



How AI reduces emissions in traffic management

SustainableSolutionsMatch

Welcome!

Session objective

Urban traffic emissions remain a critical challenge, with cities still struggling to meet climate and sustainability goals.

This session aims at demonstrating how AI can reduce congestion, optimise traffic flow and encourage more sustainable transport choices like cycling.

Innovative solutions such as **smart parking, multimodal traffic analytics, delivery optimisation, cycling mobility tools, autonomous driving and advanced traffic management systems** will be presented.

In short, the session will inspire mobility stakeholders on how AI technologies can directly contribute to cleaner, smarter and more sustainable urban transport.



Session Agenda

10:00-11:00

- Welcome & Introduction
- Pitch Presentations:
 - **City of Torino** - Elena Deambrogio (Italy) - Testing the future: how urban living labs accelerate low-emission mobility (ToMove experience)
 - **VMZ** – Jan Katker (Germany) - Turning data into cleaner streets: simulating urban traffic measures with a traffic–environment digital twin.
 - **DataFromSky/RCE systems** – David Herman (Czech Republic) - Computer vision for cleaner cities: real-time traffic analytics with AI.
 - **Beemo** – Achim Hennecke (Germany) - Cycling intelligence: AI for greener urban mobility planning.
 - **CityZ** – Andrea Buri (Italy) - Smart parking, smarter cities: AI-driven solutions to cut urban traffic emissions.
 - **Cartoway** – Gwénael Rault (France) - Optimising deliveries with AI: greener routes for a low-carbon Europe.
 - **Telraam** – Kris Vanherle (Belgium) - AI-powered multimodal traffic insights for low-emission urban mobility.
 - **Parquery** – Andrea Fossati (Switzerland) - From cameras to clean air: how AI transforms parking and traffic flow.
 - **Hypervisoul** – José Triano (Spain) - AI-enabled road orchestration: reducing emissions without new infrastructure.
- Closing Remarks

Welcome & Introduction

Who's organising?

Chiara Soffietti

Camera di commercio di Torino
– Italy

Co-Chair SG Digital

Member of TG Sustainability

Wolfgang Treinen

Berlin Partner for Business and
Technology - Germany

Co-Chair SG MAT - Mobility,
Automotive, Transport

Benno Weissner

ZENIT

Chair SG Digital

Member of TG Sustainability

Welcome & Introduction

Let's play by the rules: smooth sailing for our session!

- **Mute Policy:** Please remain muted unless speaking to avoid background noise.
- **Q&A Time:** After each pitch, there will be 1–2 minutes for questions. Please use the chat to ask questions.
- **Time management:** Pitchers, please keep track of your time. We will inform you if 5 minutes have passed.
- **Technical Issues:** If you encounter issues, use the chat to notify the host.
- **Every participant can ask for meetings with the speakers!**



Pitch Presentations

Time to meet the end users first!

Two spotlights are positioned at the top of the slide, one on the left and one on the right. They cast two overlapping beams of light that converge on a central blue oval at the bottom of the slide. The text "Pitch 1", "City of Torino", and "Elena De Ambrogio" is centered within this oval.

Pitch 1
City of Torino
Elena De Ambrogio



Living Lab

ToMove

**Challenges & Opportunities for a
more Sustainable, Efficient and
safer Mobility in Torino**

City of Torino

Elena Deambrogio

Head of Open Innovation Unit



Sustainable, Efficient, Safe Mobility for TORINO

- *Urban mobility is undergoing a profound environmental, technological and social transition. Cities must cut traffic-related air pollution and emissions (PM, NOx), reduce congestion, improve safety for vulnerable users, and ensure accessible and inclusive mobility services for all.*
- *Torino is willing to address this challenge by transforming fragmented systems into an integrated, data-driven mobility ecosystem that combines cleaner logistics, smarter traffic management and safer urban infrastructure.*
- *To this scope, since 2022 there is a dedicated “Living Lab on MaaS and CCAM” called ToMove providing an integrated urban innovation infrastructure – including regulatory sandboxes, large-scale CCAM & MaaS pilots, Digital Twin capabilities and other smart road assets– enabling the deployment, validation and scaling of data-driven mobility services consistent with net-zero targets.*



MINISTERO
DELLE INFRASTRUTTURE
E DEI TRASPORTI



DIPARTIMENTO
PER LA TRASFORMAZIONE
DIGITALE



CITTA' DI TORINO



€ 7 millions
budget

Call4Testing
€ 1.38 millions

Strategic objectives
Environmental sustainability
Safe and inclusive mobility
Traffic decongestion

What is it
A Living Lab across Turin exploring new scenarios for smart and sustainable urban mobility, using innovative cooperative, connected, and autonomous mobility solutions in the Mobility as a Service paradigm

Funding program
Funded with PNRR MaaS4ITALY funds from the Department for Digital Transformation (DTD)

Living Lab ToMove

3 Large Scale Demo

- Digital Twin for Smart Mobility (USD 1)
- On-demand autonomous shuttle service (USD 2)
- Robotics solutions for goods delivery (USD 3)

13 small scale demo
+30 businesses funded
7 startups accelerated

39 months
starting from
24/03/2023

MaaS
&
CCAM



HOW?
A regulatory sandbox has been authorized by National authorities for CCAM testing in Torino.

Which Net-Zero Urban Mobility Solutions we are seeking?

Clean Air

- *PM reduction · Smart cleaning · Electrification · AI traffic optimisation*

Smart Flows

- *Adaptive signals · V2X · MaaS integration · Congestion prediction*

Safe & Inclusive mobility

- *Smart crossings · AI risk alerts · Services for vulnerable users*

Data-Driven Governance

- *Digital Twin · Mobility Data Space · Emission modelling*

How to assess solutions

Impact – Measurable contribution to emissions reduction, traffic efficiency, safety and accessibility for all users.

Feasibility – Technologically mature, economically sustainable and operationally integrable within existing urban systems.

Scalability – Deployable at city scale and replicable

Interoperability – when relevant, compatible with C-ITS infrastructure and MaaS ecosystem.

How to Engage with Torino for Net-Zero Mobility Innovation

- While no Calls are currently open and the first phase of the ToMove Living Lab will conclude at the end of 2026, **net-zero urban mobility remains a strategic priority for the City of Torino.**
- Companies and innovators from Italy and beyond are welcome to:
 - ◆ Express interest in future pilot activities
 - ◆ Propose use cases aligned with net-zero mobility
 - ◆ Explore matchmaking with local industry, research centres and mobility operators
 - ◆ Propose joint proposals for EU-funded projects
 - ◆ Engage in early-stage co-design for upcoming sandbox initiatives

How? Follow us at <https://torinocitylab.it/en/to-move/>

Access to **Torino Talent Gateway** the ecosystem initiative featuring a structured soft-landing and innovation platform: 👉 <https://torinocitylab.it/en/torino-talent-gateway/>

ToMove

Projects Selected – ToMove4Future

What problems did they address in terms of **traffic emissions**?

