

The background of the slide features a close-up, vibrant green monstera leaf with characteristic holes. The leaf is positioned on the left and right sides, framing a central white rectangular area where the text is located.

SPARK!

Partnering to electrify

Uber



Matthew Richardson

Head of Sustainability
SPARK! Report lead author

matthew.richardson@uber.com



Adam Gromis

Head of Sustainability Policy

adam.gromis@uber.com



Zuzana Púčiková

Head of EU Public Policy

pucikova@uber.com



<https://www.uber.com/about/reports/spark-partnering-to-electrify-europe/>



Driving a Green Recovery

Our commitments

2025

\$800M to help hundreds of drivers access EVs

100% EV in London & Amsterdam

50% EV across 7 major cities in Europe

2030

100% EV rides in US, Canada, and Europe

2040

...globally



SPARK!

Partnering
to electrify
in Europe

Uber

Switch to **50% electric** by 2025 in Amsterdam, Berlin, Brussels, Lisbon, London, Madrid and Paris

Partner to be **100% electric** within 5y once drivers are no worse off in a BEV

Advocate on charging, vehicles and incentives

Report publicly on CO₂ emissions

Keep expanding sustainable options:

- 'Uber Green' from 37 to 60 cities by 2021
 - Expand micromobility (current 20 cities)
 - Public transport in 25 cities by 2025
-

