

NOMMON



POPULUS

A VENUE

*Aligning shared mobility policies with GHG
emission reduction targets*



01

THE PROBLEM

0

~~THE AVENUE SOLUTION~~

2

03

CO2 REDUCTION POTENTIAL

0

PHASE 3 PILOTING

4

05

BLOCKING POINTS AND NEEDS

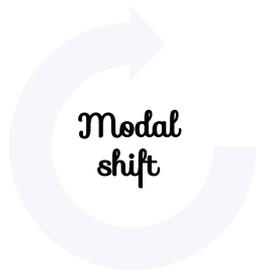
06

CURRENT RESULTS

The problem

Shared mobility offers great potential for reducing GHG emissions...

...depending on how it is used



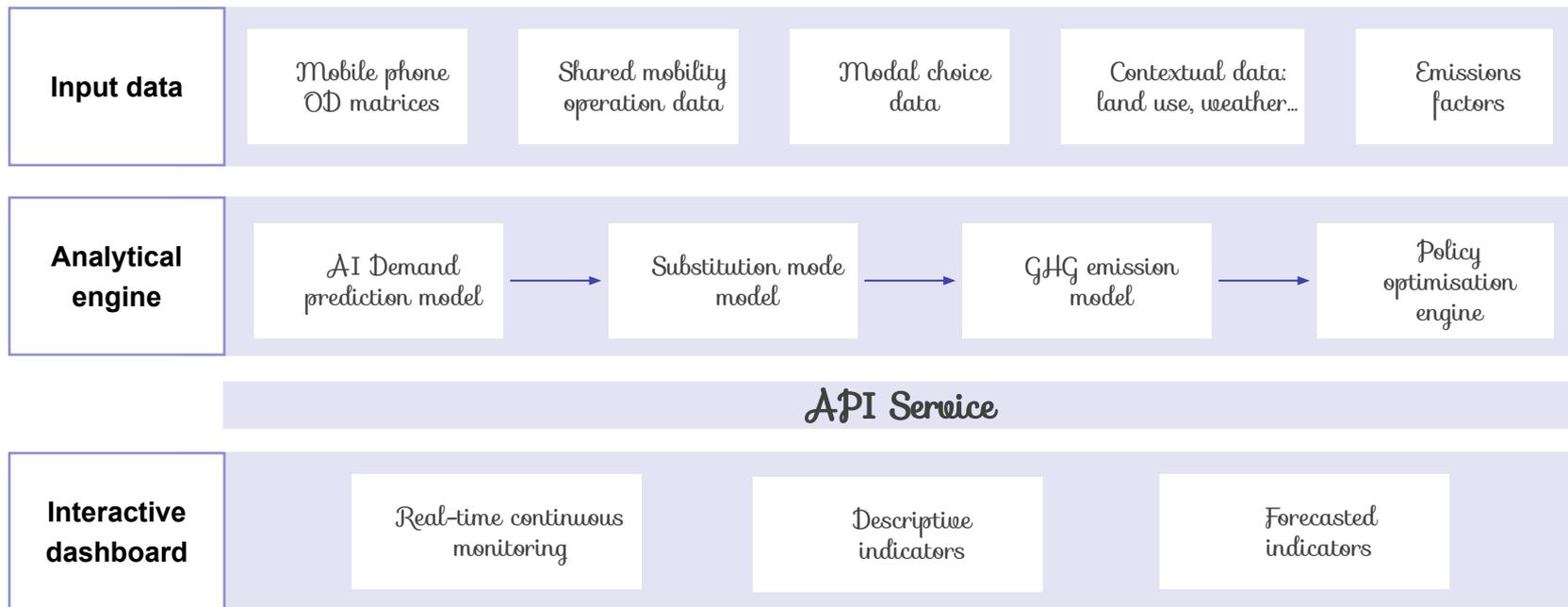
How many private car trips are replaced by shared mobility services?

How to avoid shifts from active mobility and mass transit services?

Need to move **from trial-and-error to evidence-based policies**

The AVENUE solution

An AI-based tool for aligning shared mobility policies with GHG emission reduction targets



CO2 reduction potential: use cases

What-if analysis of policies and regulations

	Assessment of service expansions	<ul style="list-style-type: none">▪ Zone ranking to prioritise the expansion of the current shared mobility system.▪ Cities can leverage the results of the simulations conducted with the tool for negotiating the conditions of the expansions and reaching agreements that take into account the effects on emissions.
	Optimal location of mobility hubs	<ul style="list-style-type: none">▪ Zone ranking to prioritise location of mobility hubs.▪ AVENUE can recommend, based on the predicted shared mobility demand and CO2 reduction, where it would be more beneficial to locate these hubs.
	Analysis of operators' performance	<ul style="list-style-type: none">▪ Predictions of demand, substituted modes and CO2 savings.▪ AVENUE provides cities with evidence of the impact of shared mobility on urban sustainability, supporting the improvement and fine-tuning of regulations and policies.

