

Online tools supporting decision-making on holistic smart mobility

HUPMOBILE Final Seminar

1.12.2021 Teemu Surakka

ASSESSING THE POTENTIAL IMPACT



HUPMOBILE Self-Assessment tool



HUPMOBILE



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SUSTAINABILITY OF TRANSPORT SYSTEM SELF-ASSESSMENT

The HUPMOBILE toolbox is intended to give a rough estimate of the potential impact of selected mobility solutions compared to the current situation in your city. This self-assessment part of the toolbox is built to help you pinpoint possible areas of improvement in your region or the possibilities to have the best impact in selected sustainability aspects.

The statements in this self-assessment tool have been developed with the help of city and traffic planners of the participating cities of our project. However, the data needed to complete the assessment is kept at a manageable level. This way, the different stakeholders in implementing sustainable mobility solutions can also use their educated estimations in this assessment for shortlisting sustainable mobility solutions for the discussion. We are not collecting any personal information, and the results are only temporarily stored for visualization and sharing (printing or mailing) purposes. For this reason, you need to complete the self-assessment every time you visit our site if you want to use this functionality. You can also use this introductory video (TBA) for guidance in the self-assessment process and connecting the results with other HUPMOBILE tools.

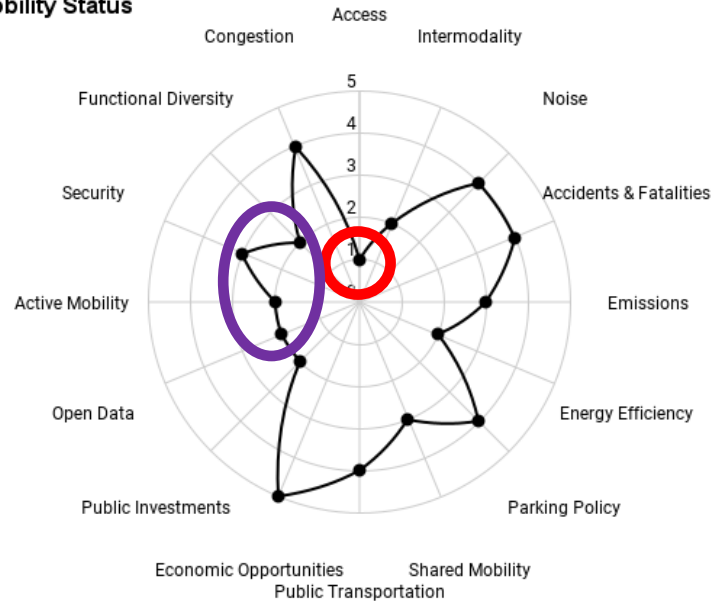


Available at:

<https://www.hupmobile-project.eu/tool/sustainability-transport-system-self-assessment>

HUPMOBILE Self-Assessment tool

Sustainable Mobility Status



Available at:

<https://www.hupmobile-project.eu/tool/sustainability-transport-system-self-assessment>

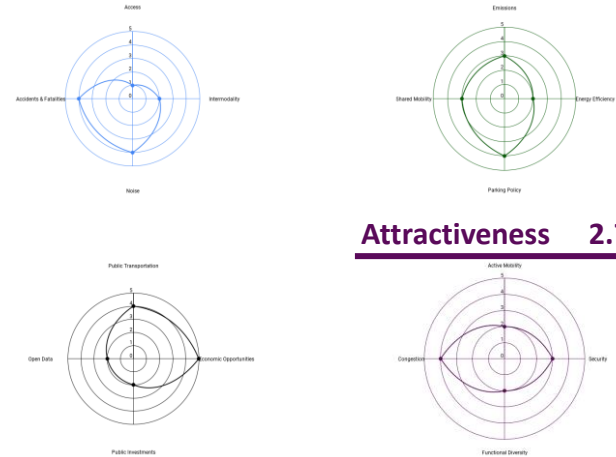
ASSESSING THE POTENTIAL IMPACT

Existing tools (example)	HUPMOBILE Self-Assessment tool
Target group(s): city planners	Target group(s): stakeholders
Simple yes/no questions (for planners)	Easy to answer statements
Sustainable urban planning	Sustainable mobility

Green City Tool

Select your topic and undertake our simple yes/no assessment of your city's APPROACH to sustainable urban planning. It covers 12 key environmental topic areas, and is based on the criteria used for the European Green Capital Award.