Zero emissions in London by 2025

1,800 active EVs

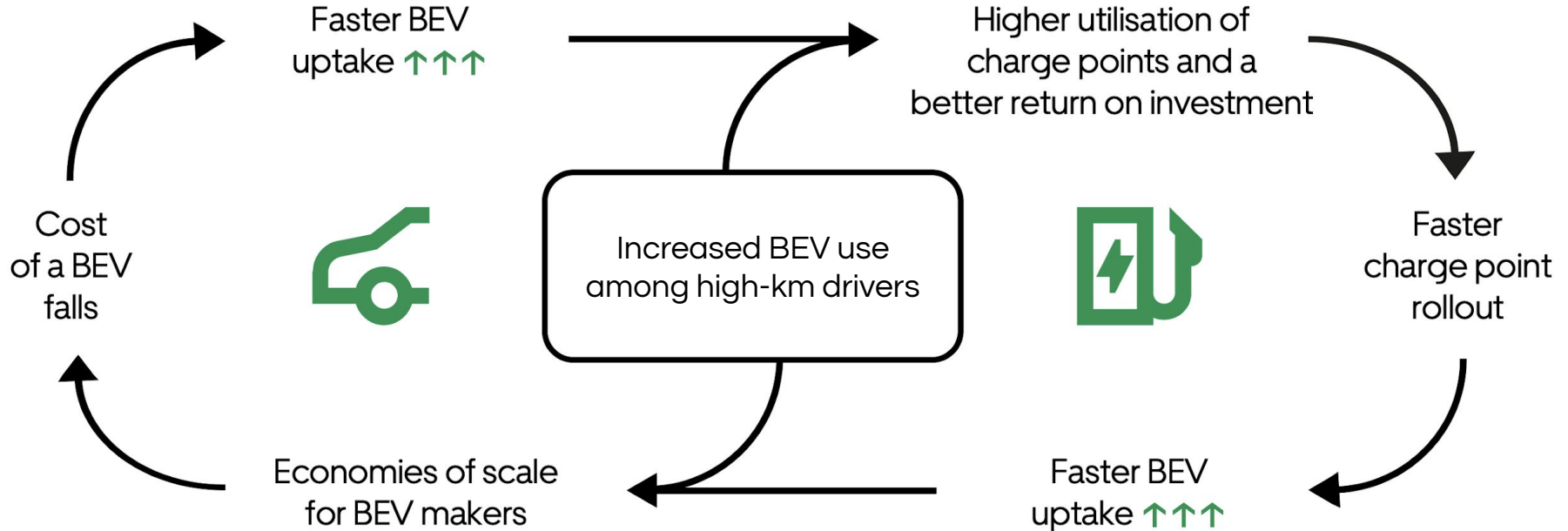
> £135m raised so far in Clean Air Plan

£5m for charging by end 2023

Partnerships with bp, Nissan, Optimise Prime

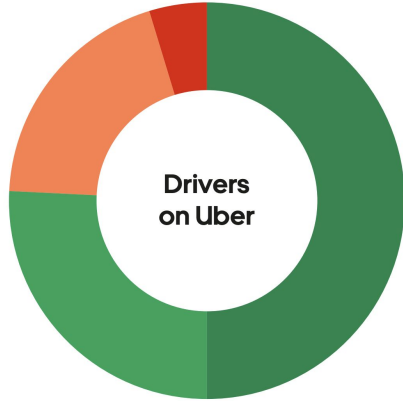
EV only product in central London

High-km drivers can kick-start EV uptake across society



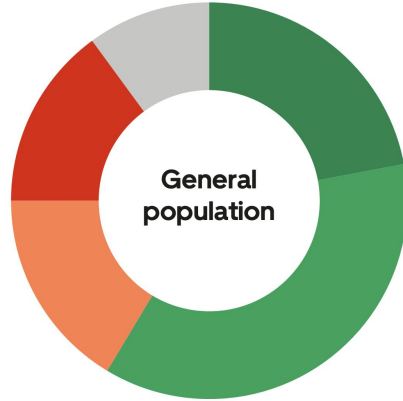
Everything starts from drivers

How interested are you in moving to an electric vehicle?



Very Fairly Not very

How likely, if at all would you be to ever consider purchasing an EV, if it was available at a price you would consider reasonable?



Not at all Don't know / already have

Charlie

Nissan LEAF



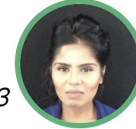
Kamel

Nissan LEAF



Razma

Tesla Model 3



Vince

Tesla Model 3



Imtiaz

Nissan LEAF



Todor

Nissan LEAF



Olu

Tesla Model 3



Ventsislav

Kia E-Niro



Three barriers drivers face



The lack of appropriate charging



The lack of affordable / second-hand BEV



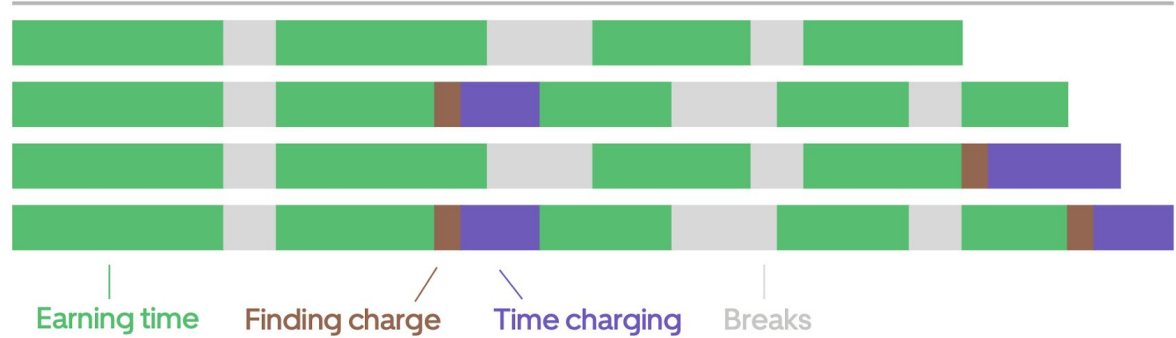
Insufficient financial incentives to close the interim cost gap

Vital to minimise 'opportunity cost' of charging time

Charging time as a % of earning time

Overnight charging available	Long range BEV	0%
	Short range BEV	14%
Only rapid charging is possible	Long range BEV	21%
	Short range BEV	29%