  <p>Real-time Urban Monitoring</p> <p>LIDAR & edge computing for traffic and pedestrian analysis</p> <ul style="list-style-type: none"> ✓ Better traffic management and reduced stop-and-go emissions real-time data 	  <p>AI-Powered Digital Twin (Replica Torino)</p> <p>Scenario testing for congestion reduction, optimised flows and lower PM exposure</p> <ul style="list-style-type: none"> ✓ AI-enabled Digital Twin simulating urban dynamics for emission policy 	  <p>Eco Routing & MaaS (Urban Green Navigator)</p> <p>AI-based low-impact route optimization and mobility incentivization</p> <ul style="list-style-type: none"> ✓ Promotion of sustainable mobility and low-emission routes 	  <p>Smart Charge Nodes (HYDRA voltaage)</p> <p>Optimization of EV charging nodes for electrification goals</p> <ul style="list-style-type: none"> ✓ Supports electrification of mobility and access to low-emission travel
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Overall Contribution

- ✓ Reduced congestion
- ✓ Improved public transport efficiency
- ✓ Accelerated electrification
- ✓ Lower last-mile emissions

#EENCanHelp

Book a meeting with: City of Torino

Elena Deambrogio

Head of Open Innovation

City of Torino

Elena.deambrogio@comune.torino.it



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MaaS

Mobility as a Service for Italy | *Living Lab ToMove*





Pitch Presentations

Time to meet end user and innovator

Pitch 2
VMZ
Dr. Jan Kätker



Turning Data into cleaner Streets: Simulating Urban Traffic Measures with a Traffic-Environment Digital Twin



vmz

VMZ

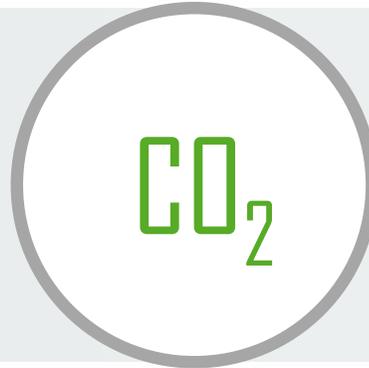
Dr. Jan Kätker
CEO

Challenges faced by cities



Air Quality

New legal requirements for compliance with limit values to protect the public from harmful pollutant concentrations and to **meet climate targets**



Climate Protection

Meet climate targets and monitoring of the progress on the way to become a climate-neutral city



Management of major construction sites

Backlogs in the rehabilitation of highways, bridges and tunnels create high demands for **the planning and coordination of construction sites**

Air Quality is a pressure point

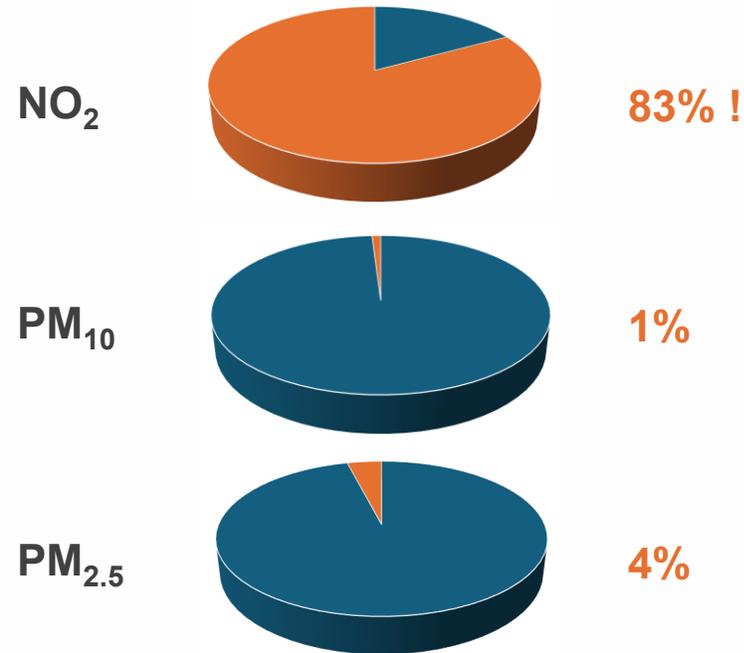
EU Standard
2030

NO2 20 µg/m3

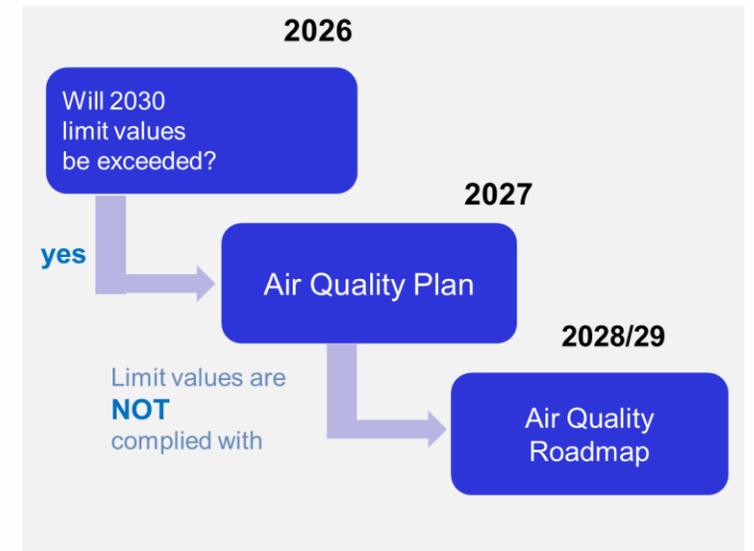
PM10 20 µg/m3

PM 2.5 10 µg/m3

Current Exceedance
of Limit Values (Germany)



Cities must now act!



Traffic-Environment Digital Twin



- Complete Digital Twin
- State of the Art Traffic and Environmental Modelling
- Covers the period 2030+
- Bottom up Solution
- Easy to use
- Reference: City of Berlin (Go live mid 2026)

We are looking

- Cooperation partners for sales and local project management in European countries
- Innovative AI traffic modelling solutions

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Book a meeting with:

VMZ Berlin -
Dr. Jan Kätker

CEO
VMZ

jan.kaetker@vmzberlin.com

[linkedin.com/in/jan-kaetker](https://www.linkedin.com/in/jan-kaetker)



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Pitch Presentations

Time to meet the innovators!

