MOBILITIES FOR EU | DRESDEN

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CAN

MOBILITIES for Dresden:
A Test Field for Future-Proof & Sustainable Mobility

National Conference on CO_2 Emissions Reduction in Ukrainian Cities:
Pathways to Climate Neutrality

April 24, 2026

Frances Weiß | Project Lead

Office for Economic Development, State Capital of Dresden

Co-funded by the European Union

Funded by the European Union

PART OF THE EU MISSIONS CITIES

Overall Project Goal

MOBILITIES FOR EU

Demonstrate …

- innovative,
- technically feasible,
- practically workable,
- economically viable,
- scalable …

… mobility solutions to improve the …

- climate protection,
- climate adaptation,
- environmental wellbeing,
- accessibility,
- social awareness,
- health …

… of the city and its citizens and guests.

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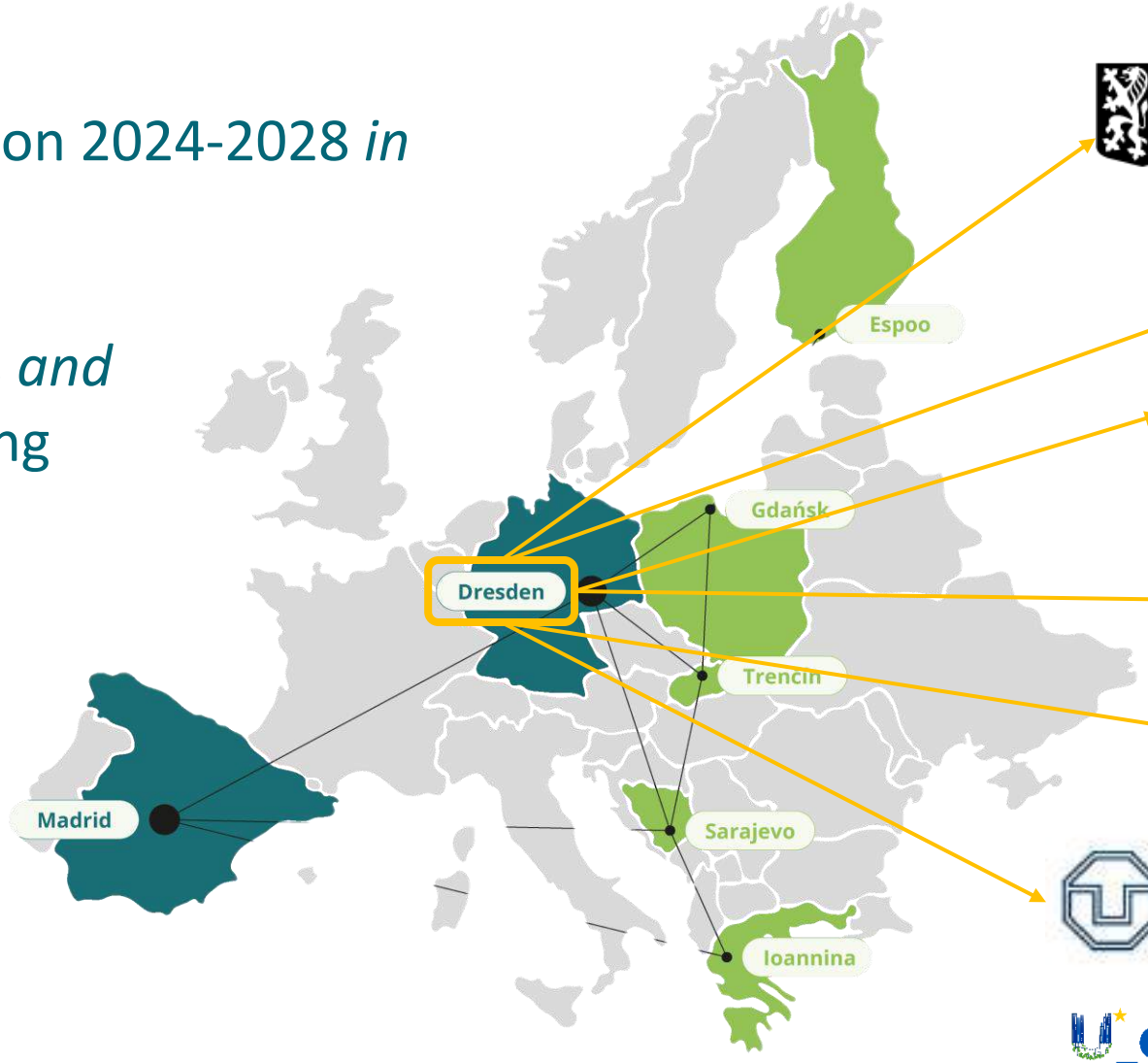
Key Project Information