Potential driving pattern

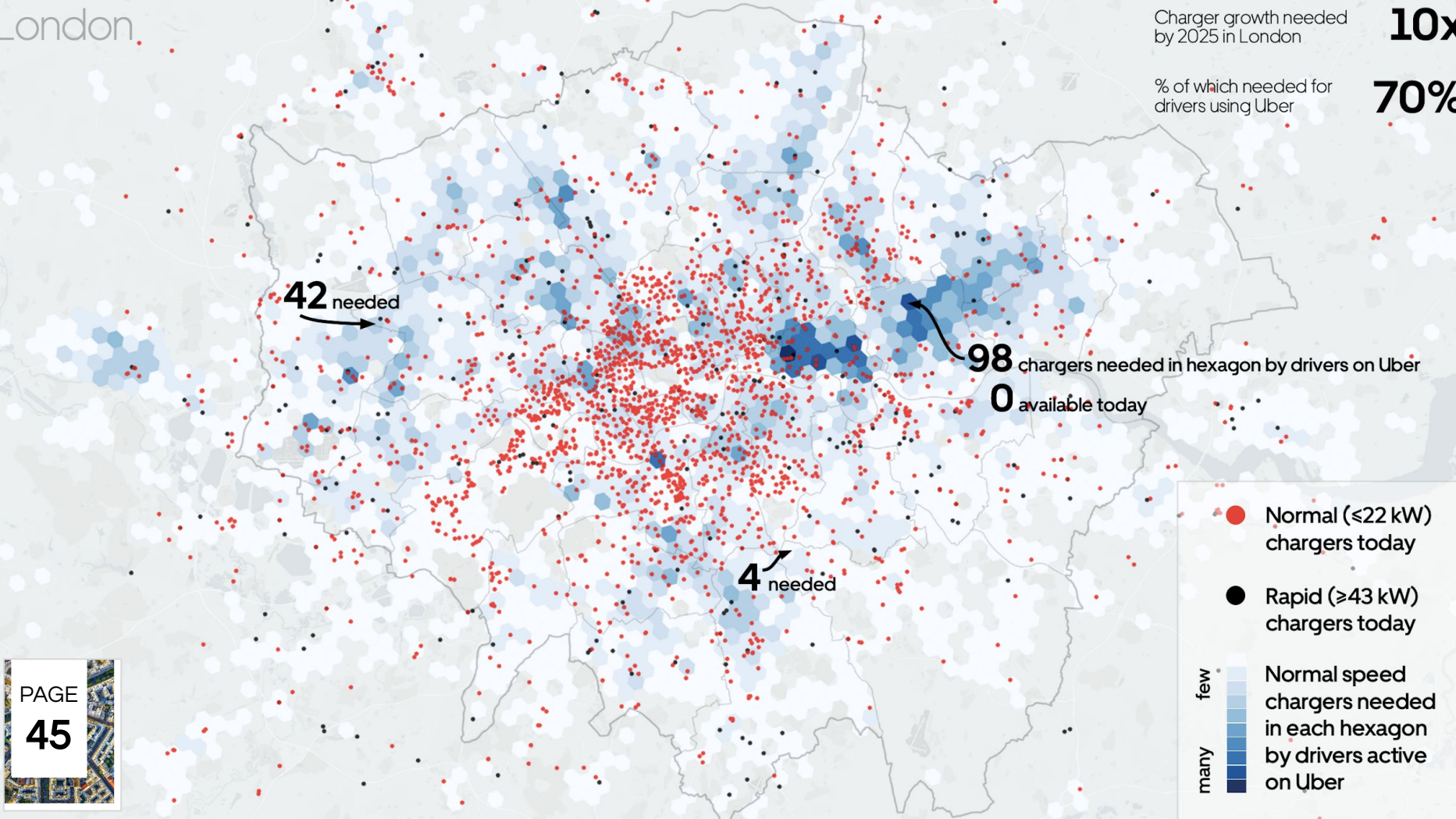


Charger growth needed by 2025 in London

10x

% of which needed for drivers using Uber

70%



Highlights from Netherlands

Demand led chargers via 'right to plug'