Pitch 3
RCE Systems -
DataFromSky
David Herman



FLOW Traffic Emissions



DATA FROM SKY

DataFromSky

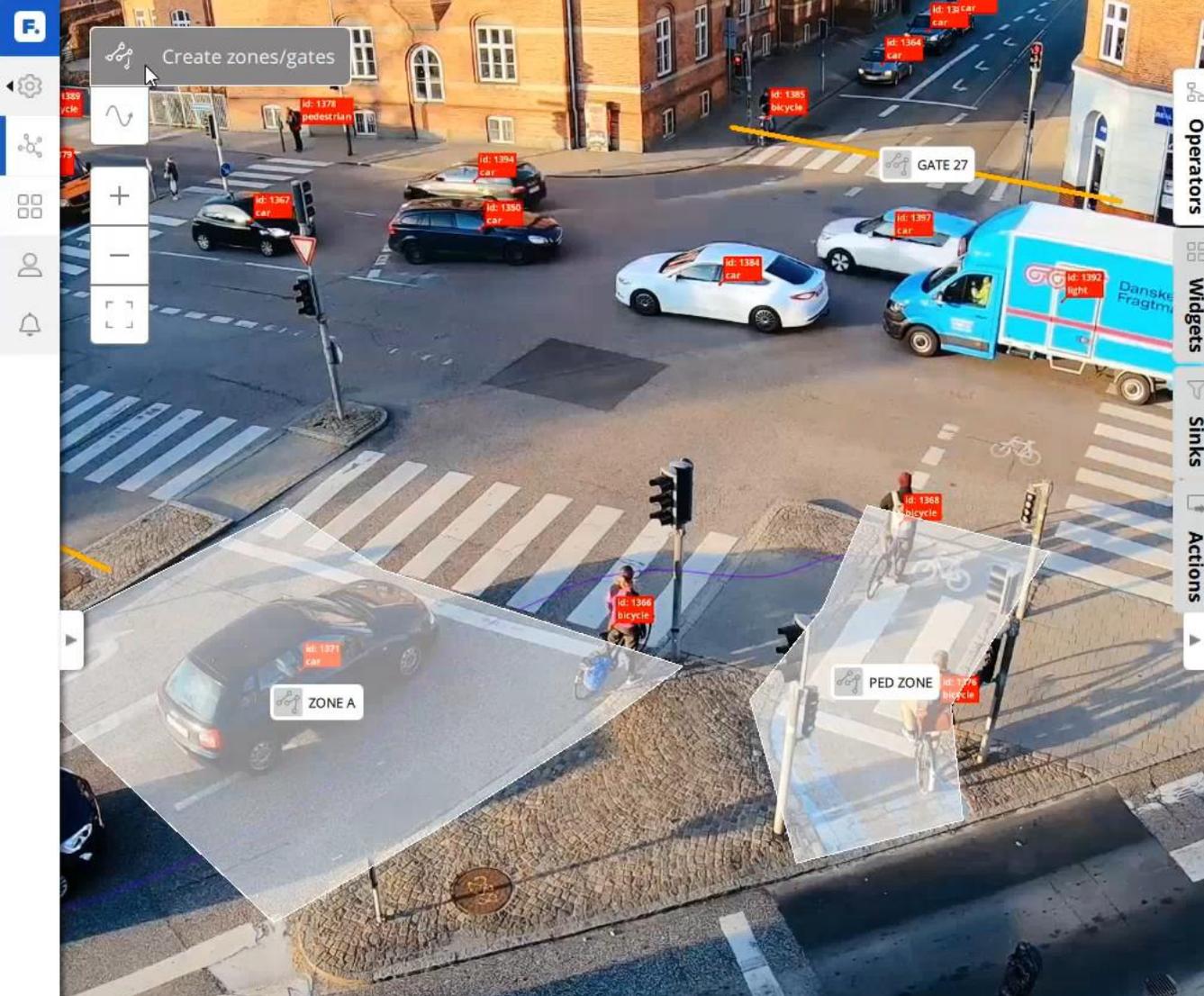
Filip Kaderabek
Business Development



[SustainableSolutionsMatch](https://www.sustainable-solutions-match.com/)

FLOW as a Visual Traffic Solver

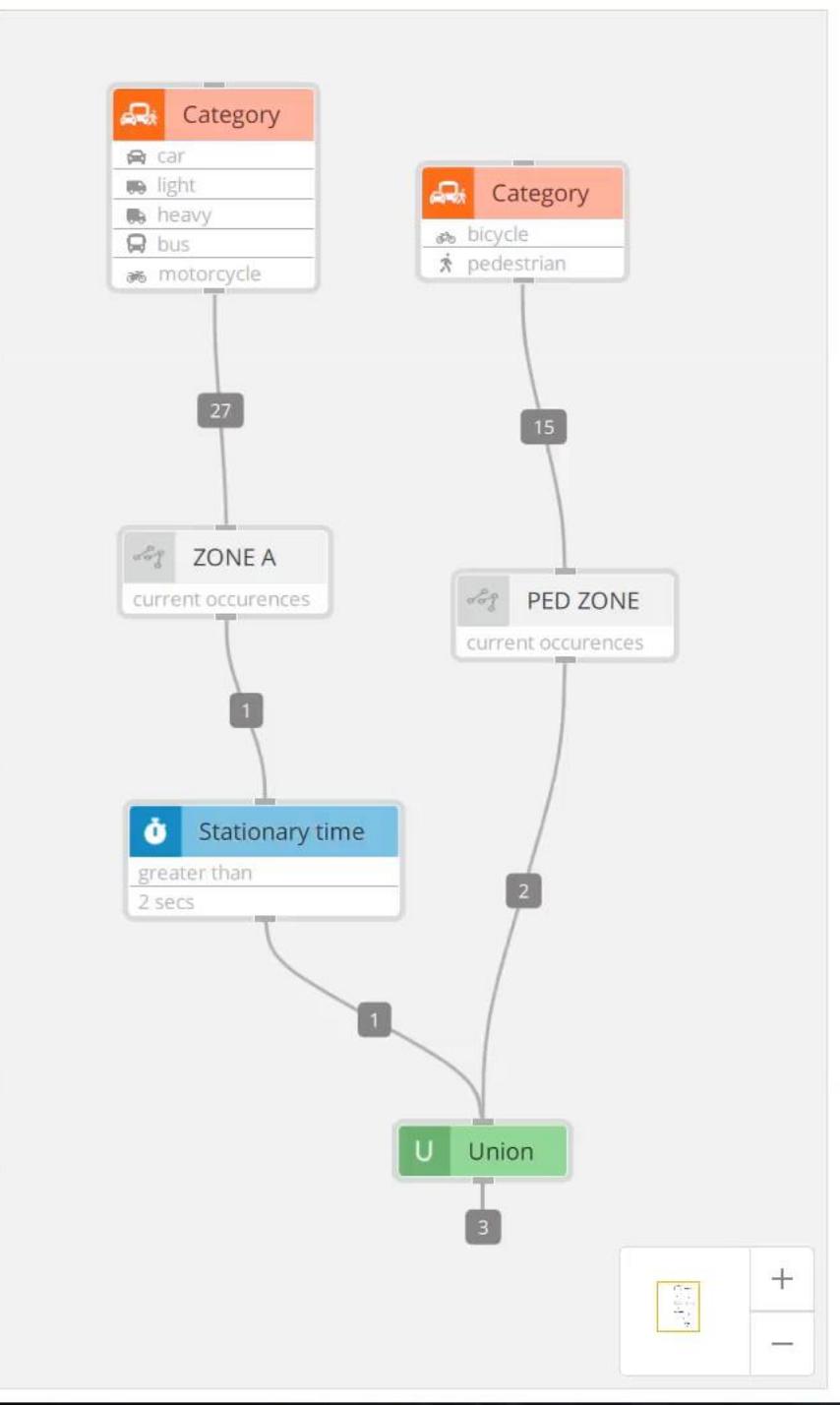
- *Video Analytics Engine*
 - *Powered by advanced deep-learning algorithms*
 - *Using own Deep Neural Network (DNN)*
- *Detects, tracks, and classifies hundreds of objects*
 - *Vehicles, bicycles, e-scooters, pedestrians and many more*
- *Outputs – event detections, safety indicators and statistics*
 - *API*
 - *Presentation dashboards*



