



Designing Future Micro-Mobility solutions

Carsten Astheimer

MD Astheimer Design

23rd Feb 2021



ASTHEIMER

Astheimer Design

An automotive design studio developing solutions for mobility.

Location Warwick UK

World class team

State of the art hardware and software.

Global Client Base

Land Rover, Bentley, Rolls Royce, Nissan, Airstream, Joby Aviation, Caterpillar, Ferrari and many more

Founded in 2009

by Carsten Astheimer

Experience

Pininfarina - Studio Director

Brunswick Marine - Design Director

End to End Product development service

Positioning

Concept

Detailed Design

Road legal functional prototypes

Design Principals

Purity

Innovation

Harmony

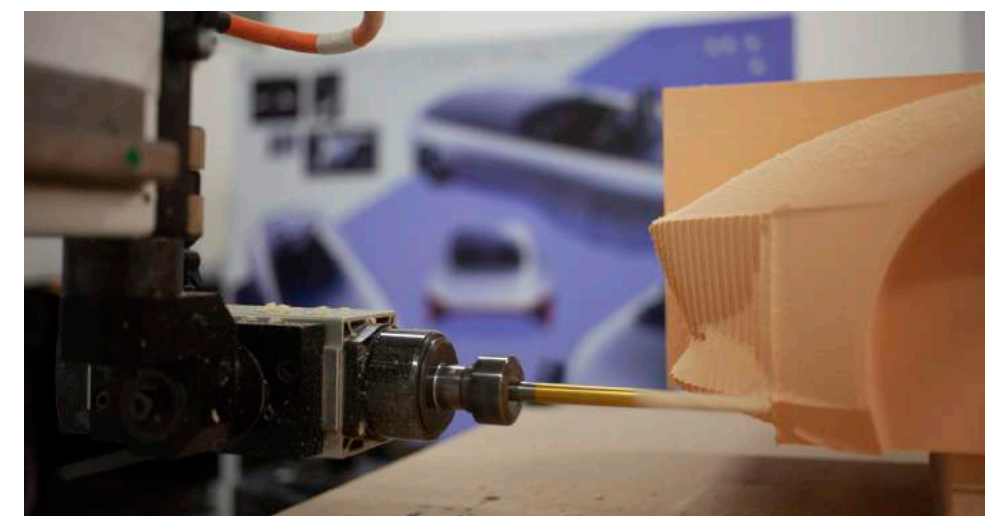
Values

Passionate

Adventurous

Tenacious

Thoughtful



Deliver E

Delivered in 10 weeks

2017 Research Vehicle

Between Astheimer and the Warwick Manufacturing Group (WMG)