5 years project duration 2024-2028 *in*
7 cities *with*
29 partners *from*
9 European countries *and*
24 000 000 € EU funding

Together with Madrid, **Dresden** is one of the Lead Cities.



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European Partner

MOBILITIES FOR EU

Consortium Lead

CARTIF

MADRID

mercamadrid

EMT MADRID

ferrovial

T Systems

Plexigrid

prezero

alsa

Dresden

VOLKSWAGEN GROUP

Fraunhofer

SAP

TECHNISCHE UNIVERSITÄT DRESDEN

CARNET

saena Sächsische Energieagentur

ESPOO ESBO

CITY OF TRENČÍN

SPECTRA

GDAŃSK

Steinbeis Europa Zentrum

AEDIVE

WE RIGHT CLICK

IRF INTERNATIONAL ROAD FEDERATION

Dresden Ecosystem

main partners for non-technical tasks

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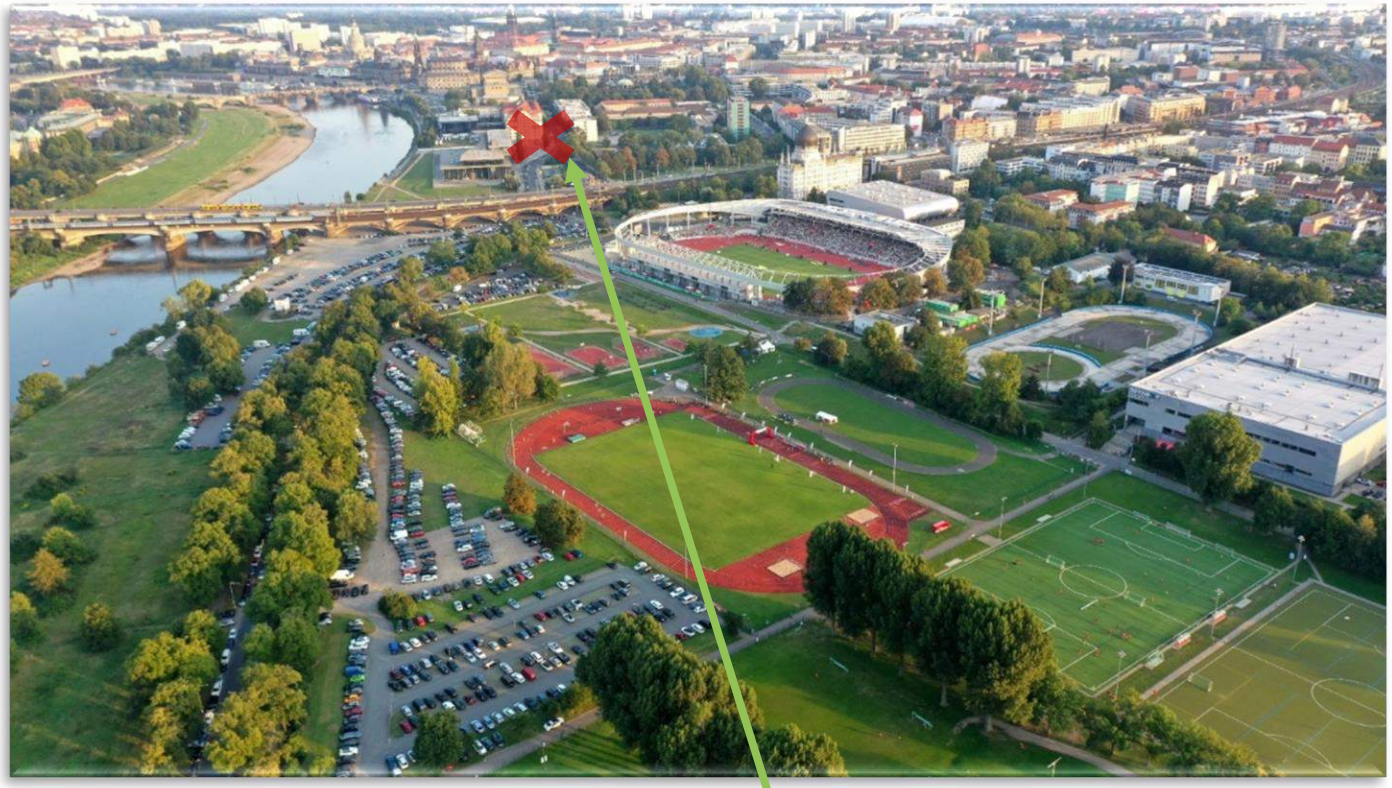
U_CAN