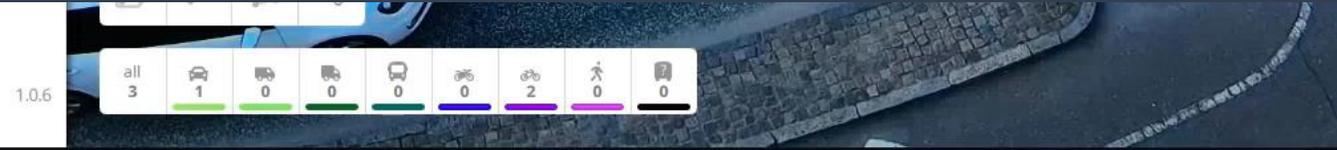
Programming elements

- Motion filters**
 - Speed
 - Acceleration
 - Time of passage
 - Stationary time
- Property filters**
 - Color
 - Category
- Group**
 - Risk analysis
 - Congestion detection
 - Group detection
 - Run in parallel
- Set operations**
 - Union
 - Intersection
 - Complement

Operators
Widgets
Sinks
Actions



One view, stream of traffic insight



Make the Road Traffic Emissions Visible

- *Thanks to AI video analytics we are able to get the telemetry data about vehicles, cyclists and pedestrians on the fly. Full anonymity of traffic participants is guaranteed.*
- *Traffic cameras are already present in many intersections and roads around the cities. There is no need to invest in the deployment and maintenance of the wide network of special sensors.*

Market/Target audience – Who can apply your solution?

- *As air pollution necessitates local solutions with global implications, **the decisions made by cities today can significantly impact the health of future generations.** It is our responsibility to rise to the challenge and contribute to a better, healthier future.*

Sustainable and circular innovation needs good networks along the whole value chain.

- *We are open to all kinds of cooperation partners, we are working with academy, municipal or commercial subjects.*
- *We can offer a comprehensive solution that:*
 - *Has user friendly and intuitive interface*
 - *Is well documented, there are available manuals and videos for particular use cases.*
 - *Allows simple Drag, Drop and Connect Visual definition*
 - *Allows comprehensible visualization of complex large-scale data*
 - *Is based on the cost-effective technology using existing infrastructure*
 - *Is easily scalable*

Decisions made by cities today can significantly impact the **health** of future generations.



FLOW Emissions - data for informed decisions, both long-term and live.

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Book a meeting with: DataFromSky

Filip Kaderabek

Business Development

DataFromSky (RCE systems s.r.o.)

Filip.Kaderabek@rcesystems.cz +420 602 108 376



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Pitch Presentations

Time to meet the innovators!

Pitch 4
Beemo
Achim Hennecke



Naviki – the bicycle app



beemo GmbH

Achim Hennecke
Managing Director

Naviki as a sustainable solution

Digital solutions related to cycling

- **Route planning** (7 specific route types)
- **Turn-by-turn navigation** (bicycle specific)
- **Documentation** (personal heatmaps, stats, goals)
- **Cycling Contests** (for companies, municipalities, groups)

AI solutions within Naviki

- *Support chat*
- *Personalised route suggestions*
- *Intelligent round trips*
- *Predictive maintainance*

Naviki's differential value and sustainable impact

- *Focus on cycling and its differentiated requirements*
- *Active in the field of cycling for >15 years plus open-minded university partnership*
- *Practical experience with many different B2B partners*
- *Measurable impact on the switch towards cycling*
 - *Eye opening for the potential of cycling*
 - *Making cycling attractive for beginners*
 - *Adaptability as a digital tool for cycling*

Market/Target audience

- **Companies** (*Naviki Contests for health and sustainability*)
- **Transport related services** (*Naviki Bicycle Routing for Navigation*)
- **Hardware manufacturers** (*digital connectivity related to cycling*)
- **Customers** (*everybody with an opportunity to cycle*)

Networking interests

- *Companies, municipalities and organisations that want to give cycling a push*
- *Hardware manufacturers that need digital connectivity related to cycling*
- *Platform providers searching for additional services related to cycling*

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Meet Naviki

Achim Hennecke

Managing Director
beemo GmbH
achim@naviki.org



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THE UNIVERSAL SMART PARKING SOLUTION