CO2 reduction potential: verification

Before and after analysis of policies and regulations

1 CO2 emission inventory

CO2 emissions in the areas where recommendations are going to be applied can be measured to track their impact. Cities environmental departments can be included in the decision workflow to help with measurements.

2 AVENUE demand monitoring

AVENUE's descriptive functionalities enable the user to track the impact on the demand in those areas where policies and regulations have been applied.

3 Shared mobility user surveys

Travel surveys conducted periodically enable the city to analyse the behavioural change of the population regarding shared mobility and the impact of the policies and regulations (first survey conducted during the pilot as baseline).

CO2 reduction potential: complementary analyses

During the piloting:

1

Stakeholder workshop

Expert opinion will be used as an alternative to objective measurements. To assess the feasibility of the recommendations and their potential impact, workshops between the city and shared mobility operators will be conducted at the end of the pilot.

2

Previous experiences

Previous experiences with similar policies and regulations (expansion, mobility hubs...) will be used to estimate the impact of the new actions considered.

3

Demand tracking

Although AVENUE's recommendations cannot be implemented in the pilot period, if any measures to promote the use of shared mobility have already been implemented or will be implemented in the coming months, the impact can be analysed using AVENUE.

CO2 reduction potential: AVENUE impact

AVENUE will help cities fulfil their climate action plans by fostering shared mobility implementation and increasing the percentage of shared mobility trips captured from more polluting private vehicles.

1

CO2 reduction

The best guess estimate for the reduction potential of CO2 emissions from urban traffic that can be realised thanks to AVENUE by 2025 can reach **between 10% and 60%** depending on the city it is implemented.

2

Private modal share

The lever used by AVENUE to reduce GHG emissions is promoting a shift from private cars to less polluting modes. Thanks to AVENUE private car modal share could decrease in 2025 from **4% to 5%**.

Phase 3 piloting

What has been done

- Further data collection
- Preliminary model calibration
- API development
- Integration with Mobility Manager
- Use case definition with cities

Current situation

- Pilots started in both cities
- Access granted to the tool
- On-boarding sessions

Next steps

- Use case online training
- Guidance and technical support
- Refinement of the tool
- Shared mobility surveys
- End of pilot stakeholder workshop

Delivery of a fully functional tool

Phase 3 piloting

What has been done

- Further data collection
- Preliminary model calibration
- API development
- Integration with Mobility Manager
- Definition of use cases with the cities

Current situation

- Pilots started in both cities
- Access granted to the tool
- On-boarding sessions

Next steps

- Use case online training
- Guidance and technical support
- Refinement of the tool
- Shared mobility surveys
- End of pilot stakeholder workshop

Delivery of a fully functional tool

Phase 3 piloting

What has been done

- Further data collection
- Preliminary model calibration
- API development
- Integration with Mobility Manager
- Definition of use cases with the cities

Current situation

- Pilots started in both cities
- Access granted to the tool
- On-boarding sessions

Next steps

- Use case online training
- Guidance and technical support
- Refinement of the tool
- Shared mobility surveys
- End of pilot stakeholder workshop

Delivery of a fully functional tool

Blocking points and needs



Project Plan adjustment

- Plan adapted to cities' needs (summer holidays)



Availability of test users

- Piloting month extended to give users more time to test
- Onboarding and training sessions planned to guide the users step by step



Stakeholder involvement

- Significant effort is being invested in linking with key stakeholders (e.g., shared mobility operators)
- Final workshop planned ahead of time to block availability of cities and operators



User survey

- To ensure high response rates, the surveys will be conducted directly through operators
- Additional data (e.g., household survey) will be used to complement the surveys

Mobility Predictions

Powered By **NOMMON**

DATE

4/1/22

CO₂ PREDICTIONS

Included Emissions Zones

All Zones

26,120 total est. shared mobility trips

46,833 estimated shared mobility emissions (Kg-CO₂eq)

9,528 private vehicle trips replaced
65,860 Kg-CO₂eq saved

4,232 public transit trips replaced
14,648 Kg-CO₂eq saved

11,968 active trips replaced
0 Kg-CO₂eq saved

392 other trips replaced
2,426 Kg-CO₂eq saved

36,101 estimated CO₂ savings from replaced trips (Kg-CO₂eq)