EU MISSIONS

Project Area OSTRA: Sportpark + „neighbors“



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- near the city center and adjacent to the river Elbe (Е́льба, Ла́ба)

Sportpark OSTRA:

- primary demonstration area
- > 25 sports facilities with various arenas, indoor + outdoor facilities
- mixed use and different operators

adjacent:

Trade Fair Company Dresden // concert & event organizers // food services // sports boarding schools // etc.

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Project Area OSTRA: Sportpark + „neighbors“

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Challenges:

- partly flood area
- high maintenance needs
- publicly accessible 24/7
- difficult wayfinding
- mobility bottlenecks
- limited public transport and charging stations

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Pilot Actions in the Project Area (Selection)

- **Autonomous Charging Robot** — VOLKSWAGEN GROUP
- **Remote/Automated Driving** — Fraunhofer IVI
- **Service Robots**
- **Bidirectional Charging** — TECHNISCHE UNIVERSITÄT DRESDEN
- **Route & Wayfinding Guidance**
- Integrated Digitalization — Fraunhofer IVI, SAP
- Private 5G Network — TECHNISCHE UNIVERSITÄT DRESDEN

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Pilot Action: Autonomous Charging Robot

© VW GI (coloring added by FW)

Lead: Volkswagen Group Innovation
involved: Fraunhofer, TU Dresden, City

What?

- Mobile, autonomous charging solution

How?

- Autonomous navigation
- Automatic de-/coupling and charging
- Request and configuration via app

Why?

- Charging option for “difficult” areas
- Increase number of vehicles served
- Optimization of charging schedules

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Pilot Action: Remote/Automated Driving

© Fraunhofer-IVI

Lead: Fraunhofer
involved: TU Dresden, City

What?

- Safe + efficient remote/automatic driving in areas with limited public transport

How?

- Setup of control infrastructure (road, car)
- Setup of a control center
- Connect and remote-control car

Why?

- Optimization of traffic management
- Protection of all road users
- Accepted and attractive mobility option

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Pilot Action: Service Robots


Michael Weiße


Frances Weiß

Lead: City of Dresden

What?

- automation of maintenance services

How?

- robot for indoor cleaning
- robot for artificial turf maintenance

Why?

- Reduction of manual work and operating costs
- Seamless, discreet service
- Increased efficiency and better occupancy
- replacement of petrol-powered machines with electric robots