CityZ

Andrea Buri
CEO



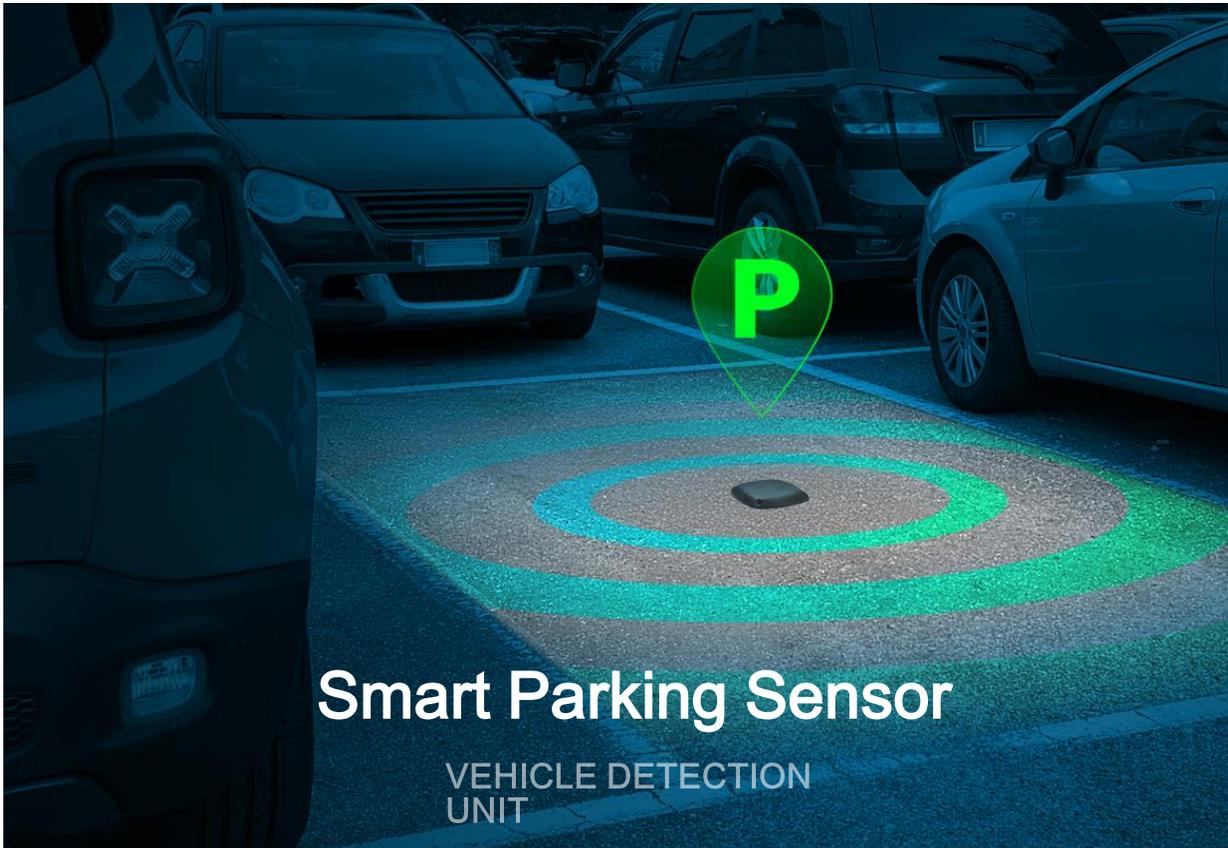
SustainableSolutionsMatch

PARKING PROBLEMS

*Estimates calculated per individual driver



OUR SOLUTION: SMART SENSOR



- ✓ Flush-mounted or surface installation
- ✓ Large-scale deployments
- ✓ Magnetic and radar technology
- ✓ Communication via NB-IoT
- ✓ Recognition of authorized vehicles with BLE

USE CASES



FLEET MANAGEMENT

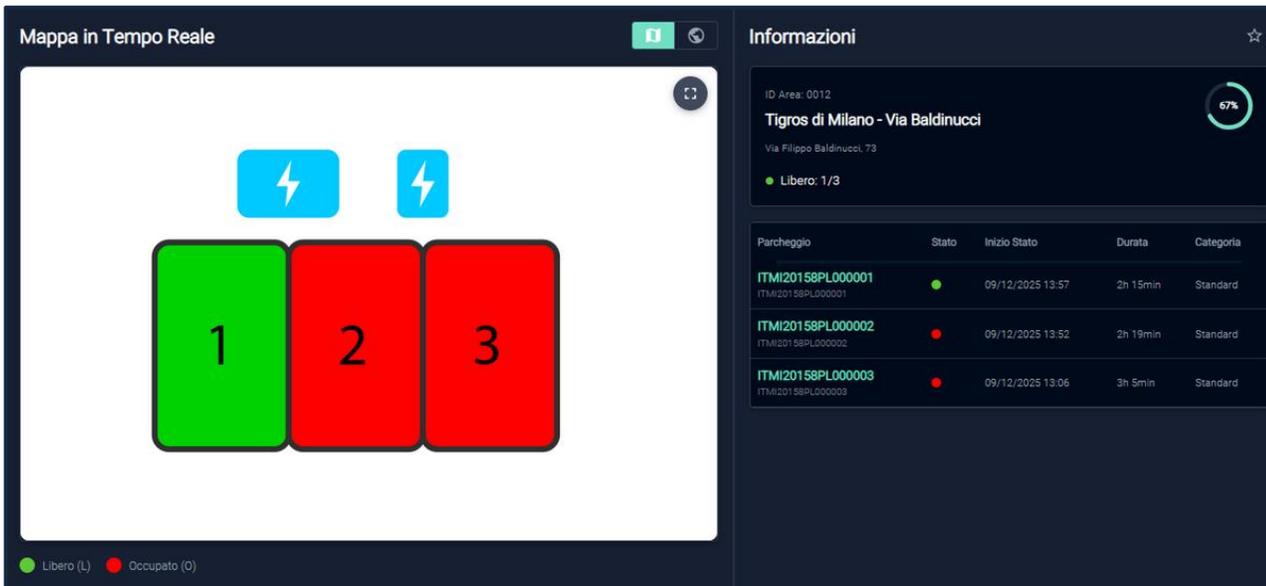
Optimization of parking and efficient fleet management



ELECTRIC CHARGING

Detection of unauthorized use and real-time availability of charging spots

CITYZ DASHBOARD



The dashboard displays real-time parking data through maps and charts, helping users easily understand usage trends and improve management and planning.



Analyzing parking data helps reduce traffic congestion at certain times of the day. Moreover, historical data analysis enables AI-based predictive models to estimate parking availability with good accuracy, improving planning and proactive mobility management.

SUSTAINABILITY IMPACT

Reduced driving time → lower emissions & fuel consumption

Optimized use of EV charging infrastructure and car sharing parking areas

Data insights for sustainable planning & better resource allocation

Supports environmental goals through measurable impact

We align with global sustainability goals, contributing to measurable impact in urban mobility and decarbonization.

7 AFFORDABLE AND
CLEAN ENERGY



11 SUSTAINABLE CITIES
AND COMMUNITIES



13 CLIMATE
ACTION



WHY NOW?

EV transition accelerating → infrastructure needs orchestration

Smart parking is a gateway to intelligent mobility ecosystems

Cities investing in sustainable mobility & data-driven solutions

The shift from free-floating to reserved parking for car-sharing fleets

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Book a meeting with:

CITYZ

Andrea Buri
andrea.buri@cityz.it



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Pitch Presentations

Time to meet the innovators!

Pitch 6
Cartoway
Gwénael Rault



Optimising Deliveries with AI

Greener Routes for a Low-Carbon Europe



Contact Cartoway



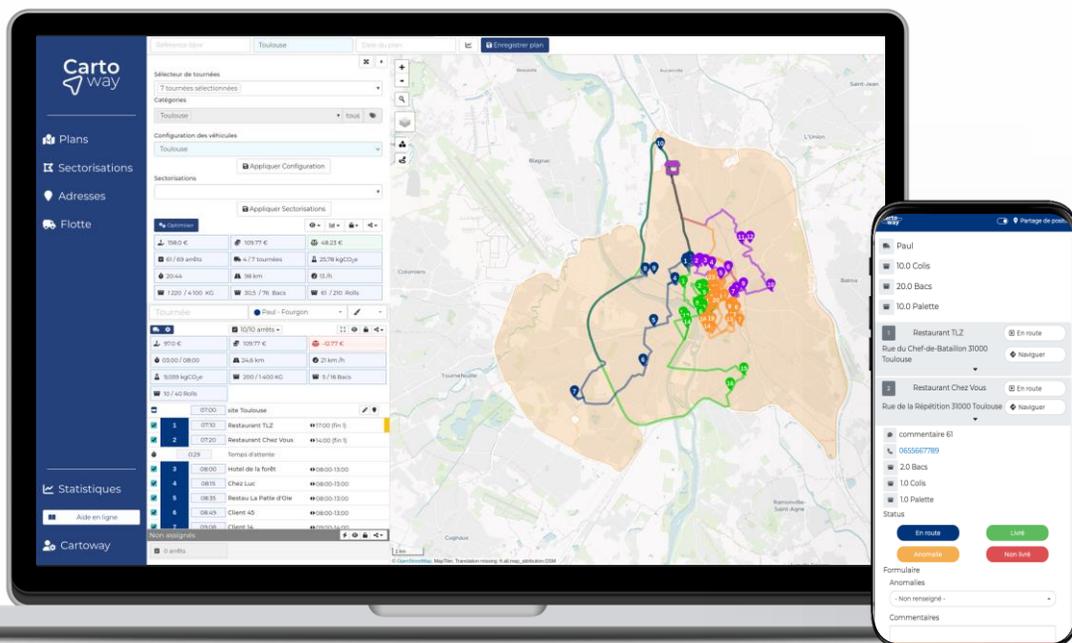
Gwénaél Rault, PhD
Tech Lead R&D
@Cartoway



