# Addressable Market for Micromobility in the UK

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# Who are WMG



### Who

From Aerospace to Agritech, WMG works to support, advise and collaborate with industrial partners across different sectors and across the supply chain.

We provide companies of all sizes with tailored support, from micro and SME sized companies through to large OEMs.



### What

WMG is a specialist in bridging the gap between TRL4 and TRL7, with over 90% of our research rated as World Leading or Internationally Excellent.

Our capabilities span 20 research groups and 10 dedicated state of the art buildings. Read more about our capabilities.



### How

You are able to engage with us through collaborative bids, contract research, traditional and industrial skills programs, and with our specialist SME and KTP teams.

Contact us to explore the best option for your organisation.



# What is Micromobility













































Bicycles & EAPC

LZEVs including e-scooters

L-category















# Why does it matter



Micromobility vehicles can be owned, leased and rented



Micromobility has developed in a way that ensures nobody is excluded or negatively impacted, as far as practicable



Micromobility seamlessly connects to and enhances other forms of transport



Micromobility has supported better urban design and placemaking in public areas



Micromobility is delivering profound carbon and harmful pollutant emissions reductions



Micromobility businesses in the UK are growing, thriving and leading globally



Micromobility is a safe form of transport, for users and non-users



Fewer car journeys are being taken where they could be completed by micromobility, improving traffic congestion



# **Germany, Portugal and France**

### **Germany - established**

- 3.85 million bicycle sales
  - including 2 million e-bikes
- 2 million bicycles produced
  - Including 1.3 million e-bikes
- 3<sup>rd</sup> largest exporter globally by value
- €7.36 billion market value
- Quadrupled between 2012 and 2022



### **Portugal - recent investment**

- Concentrated around Agueda in central Portugal
- Decade of strategic investment
- Largest producer in Europe by volume
- Produce up to 3 million bikes per year
- Strong growth of e-bikes



### France - new industrial strategy

- Government committed €55 million support to bicycle industry as part of its €2 billion "Plan Vélo" in June 2024
- Focusing on innovation, R&D, and manufacturing capacity
- Aim of assembling 1.4 million bikes by 2027 and 2 million by 2030





# What's the industrial opportunity for the UK

# West Midlands Plan for Growth





"We are also pursuing legislative reform for micromobility vehicles when parliamentary time allows, to provide a proportionate and more agile process for regulating Low-Speed Zero Emission Vehicles (LZEV) likely including pavement delivery robots, e-scooters, and last mile delivery vehicles. Creating a clear route to market will drive the investment and usage in these new vehicles, unleashing businesses from the current regulatory burdens and kickstarting economic growth."

**UK Government - Modern Industrial Strategy - Advanced Manufacturing Sector Plan** 





# Addressable market for micromobility in the UK

Rowena Crawford

September 2025

# **Frontier Economics**

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# **Current micromobility use**



### Cycle

7% of adults cycle at least once a month for travel

39% own or have regular access to a cycle

Significant geographical differences

(DfT - England 2023)

1.45 million cycles sold in the UK in 2024

146,000 e-bikes (~10% sales)

(Bicycle Association)



### E-scooter

Illegal to use outside of private land, yet...

2% own an e-scooter
7% annually use e-scooter

(DfT Technology Tracker)

Trials of shared e-scooter services since 2020

52.6 million trips taken by 3.5 million users

(CoMoUK - by March 2025)



### Last mile applications

7,000 daily cargo bike count in central London in 2023

(TfL)

"Cycle logistics are most suited to dense urban areas, with relatively high concentrations of suitable delivery work, or where individual trips are relatively short"



# Electric L-category (Powered light vehicles)

**3,608 registrations of L1-3** category vehicles in 2024

Nearly 24,000 cumulative registrations 2019-2024

(MCIA)

**383 registrations of L5-7** category vehicles in 2024 Around 1,200 cumulative registrations 2022-2024

(MCIA)

# Future demand... for cycles

Recent trend (covid aside): Declining rates of cycling and cycle sales

### Main barriers to increasing cycle demand

**Rider safety** – Requires coordinated investment in road infrastructure

Cycle security – Requires investment in secure parking facilities

**Public perceptions** – Attitudes need to shift to seeing cycling as a mode of transport. Need a crack down on anti-social riding.

**Awareness of product quality** – Consumers, regulators, insurers need to acknowledge high quality e-bikes and associated safety

**Weather** – Hard to change(!) but relates to regulation around carriage on public transport



### Scenario: "Status quo"

- Cycle use and demand plateaus at current level
- Could see cycle sales around 1.5 million
- Would require perception shift around cycles as a mode of transport

### Scenario: "Level-up to London"

- Increase cycle rates around England to match London
- Could see additional 500,000-750,000 cyclists
- Likely an increase in demand for higher value bikes
- Would require significant infrastructure investments and perception shifts

### Scenario: "Best in class"

- Increase cycle rates to match the European leaders
- Could see an additional 4 to 5 million cyclists
- Would significant and sustained investments in infrastructure and shift to cycle first mentality

## Future demand... for e-scooters

### Future demand for e-scooters will depend crucially on legislation

"We are also pursuing legislative reform for micromobility vehicles when parliamentary time allows, to provide a proportionate and more agile process for regulating Low-Speed Zero Emission Vehicles (LZEV)." Advanced Manufacturing Sector Plan

