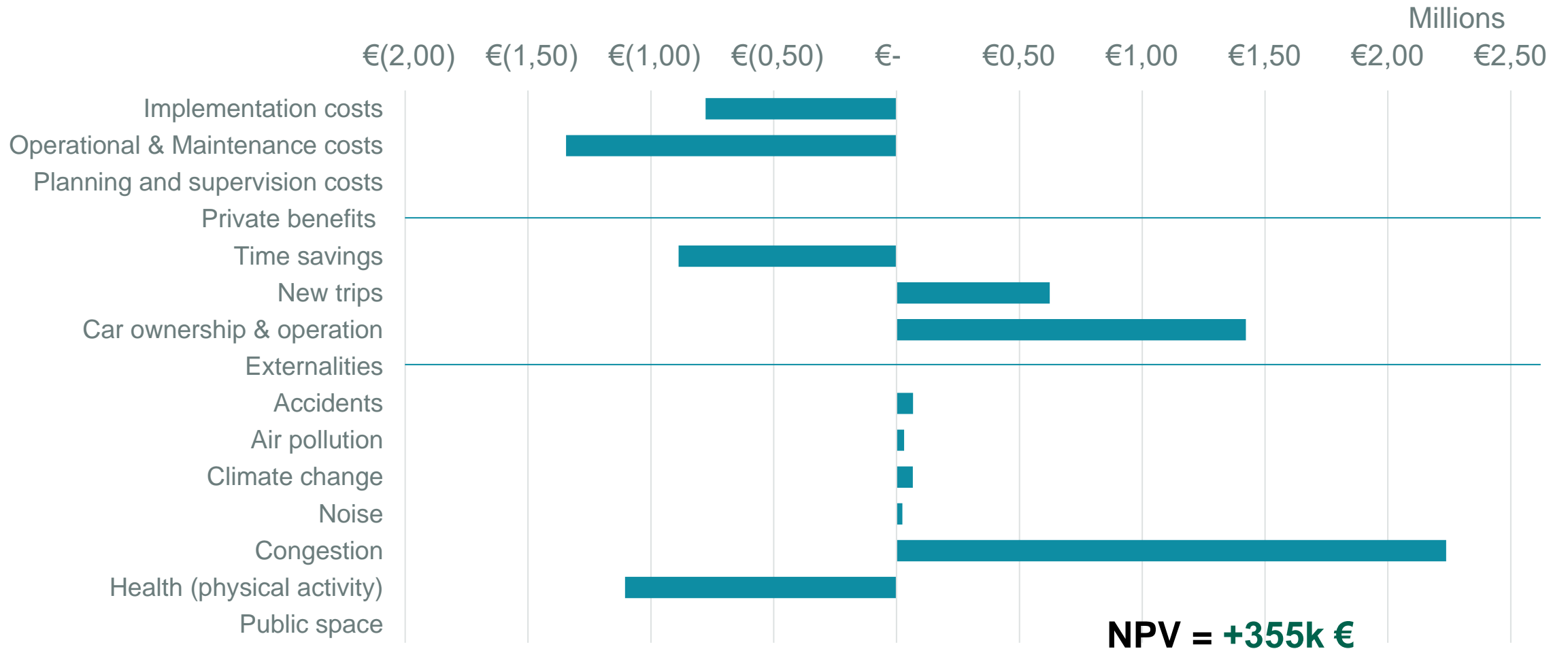
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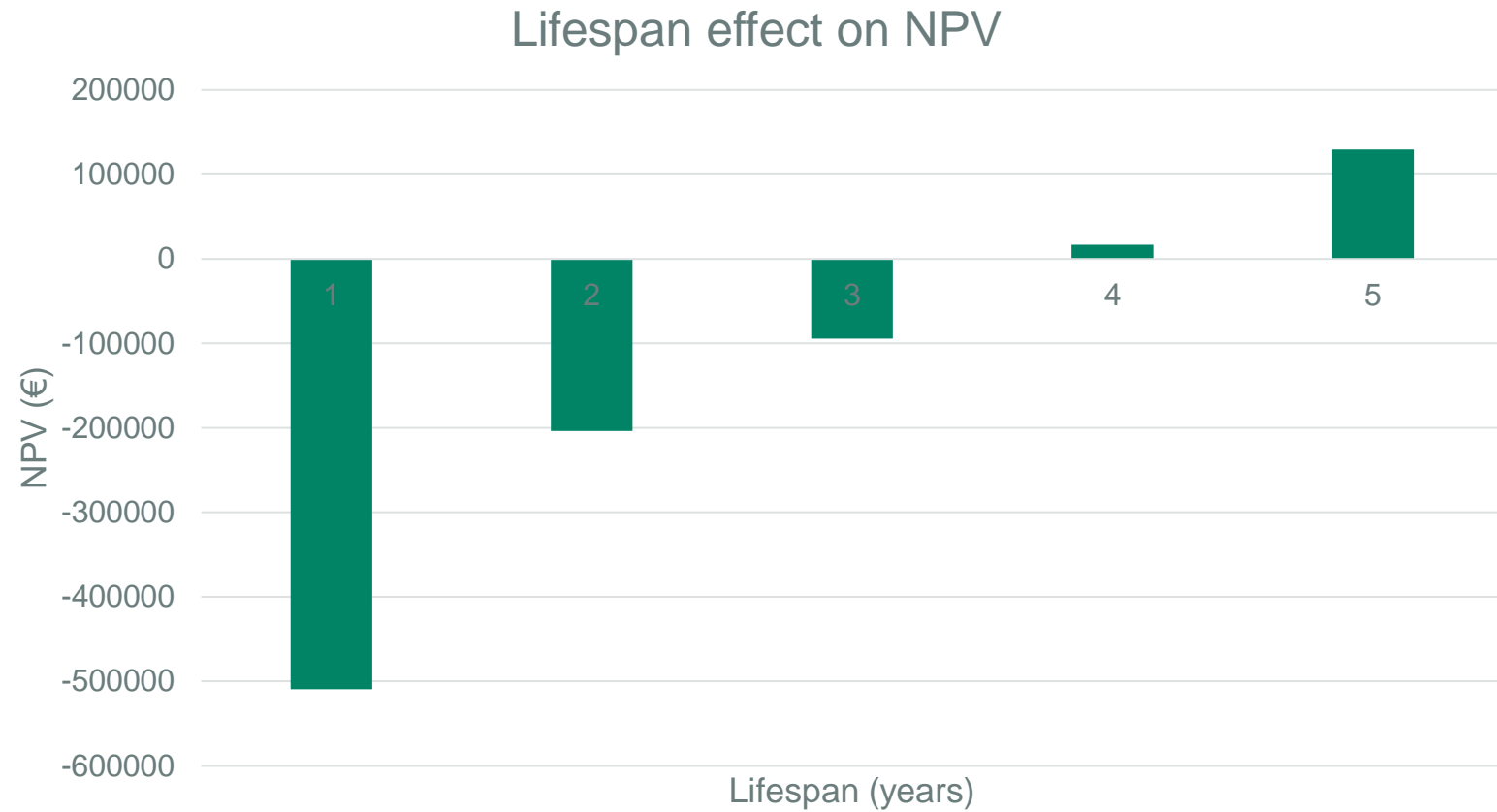
# Cost-benefit Analysis