SustainableSolutionsMatch

Cartoway

A strategic and operational solution for **wholesalers and delivery businesses**



Improve your own software with our APIs

- *Planner*
- *Router*
- *Geocoder*
- *Optimizer*



Limited Traffic Zones – A delivery pain point

The goal:

- > Less pollution emissions (CO₂/NO_x/PM)
- > Less noise
- > Less visual pollution

LTZ are good idea, right ?

The overnight reality

increased congestion in the zones during opening periods



Rather than a deterioration, this is an opportunity

With our AI tools:

- *Optimize your existing routes with LTZ and access time windows*
- *Simulate cargo bikes routes from urban hubs*
- *Automatically assign the most fitted and sustainable modes of transport that we support*



Cartoway



Value and sustainable impact

Reduced emissions

Optimized routes = fewer kilometers, less CO₂/NO_x/PM [1]

Modal shift enablement

Routes designed for cargo bikes, electric vehicles

Congestion reduction

Less time on the routes and adapting the fleet to actual needs

Improved efficiency

Increase the loading rate, faster planning

[1] Up to 40% reduced CO₂ emission for combustion engine vehicles



An example: Hoplunch

“Your favorite restaurants, delivered free of charge to your office for lunch break”

From 1 to 9 cities covered (feb. 2026)

**Entire fleet of electrical vehicles
van & cargo scooters**

**Custom Optimisation procedure
through Cartoway APIs**



Cooperation Partners beyond Customers

- **Software providers**
 - > Add mapping and route optimisation expertise to your own solution
- **Hardware and infrastructure providers**
 - > Solutions to ease the delivery.
ex: Telematic providers, storage solution providers, etc.
- **Supply chain & urban logistics consultants**
 - > Use our turnkey solution to bring more value to your customers



elp

Book a meeting with: Gwénaél Rault - Cartoway

<https://cartoway.com>

Contact me

gwenael@cartoway.com

<https://www.linkedin.com/in/rgwenael>



Cartoway



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Pitch Presentations

Time to meet the innovators!

Pitch 7
Telraam
Kris Vanherle



Citizen-powered traffic monitoring

**Kris Vanherle
Co-founder**



[SustainableSolutionsMatch](https://www.sustainable-solutions-match.com/)

Affordable traffic counting at scale

- *Simple sensor installed in citizen windows*
- *AI-on-edge counts cars, bikes, pedestrians*
- *Privacy by design: no images stored or transmitted*
- *Citizens install & maintain – zero deployment costs*



How it works

- *Mount sensor in window → starts counting automatically*
- *Built-in mobile connection (no WiFi needed)*
- *Data flows to open platform every 15 minutes*
- *Dashboard + API for cities, researchers, citizens*



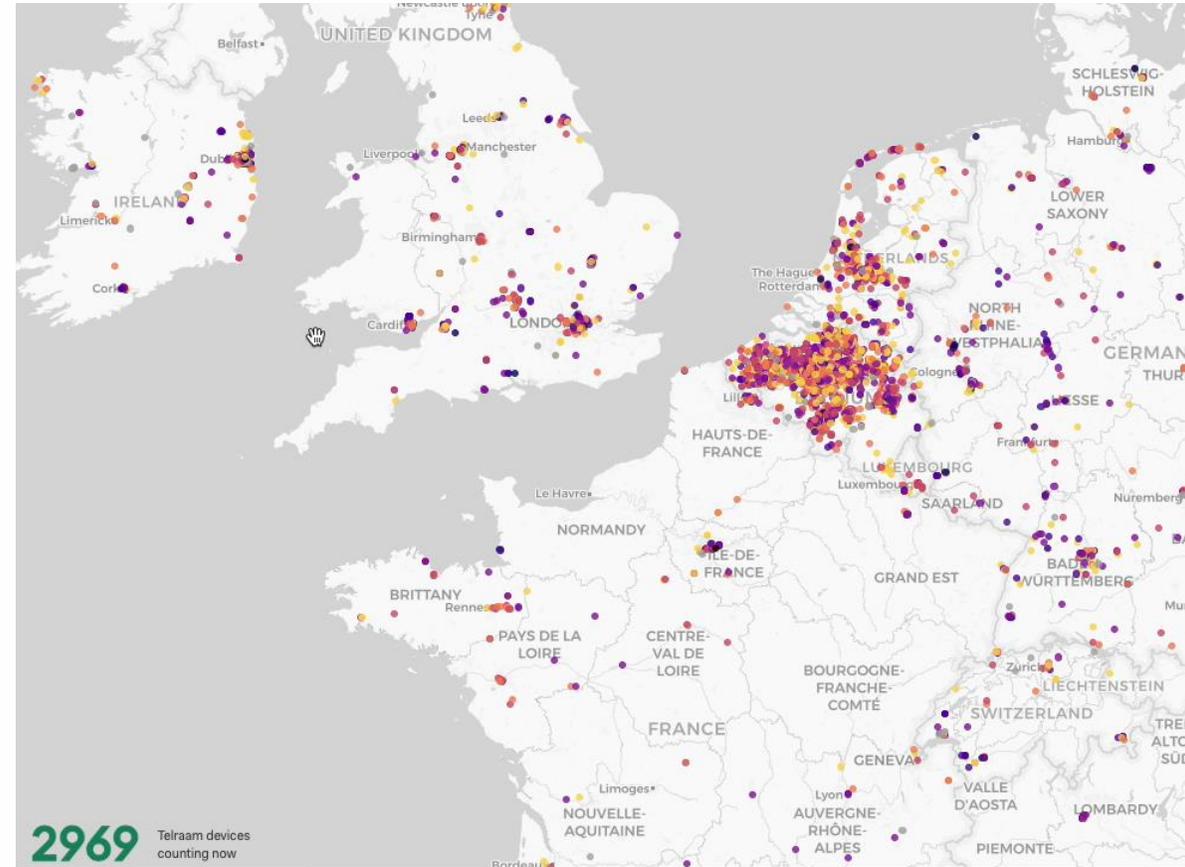
Sustainable impact

- *Democratizes mobility data for cities of any size*
- *Network-wide data: residential streets, not just arterials*
- *Enables evidence-based decisions for safer streets*
- *Builds citizen engagement in mobility policy*



Traction & target market

- 3,000+ active sensors across 19 countries
- ~30% of Belgian municipalities as customers
- €1.5M revenue, profitable, minimal marketing
- Target: municipalities, researchers, citizen groups



Looking for partners

- *Distribution partners for international expansion*
- *Smart city integrators & mobility consultancies*
- *Research collaborations on traffic safety & active travel*
- *Municipalities seeking affordable traffic insights*



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Book a meeting with: Telraam

Kris Vanherle

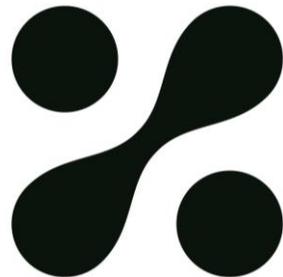
Co-Founder

Telraam / Rear window

Kris.Vanherle@telraam.net



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Pitch Presentations

Time to meet the innovators!