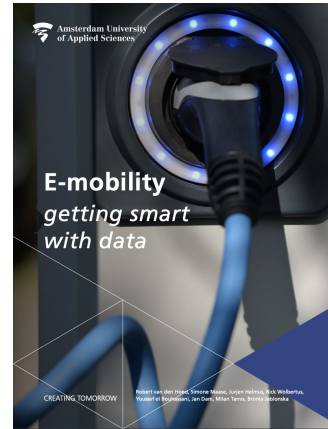
Centralising provision at city level

Harnessing utilisation data

On street overnight charging can be economical

Providing right type in right area

Ensuring interoperability

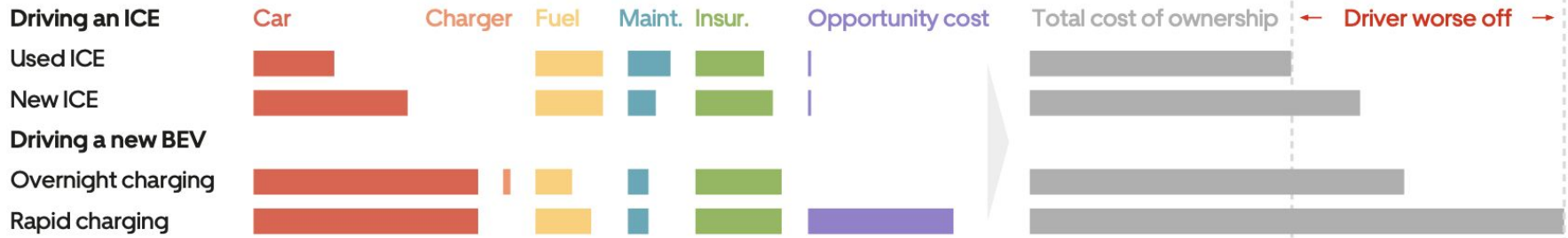


INTRODUCTION	KEY PERFORMANCE INDICATORS	EVALUATING POLICY MEASURES
► Projects and Partners 8-9	► Key Performance Indicators of Charging Infrastructure 38-42	► Roll-out strategies: Demand-driven versus Strategic 59-62
► User Groups 12-15	► EVdata.nl: Portal with up-to-date information on electric charging in the Netherlands 43-46	► How much will they charge? Charge tariffs in the Netherlands 63-65
► Managing charging infrastructure data: five issues to solve 16-21	► Utilisation rates of charging infrastructure: A balancing act for policy-makers 47-50	► Charging Station Hogging: Is it a problem? 66-67
► Charging Infrastructure 23-25	► Charging Infrastructure assessment platform 51-56	► Time based fees to reduce session length 69-70
► Stimulating electric mobility 26-27		► Charging Behaviour of Plug-in Hybrid Electric Vehicles 71-73
► Fiscal incentives and their effect on EV sales in the Netherlands 28-31		► Using daytime charging to reduce parking pressure 74-75
► Charging infrastructure as enabler for buying EVs 33-35		► Performance of a charging hub, and the effect on its surroundings 78-82

SIMULATION STUDIES	SMART CHARGING	ELECTRIC TAXIS
► Vulnerability of charging infrastructure 85-88	► Smart Charging Strategies 106-109	► Voluntary agreement "Clean taxis for Amsterdam" 142
► Simulating Electric Vehicle Activity: why? and how? 90-92	► Charging speeds at AC charging stations 113-116	► Cleaning the Amsterdam Central Station taxi stand 143-147
► Simulating the transition from PHEV to large battery BEV 93-96	► Smart Charging: Potential for rescheduling charging sessions 117-120	► Cleaning the Leidsplein taxi stand 148-151
► Failed connection attempts: Simulating that you are not able to charge 97-100	► Predicting & Clustering: Developing optimal charging profiles 121-125	► Fast charger utilisation in Amsterdam 152-156
► Introducing a free-floating car sharing scheme: simulated impact on charging convenience 101-103	► Flexpower: Applying Smart Charging in real life 128-132	► Taxi drivers' attitudes and behaviour in Amsterdam 157-159
	► Solar Storage: The Case of the Amsterdam Energy ArenA 135-138	



Total cost of ownership (TCO) is still a challenge



Assumptions (excludes all subsidies)

Car	ICE: Toyota Prius, €27.5k new, €14.4k used BEV: Nissan LEAF with 62 kWh battery, €40.2k 8% APR finance, 25% resale value after 4 years
Charger	Home charger installation: €1.1k
Fuel	ICE: 4.5 ltr/100 km, €1.25/ltr BEV: 17.0 kWh/100 km, 18c/kWh (home), 28c (rapid)
Maintenance	New ICE: 2.37c/km, used: 3.55c, BEV: 1.69c
Insurance	New ICE: €3,451 / yr, 25% elasticity on car cost
Oppt. cost	Loss of 21% of earning time, less variable costs

Do common policies close the gap?