The screenshot shows a grid of 12 topic cards, each with an icon and a 'Start' button. The topics are: Air, Mobility, Energy, Climate change adaptation, Nature & Biodiversity, Noise, Governance, Water, Climate change mitigation, Green growth & innovation, Land use, and Waste.



ASSESSING THE REALIZED IMPACT



HUPMOBILE Impact Assessment tool

Building blocks of the assessment



Assessment process

To set up an assessment process, you can use the building blocks on the [Impact Assessment Process page](#) and localize the process for your needs. You can also contact us (information below) for assistance in any part of the process or if you want to include the resulting assessment in our database. We have also made you [example pages of a possible assessment process](#).



Assessment template

Each of the different fields of the [HUPMOBILE Assessment Template](#) has its purpose and should be completed according to the instructions found on the [Information Fields in the HUPMOBILE Assessment Document](#) page.



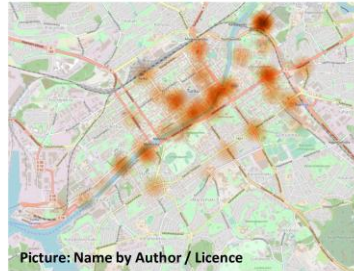
Supporting documents

Our repository of supporting documents - including information about the indicators and statements used in the assessment - can be found on the [Supporting Documents page](#).

HUPMOBILE Impact Assessment tool



Title
Subtitle



Picture: Name by Author / Licence

Land Area	
Users	
Solutions	
Location	
Affordability	
Costs	€/user

Details

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Unique aspects

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Frame conditions

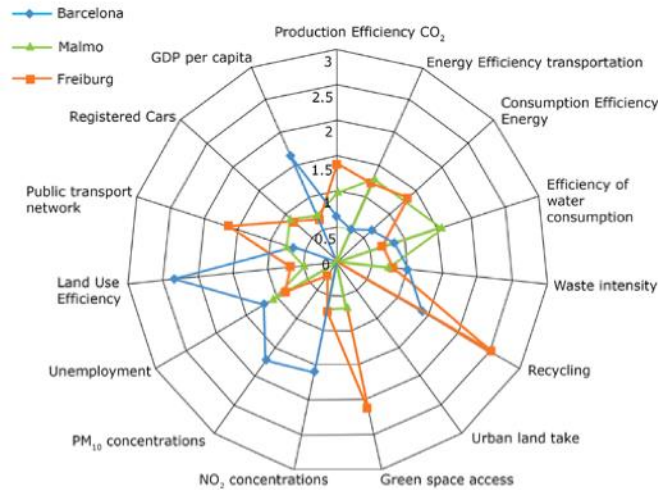
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Available at:
<https://sites2.org.aalto.fi/smartcommuting/>

ASSESSING THE REALIZED IMPACT

Existing tools (example)	HUPMOBILE Impact Assessment
Target group(s): policymakers	Target group(s): stakeholders
Quantitative assessment	Easy to answer statements
Benchmarking the development status	Sharing best practices

EEA Urban Metabolism Framework



FÖLI Bikes

Year-round city bike-share system



Land Area

Users

Solutions

Location

Affordability

Costs 20€/user

Details
In year 2019 there were 300 bikes, 39 bike-sharing stations with the core area of operation covering 25km² of the urban city area of Turku. In addition, there are 2 pop-up stations for discovering new potential locations and 2 additional stations with commercial partners. The potential user group is 39 400 inhabitants living in the proximity (300m) of the nearest station. The total costs of the system in the first year were 789 473 €, with some of the money coming from the EU and commercial collaboration (the cost for the city was 221 337 €). For the casual user, using the bikes costs 5€ per day (+ additional fee for longer than 30min use). However, the use of the system is included in most season PT tickets for the residents.