Pitch 8
Parquery
Andrea Fossati



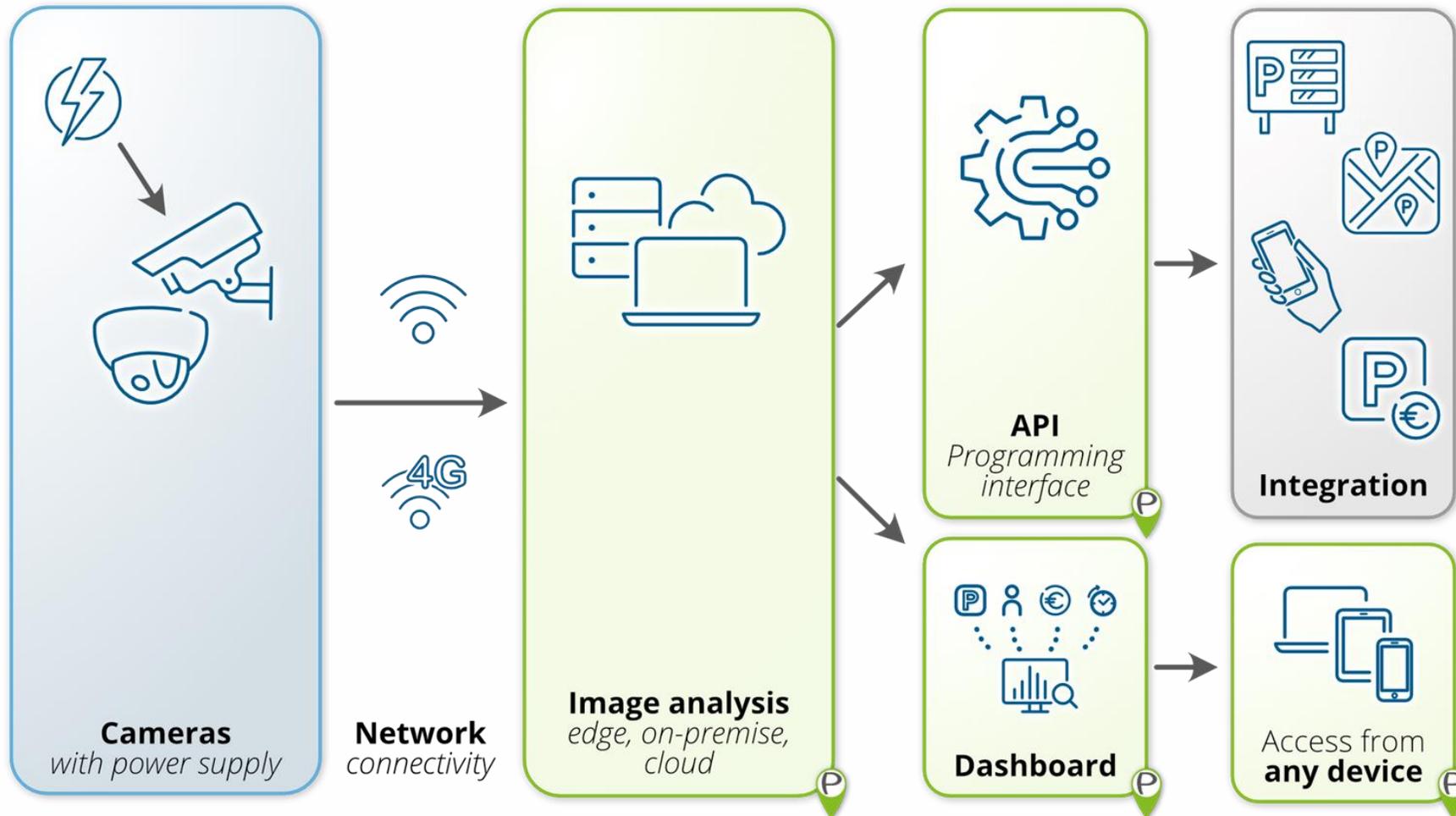
From Cameras to Clean Air: How AI Transforms Parking and Traffic Flow



Parquery

Sustainable Solutions Match 2026

17.03.2026



(Sustainability)²: Use less devices (reusing them for other purposes where possible) and produce sustainable output

For us citizens

More data on traffic → Better route planning
More data on parking → Less search traffic

For cities

→ Data-driven decision making
→ Smoother traffic
→ Efficient parking management



less traffic-related pollution

Parquery targets a very global market!



Besides customers we are always looking for commercial and distribution partners worldwide

- *Parking service providers*
- *System integrators*
- *Smart lighting suppliers*
- *Camera installers*
- *Camera manufacturers*

elp

Book a meeting with: Parquery

Dr. Andrea Fossati, CEO

+41 76 234 2948

andrea@parquery.com

www.parquery.com



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.eu





Pitch Presentations

Time to meet the innovators!

Pitch 9
Hypervisoul
José Triano



AI-powered solutions for smart roads



Hypervisoul

José Triano
CEO

Vehicle's cooperation: the promise of a 100% connected-and-automated vehicle world