HIGH PRIORITY GEOGRAPHIES

Zone Prioritization

CO₂ Savings

RESET FILTERS



1 mi

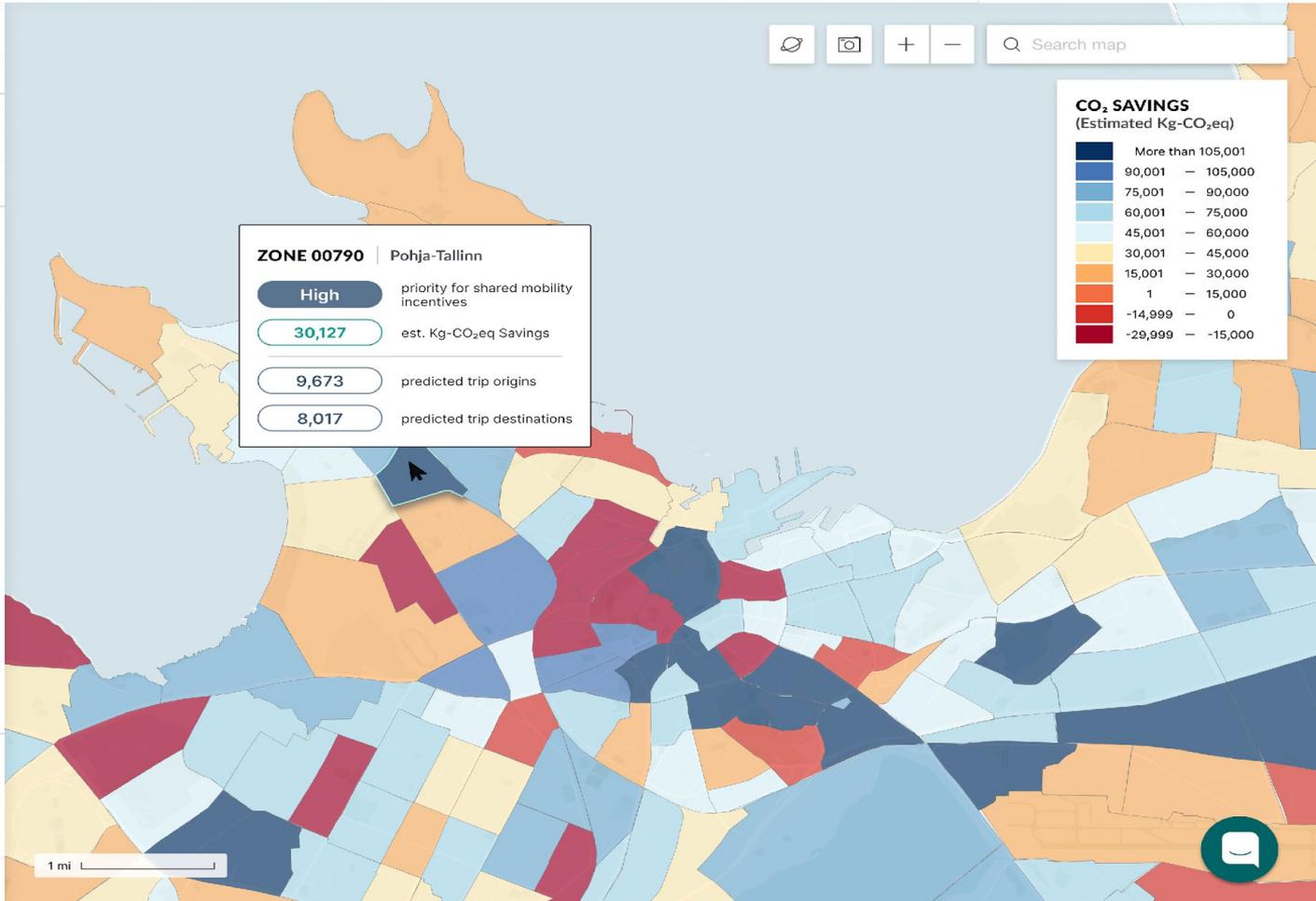
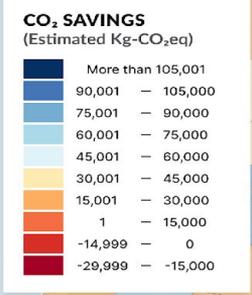
ZONE 00790 | Pohja-Tallinn

High priority for shared mobility incentives

30,127 est. Kg-CO₂eq Savings

9,673 predicted trip origins

8,017 predicted trip destinations



CONTACT

www.nommon.es

transport@nommon.es

