

Barclays Research Highlights: Sustainable & Thematic Investing

## Micromobility: Fast, Cheap and Good Solution for ‘Smart Cities’

City planners need to develop smarter cities that can transport an additional 2.7bn urban commuters by 2050. By the mid-2020s, 1.1tn passenger miles (4% of global total) could switch to micro, electric vehicles for urban trips below five miles, representing an \$800bn revenue opportunity for micromobility operators.



# Micromobility: Fast, Cheap and Good Solution for ‘Smart Cities’

## Micromobility (transport using electric-powered personal-sized vehicles like e-scooters and e-bikes) could be an ‘iPhone moment’ for personal mobility

Sustainable & Thematic Investing  
Kristina Church

Investment Sciences  
Ryan Preclaw  
Ben McSkelly

~30tn passenger miles are travelled per year globally. 60% of current trips are below 5 miles. We expect 1.1tn of those miles could switch to micromobility (MM), which implies \$800bn global revenue, with the change happening because compared to full-sized autos, MM is:

### Faster

In high-traffic cities, MM can move people faster than the current average speed of <10 mph with minimal infrastructure outlay required.

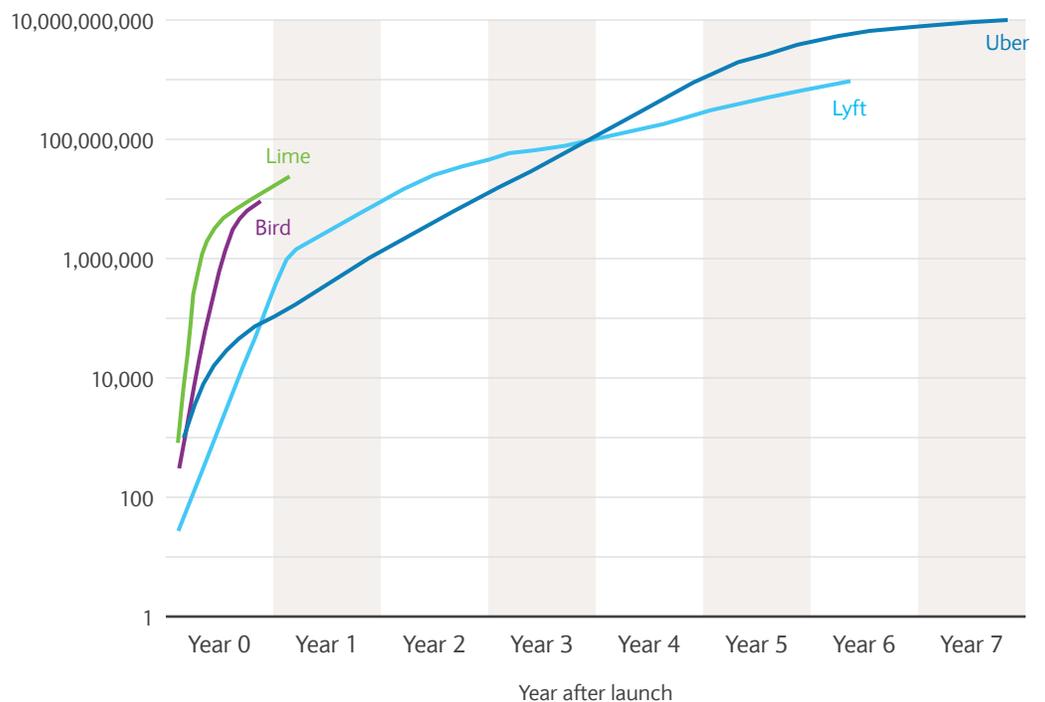
### Cheaper

In the densest cities, the cost per mile of an e-scooter is as little as a third the cost of conventional auto options (ride-hailing, driving a personal vehicle).

### Good

It's better for the environment, better for city planning, the form factors can be more varied, and it is a fun way to get around.