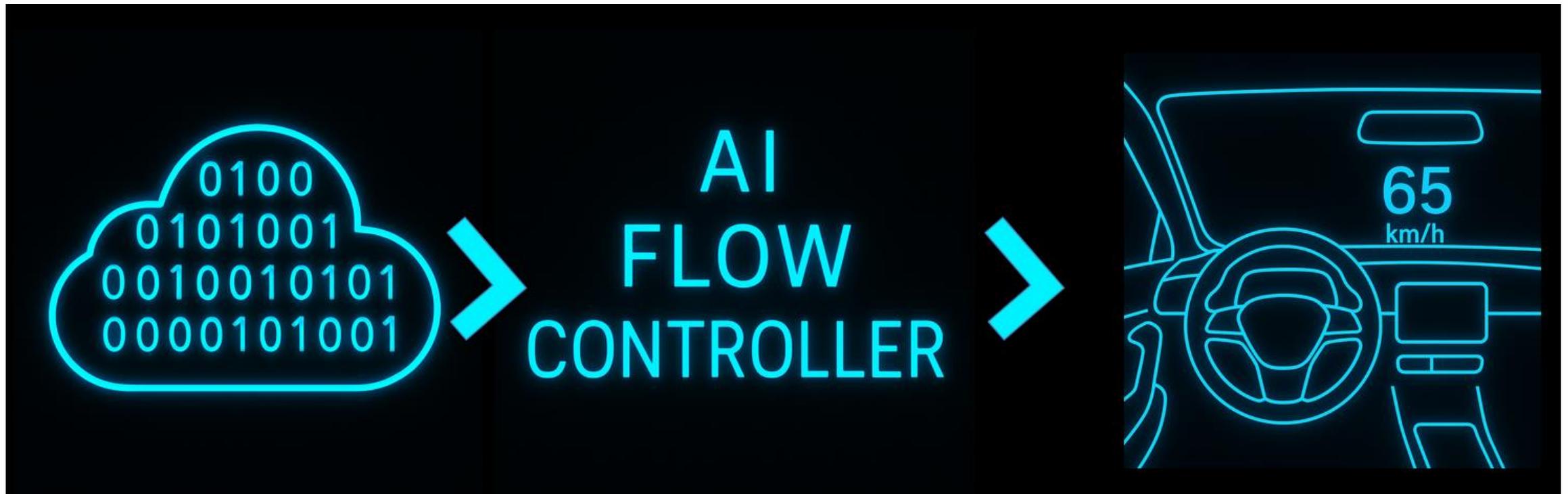
A new paradigm in traffic management: Traffic orchestration

Uncoordinated driving strategies → congestion.

Traffic flow is a coordination problem → orchestration is the solution.



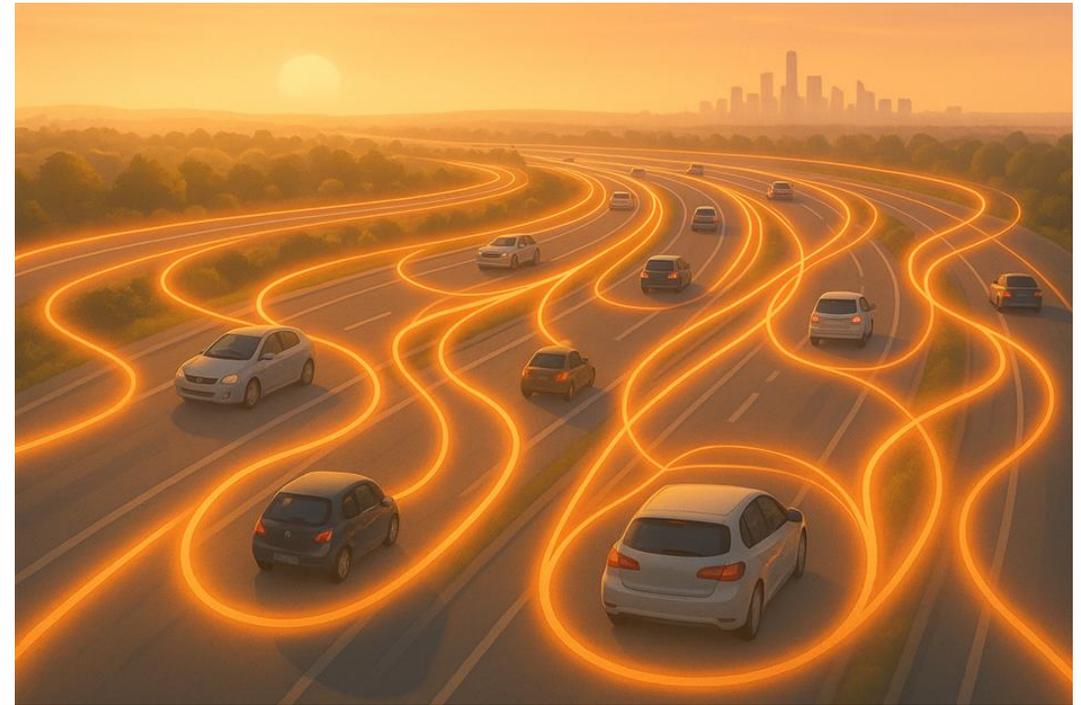
Traffic flow is a coordination issue, orchestration is the solution



People-powered mode



CAV-ready mode



Orchestration benefits: helping vehicles to move efficiently

- **Less stop-and-go:** smoother trajectories reduce shockwaves.
 - **Higher effective capacity:** better use of existing lanes.
- **Lower emissions & energy consumption:** Smoother flow reduces peaks and shocks.
- **Safety-aligned operations:** fewer hard brakes, lower conflict rates.



We are looking to connect with several types of cooperation partners:

- **Road operators and traffic authorities**
- **Consortium partners for upcoming European CCAM calls**
- **ITS / ADAS / CAV Technology providers**
- **Academic and research partners**

#EENCanHelp

Book a meeting with: Hypervisoul

José Triano

CEO

Hypervisoul

jose.triano@hypervisoul.com



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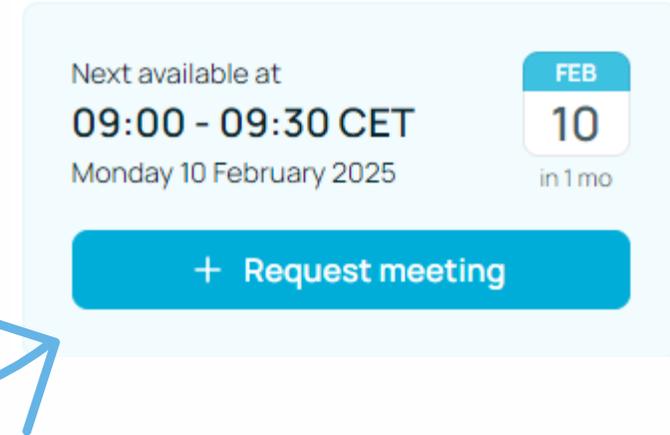




Closing Remarks

A big thank you to all pitchers and attendees!
We appreciate your participation today.

If you'd like to connect with any of the pitching companies, please use the matchmaking tool to **book a meeting!**

A screenshot of a meeting booking interface. It shows the text "Next available at" followed by the time "09:00 - 09:30 CET" and the date "Monday 10 February 2025". To the right is a calendar icon showing "FEB" and "10" with "in 1 mo" below it. At the bottom is a blue button with a white plus sign and the text "Request meeting". A blue arrow points from the text "book a meeting!" in the previous block to this button.

Next available at
09:00 - 09:30 CET
Monday 10 February 2025

FEB
10
in 1 mo

+ Request meeting

Need support? **Enterprise Europe Network is here to help!**

Reach out to your local Network partner:

<https://een.ec.europa.eu/local-contact-points>

#EENCanHelp

Thank you!

Chiara Soffietti
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Wolfgang Treinen
Co-Chair SG MAT
Berlin Partner
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Benno Weissner
Chair SG Digital
ZENIT / EEN North Rhine Westphalia
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Camera
di commercio
Torino