### Main barriers to increasing e-scooter demand

**Legislation** – Change required to enable legal riding

**Rider safety** – Legislation needs to support riding that minimises risks to riders and others

**Public perceptions** – Attitudes need to shift – need a crack down on anti-social riding.

**Awareness of product quality** – Consumers, regulators, insurers need to acknowledge high quality e-scooters and associated safety

**Weather** – Hard to change(!) but relates to regulation around carriage on public transport



### Scenario: "Status quo"

- Using private scooters outside private land still illegal
- Would expect scooter sales around current levels

### Scenario: "Effective legislation"

- Could see 2m people buying e-scooters
- Expect a different demographic of riders
- Expect an increase in quality / price of e-scooters sold and an increase in servicing
- Would require regulation that enables private use while protecting both riders and pavement users, to maintain a positive public perception

# Future demand... for last mile delivery vehicles

Recent trends: large increases from a small base

- Evri planned to increase electric cargo bike fleet from 33 to 99 this year
- Delivery Makes expanded e-cargo bike fleet by 42% in 2024
- London daily cargo bike counts increased 42% from 4,915 (2022) to 6,998 (2023)

# Main barriers to increasing micromobility demand for last-mile services

**Awareness** – Organisations doing last mile delivery not aware of where micromobility would be more efficient.

**Costs** – High upfront vehicle cost, coupled with maintenance costs and no end-of-service resale value, and no government subsidies. Customers are not willing to pay more for sustainability.

**Dispersed market** – some large delivery organisations but a very large number of businesses with small last-mile delivery services

**Property to operate from** – real estate and regulations/insurance for storing and charging electric vehicles



### Scenario: "Localised growth"

- TfL have estimated that cargo bikes could replace 17% of van km in central London by 2030
- Would require greater awareness and lower costs

### Scenario: "Widespread growth"

- Increased use in other dense urban areas around UK
- Would require increased awareness, infrastructure investments, and lower costs

# Future demand... for electric L-category

### **Electric mopeds/motorcycles (L1-3):**

Annual registrations fallen since covid boom but 2024 (3,600) still twice 2019 level

### Electric motorbikes serve different consumers to ICE motorbikes

Should be viewed as a wide-appeal form of micromobility (like an e-bicycle but with longer range) rather than a replacement for current ICE motorbikes

### Main barriers to electric motorcycle demand

<u>Perceptions</u> of rider safety – public and policymakers need accurate understanding: electric motorcycles have half the 'collision rate' as petrol motorcycles

**Awareness of product safety** – consumers and regulators need to acknowledge high quality vehicles and associated safety

**Licencing arrangements** – regulation changes to make licencing more accessible and less burdensome

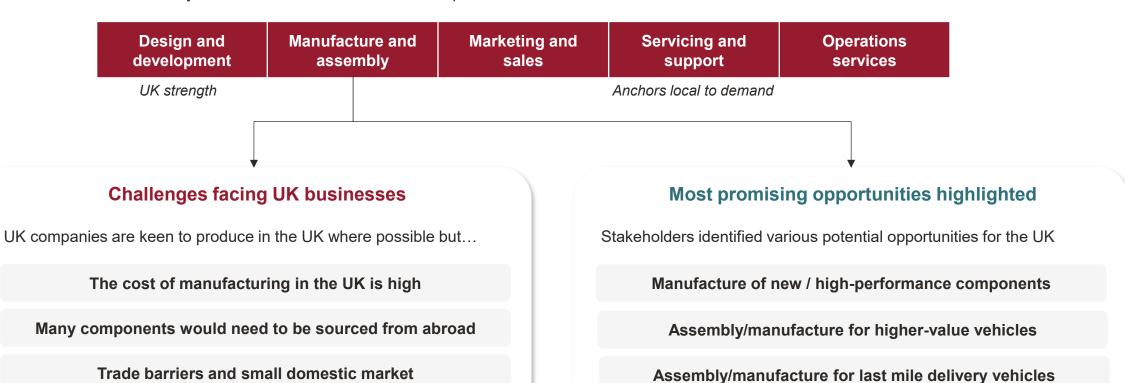
### Other electric light powered vehicles (L5-7):

- Niche vehicles
- Annual registrations <400 in 2024</li>

# **Opportunities for UK industry**

The market for micromobility can be defined to include various aspects:

Consumers do not (yet) adequately value product quality



Manufacture of low volume electric L-cat vehicles

# Where do we go from here?



### Policymakers need to help unlock demand...

There is latent demand potential for micromobility

### What is needed:

- Investment in infrastructure
- Changing public perceptions
- Education and enforcement on product quality
- Regulations on use, storage and transport
- Favourable policy and incentives



### Many benefits from increased micromobility use



- Decarbonisation
- Health (mental and physical)
- Inclusion
- Travel efficiency
- Business opportunities ⇒ UK economic growth

"Creating a clear route to market will drive the investment and usage in these new [LZEV] vehicles, unleashing businesses from the current regulatory burdens and kickstarting economic growth." Advanced Manufacturing Sector Plan



### .... and consider how to support industry to maximise emerging opportunities

- Support for UK R&D ecosystem
- Improved access to scale-up capital
- Lower trade barriers
- Protection from foreign "dumping"



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