## Micromobility has grown even faster than ride-hailing



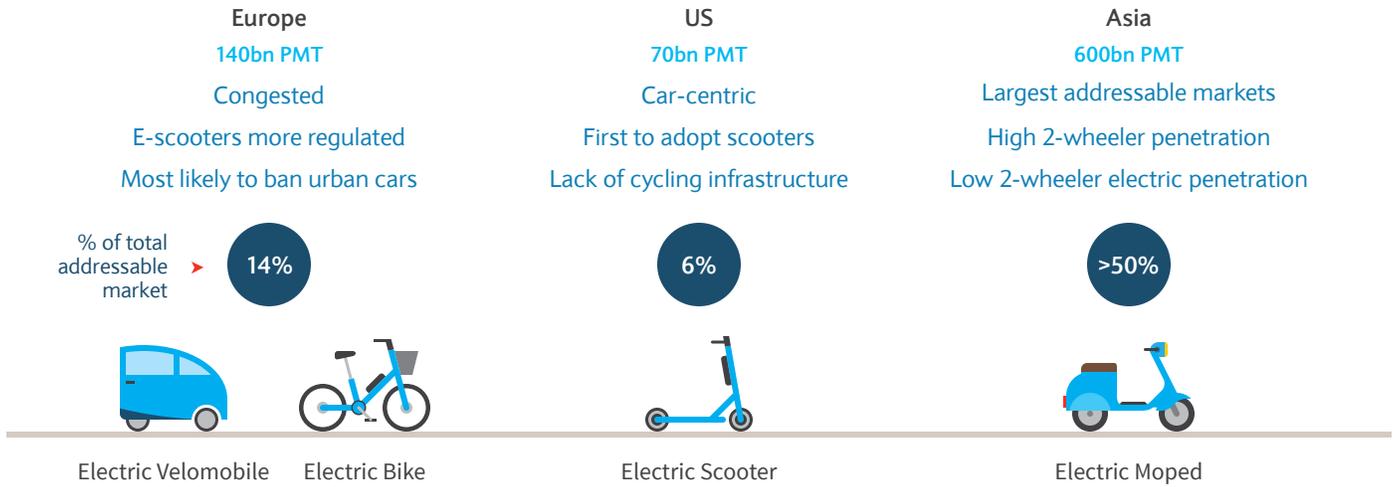
Source: Barclays Research, company data

**Micromobility** is an electric vehicle weighing <500kg that can be owned or shared and is connected using AI. It is used for utility purposes.

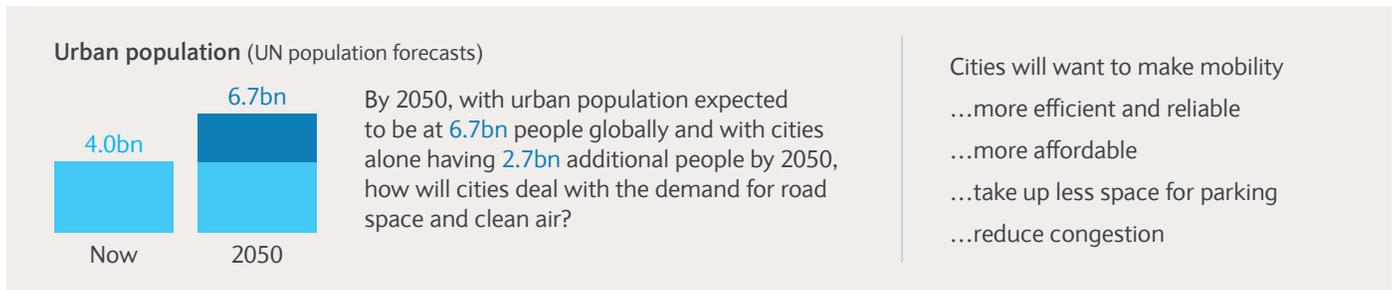


By the mid-2020s, micromobility could be an **\$800bn\*** global revenue opportunity for 'smart cities,' with >1tn personal miles travelled (PMT) by micro vehicle or 4% of global total

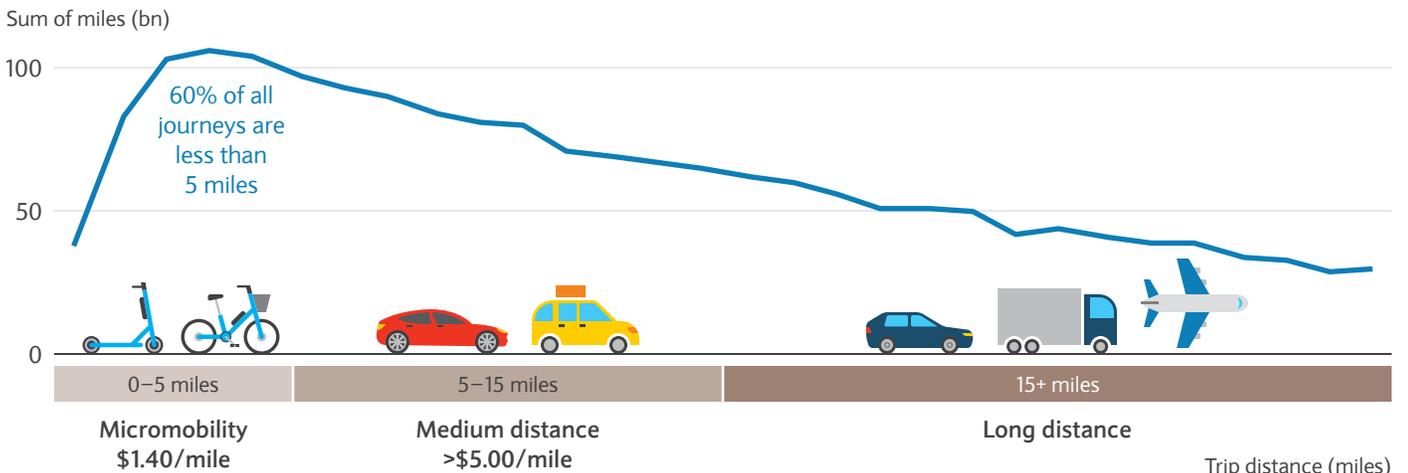
**Micromobility market size opportunity by 2020s**



To achieve 1.1tn PMT, Barclays estimates the micro vehicle parc could reach close to **300mn** vehicles, or **0.9bn** riders; long before full autonomy is adopted



**Why does micromobility appeal to the consumer?**



\*Based on today's population size and prices

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