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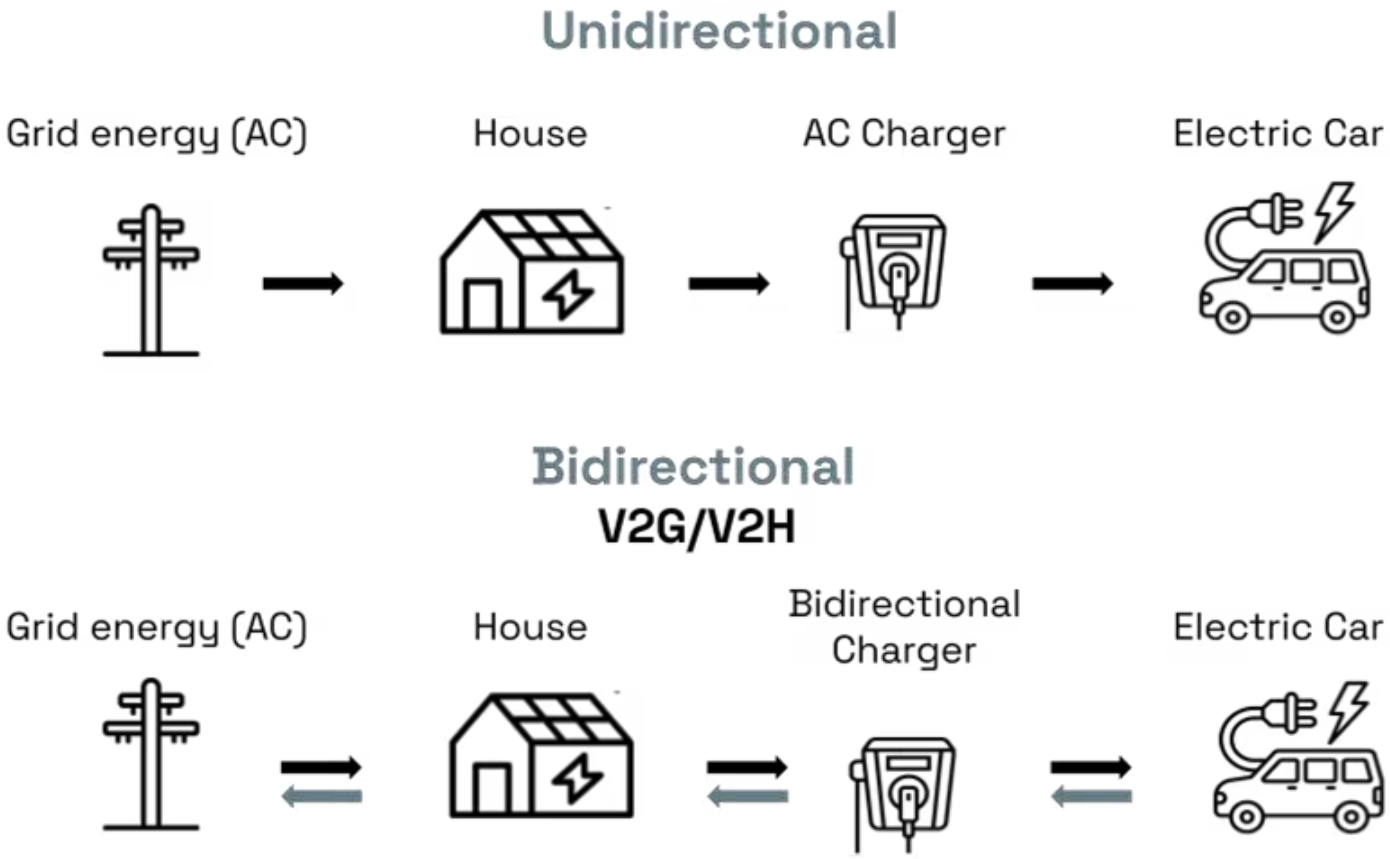
Pilot Action: Bidirectional Charging



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Lead: TU Dresden
involved: City

What?

- Feasibility and benefits of V2G for grid stability and efficiency

How?

- Bidirectional charging station
- Optimization of car and grid load management
- Request and configuration via app

Why?

- Improved grid stability
- More efficient use of renewable energy
- Cost savings

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Pilot Action: Route & Wayfinding Guidance

Lead: City of Dresden

What?

- Design of sustainable, attractive, efficient and environmentally friendly mobility

How?

- Development of an intermodal mobility concept
- Wayfinding system with physical and app integration

Why?