# Cost-benefit analysis

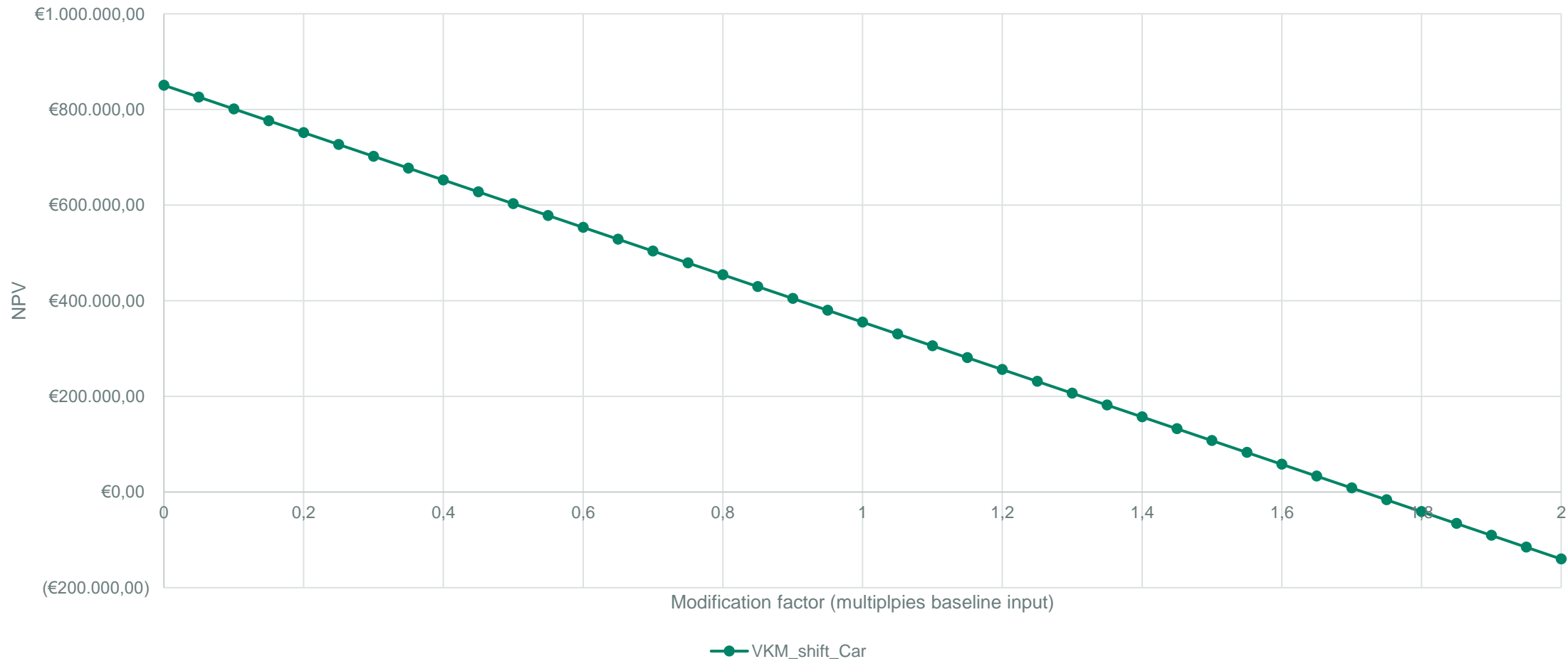


# E-scooters lifespan effect on NPV



# Sensitivity analysis (vkm shifted from car)

Sensitivity analysis (Case 1)





# Conclusions

- Importance of e-scooters' low **life cycle assessment (LCA)** to ensure they are beneficial
- Low **e-scooter's lifespan** (<4 years) will have a considerably negative effect on their benefits
- Low **commercial speed** difference between private car and e-scooters is key to have benefits



# THANK YOU

## GET IN TOUCH



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