Near home charging for all (eg. Amsterdam)	Green arrow pointing left
€11k subsidy on cost of a BEV (Paris)	Green arrow pointing left
£350 subsidy on cost of home charger (UK)	Green arrow pointing left
£15 / day ICE congestion charge (London)	Red arrow pointing right
£150 annual road tax for ICEs (UK)	Red arrow pointing right
Sum of all of these policies combined	Green arrow pointing left, significantly longer than individual policies

Principles we believe are universal

Think in terms of BEV kilometres vs ownership

Prioritise change in cities

Tilt the playing field from ICEs to BEVs (bans should cement, not initiate change)

Fair & equal treatment for drivers

Policies needed across the spectrum (vehicle production, charging & incentives)

Potential policy areas to explore

Goal

1. **Ensure all high-mileage drivers can reliably charge overnight where they park**

2. **Stimulate affordable / 2nd hand EV market more suited to professional drivers**

3. **Tilt economics of everyday use for high-mileage drivers in particular**

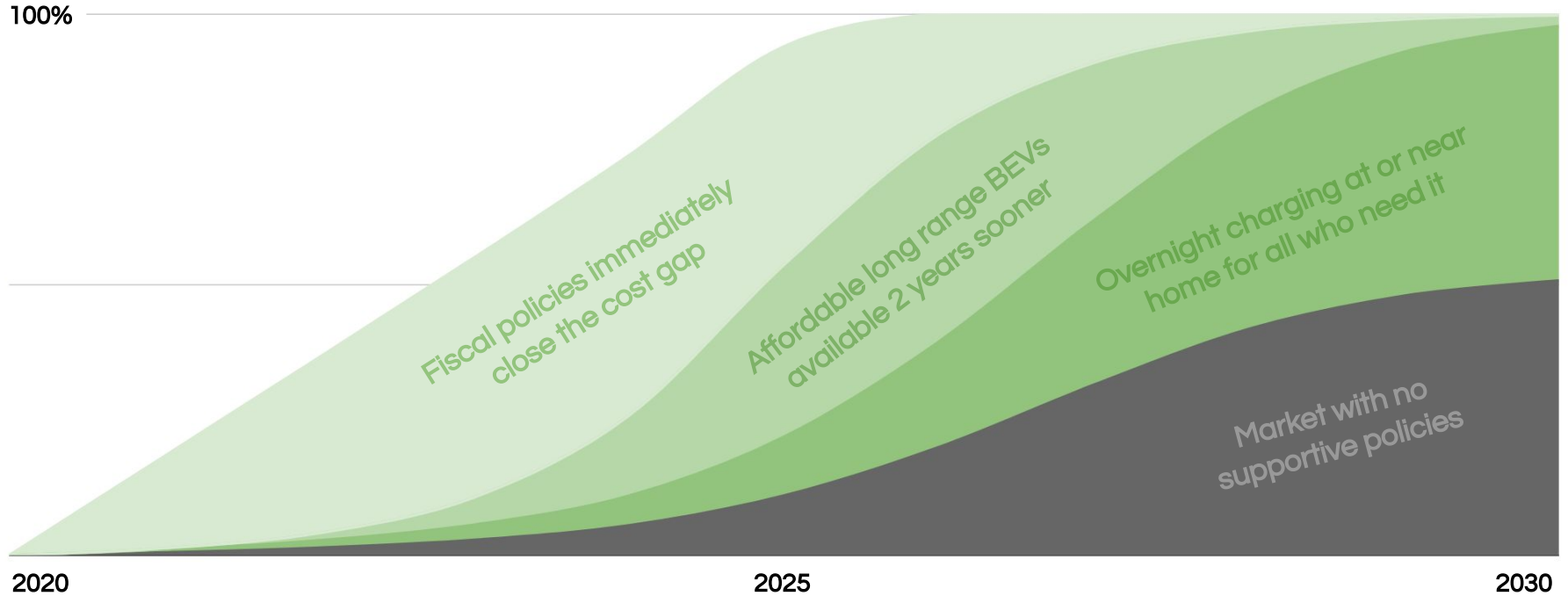
Potential ideas

- Centralised charge network planning & analytics
- 'Right to charge' for drivers without off street parking
- Minimum 7kw to ensure full charging overnight

- Making cheaper long range EVs really affordable
- Tilting EV sales to high mile drivers
- Developing 2nd hand market

- Taxes / subsidies that naturally scale on use
- Addressing upfront cost barriers for high mile drivers
- Emissions-based road charging in cities

With right economic & policy conditions change would ~5 years





Matthew Richardson

Head of Sustainability
SPARK! Report lead author

matthew.richardson@uber.com



Adam Gromis

Head of Sustainability Policy

adam.gromis@uber.com



Zuzana Púčiková

Head of EU Public Policy

pucikova@uber.com



<https://www.uber.com/about/reports/spark-partnering-to-electrify-europe/>