- Increase in pedestrian and bicycle traffic
- Wayfinding and parking guidance system
- Congestion avoidance

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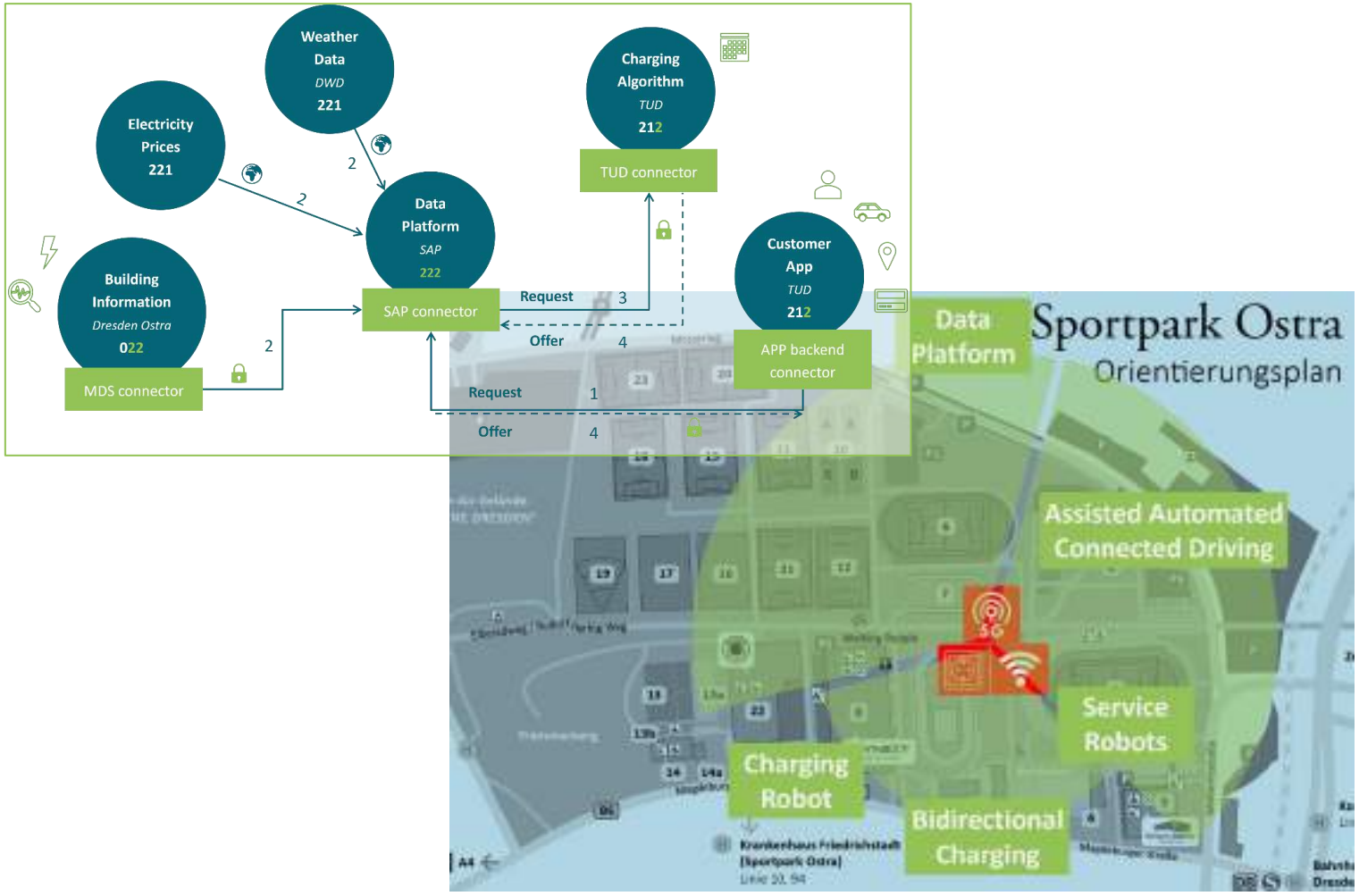
Pilot Action: Digitalization & Private 5G Network



Lead: Fraunhofer, SAP
involved: all other Dresden partners

What?

- access, linking, monitoring of (pilot) data and services
- exchange of sensitive mobility data

How?

- implementation of integrated data platform and suitable front end
- installation of 5G antenna and setup of private network

Why?

- sovereign, robust, secure connectivity for and compatibility with pilot services

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Pilot Action *PLUS*°: Extension of Public E-Bus Fleet

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Lead: City of Dresden
involved: DVB (local public transport)

What?

- electrification of public e-bus fleet

How?

- Procurement of new electric buses
- Continuation of e-bus data collection and assessment started in 2022

Why?