Unique aspects
Despite the severe winter conditions in Finland, the solution is a year-around and 24/7. For the winter, the bikes are maintained and fitted with winter tires. Also, a test route was established to discover the best ways to clear out the snow – however, the average use of the system in the winter was modest 300 trips per day. The winter increases the need to maintain bikes, and the users reported that sometimes the batteries, displays, and gear froze up in the bikes. Another unique aspect is that the system was tendered with a requirement of open interfaces, enabling seamless integration of the bike-sharing system to the rest of the public transport offering, data ownership for the city, and create stations only visible for the city employees in applications.

Frame conditions
According to a recent survey, the residents of Turku overwhelmingly back the city's strong support for cycling – 96% of respondents are in favour of improvements to cycling infrastructure. 25% of the respondents reported that they have reduced the use of private car due to new system. This is the first shared economy system in the city that has traditionally relied on efficient and affordable public transport and supporting active mobility.

Individual	Customer organization	Transport authority	City / Society	Legend
Strategic Integration	Organizational changes	Support from the management	Access to mobility services	Positive impact
Set of services user	Flexibility	Booking platform	Intermodal integration	Highly positive impact
Security	Use of existing time	Service visibility	Seamless passenger transport	Medium positive impact
Overall mobility system	Quality and well-being	Clear parking among partners	Air pollution emissions	Neutral impact
Service reliability services	Use of existing resources	Secure maintenance	Less of public transport	Highly negative impact
Quality	Number of existing users	Overall mobility system	Security & Security	Highly negative impact
Right accessibility	Security	Customer engagement	Security	Highly negative impact
Flexibility	Access to mobility services	Organizational changes	Urban functional diversity	Not possible to assess
Cooperation and delivery	Empowerment and delivery	Role of public transport		
Booking	Clear parking among partners	Cooperation and delivery		
Use of existing time				

Disclaimer: Assessment made by the research group

SEARCHING FOR OPPORTUNITIES



SEARCHING FOR OPPORTUNITIES

Existing tools (example)	HUPMOBILE Impact Assessment
Target group(s): stakeholders	Target group(s): stakeholders
Active promotion	Interactive filtering of results
Inclusion of solution providers	Connection between tools

BABLE HOME EXPLORE SPOT CONNECT LOG IN SIGN UP

Found 31 results in 8 milliseconds. Displaying results 1 to 25 of 31.

Solution

INTELLIGENT AND CONNECTED PUBLIC SPACE

An intelligent and connected public space collects data in public areas and displays or reacts on the data. The data can be securely transferred via Wi-Fi or other similar technologies to be, i.e. combined with a central...

[Go to Solution](#)

Solution

WASTE SEPARATION AT SOURCE

In 2017, 70 percent of the global waste has been generated in cities - and a rising trend is expected in the next years. One step to efficiently and economically process this waste is the waste separation at source. It is fundamental for reusing and recycling...

[Chat with us!](#)

Solution

VIRTUAL POWER PLANT

The concept of Virtual Power Plants (VPPs) overturns the more traditional idea of relying on centralised (often CO2-emitting) power plants for predictable and reliable power output. As more and more small and large independent power producers enter the scene, solar, wind, wind...

[Go to Solution](#)

Smart Commuting

Impact Assessment Tool Accessibility statement Privacy Policy HUPMOBILE Database of successful mobility solutions

HUPMOBILE Database filtered by operating conditions

The database is filtered in real-time, so start with the most important operating condition and add others until a suitable set of solutions for your needs is portrayed.

Land Area

- All
- Under 5km²
- 5km² - 25km²
- 25km² - 100km²
- 100km² - 400km²
- 400km² and over

Users

- All
- Under 20k
- 20k to 100k
- 100k to 300k
- 300k to 1M
- Over 1M

Access

- All
- Bike sharing system
- Car sharing system
- Rail based transportation
- Good PT coverage
- Excellent PT coverage

Location

- All
- Steep topography
- Presence of water
- Large transport node
- Snow
- Snow in challenging conditions

Affordability

- All
- People experiencing mobility poverty
- No actual mobility poverty
- Low impact of public transport
- Subsidies for vulnerable groups
- Free PT

<https://sites2.org.aalto.fi/smartcommuting/hupmobile-database-of-successful-mobility-solutions/>



HUPMOBILE

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