- Replacement of diesel-fueled with electric-driven buses
- Long-term impact measurement

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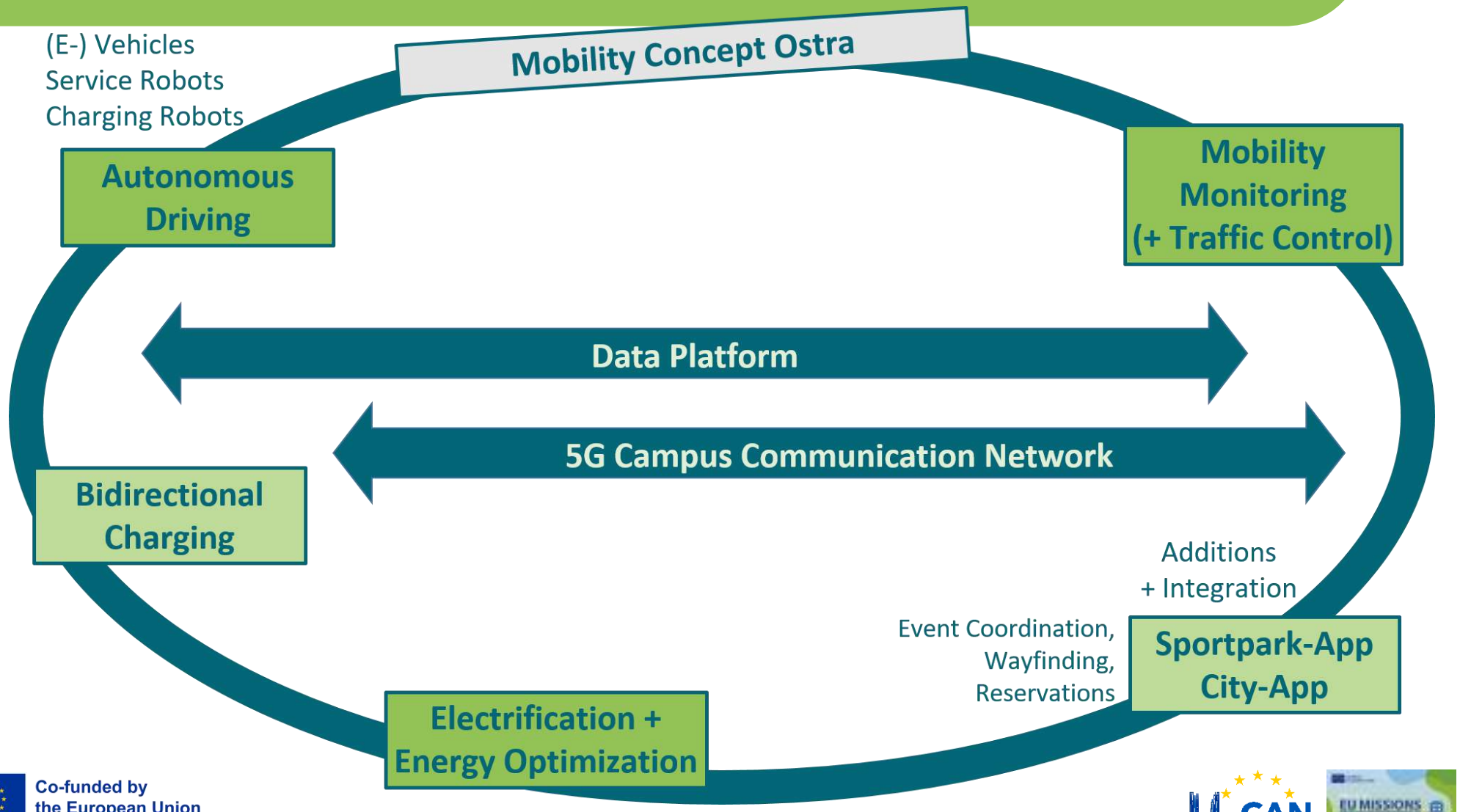
°*city-wide, not (only) in project area, electrifiction itself not part of project*

Pilot Actions Interplay



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Thank you very much for your attention!

Frances Weiß | Project Lead
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https://**mobilities-for.eu**/living-labs/dresden-germany/

https://**smartcity.dresden.de**/projekte/mobilities-for-eu

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