Astheimer

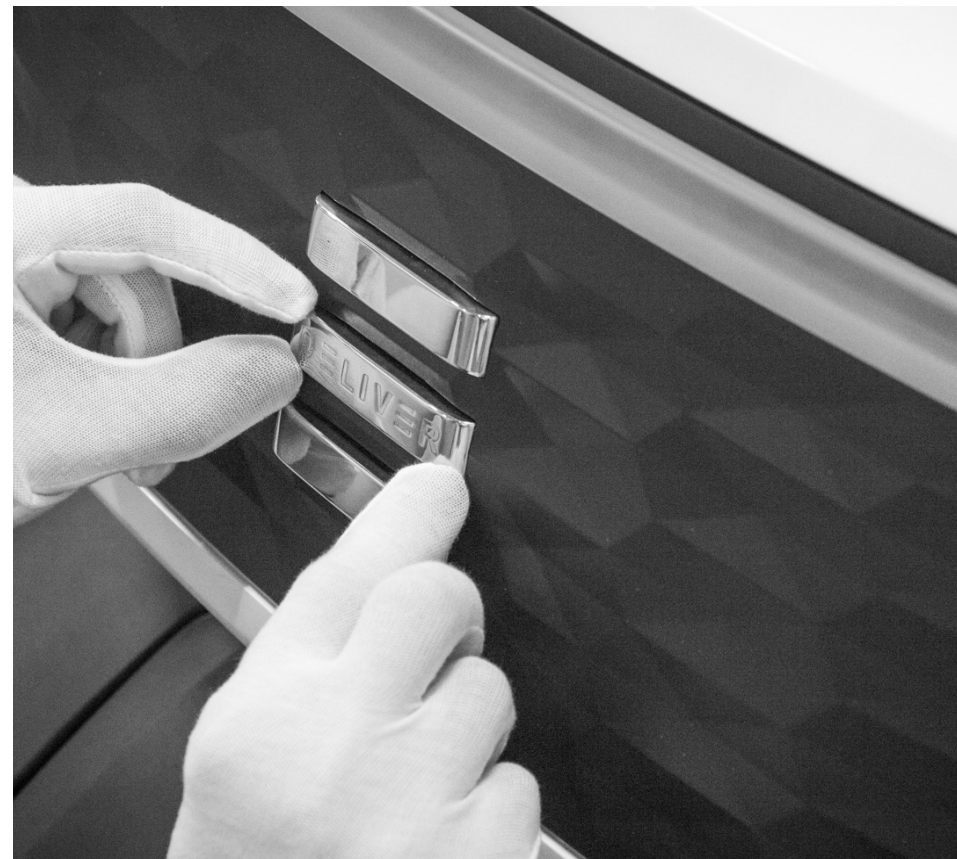
Concept, Design, Prototype Build

WMG

Advanced propulsion system

Collaboration between academia and the private and public sectors

Funding Partner



Inovo Trio

with Maurizio Ficcadenti

1999 Research Vehicle

We patented and prototyped the first inclining 3 wheeled scooter with the intention of creating more stability whilst turning.

This patented design was the forerunner to the Piaggio MP3 which uses the same system.

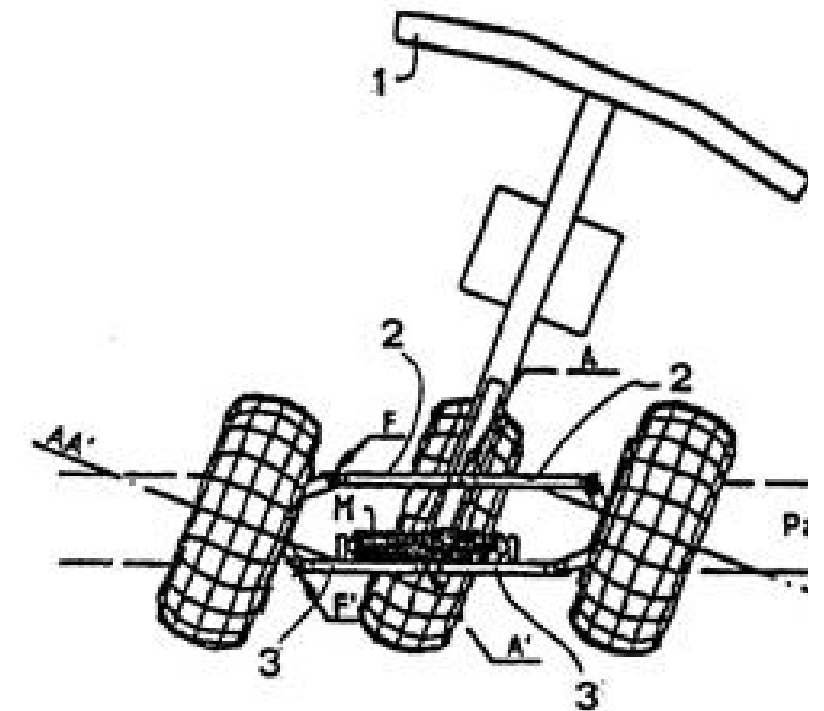


(54) Title: A THREE-WHEELED CAR FRAME CAPABLE OF INCLINING WHEN HANDLING A CURVE

(57) Abstract

A car frame for three-wheeled vehicles having two steering front wheels and one rear wheel comprising a rigid portion and a trapezoidal portion capable of being deformed and allowing the centre of gravity of the vehicle and the loads applied thereon to be shifted to the inside of the curve which is being run across, the steering being controlled by a suitable linkage and handle bar (1), and the side inclination being controlled by the driver by shifting his body. The front wheels steer by rotating about two respective axes (S, S') orthogonal to the axes of rotation (AA', BB') of the respective wheels and lie in a vertical plane passing through the centres of the front wheels. The trapezoidal portion capable of being deformed is the front portion, such a deformation causing the front wheels to incline together with the rear portion where the driver's seat is located.

InovoDesign Srl



Micro Mobility

Emerging Trends

User Needs

Openness to change, and new technologies
Increased will in having a reduced impact on the environment - if there is a valid option.
Increased desire for Personal Mobility in Urban environment

Legislation

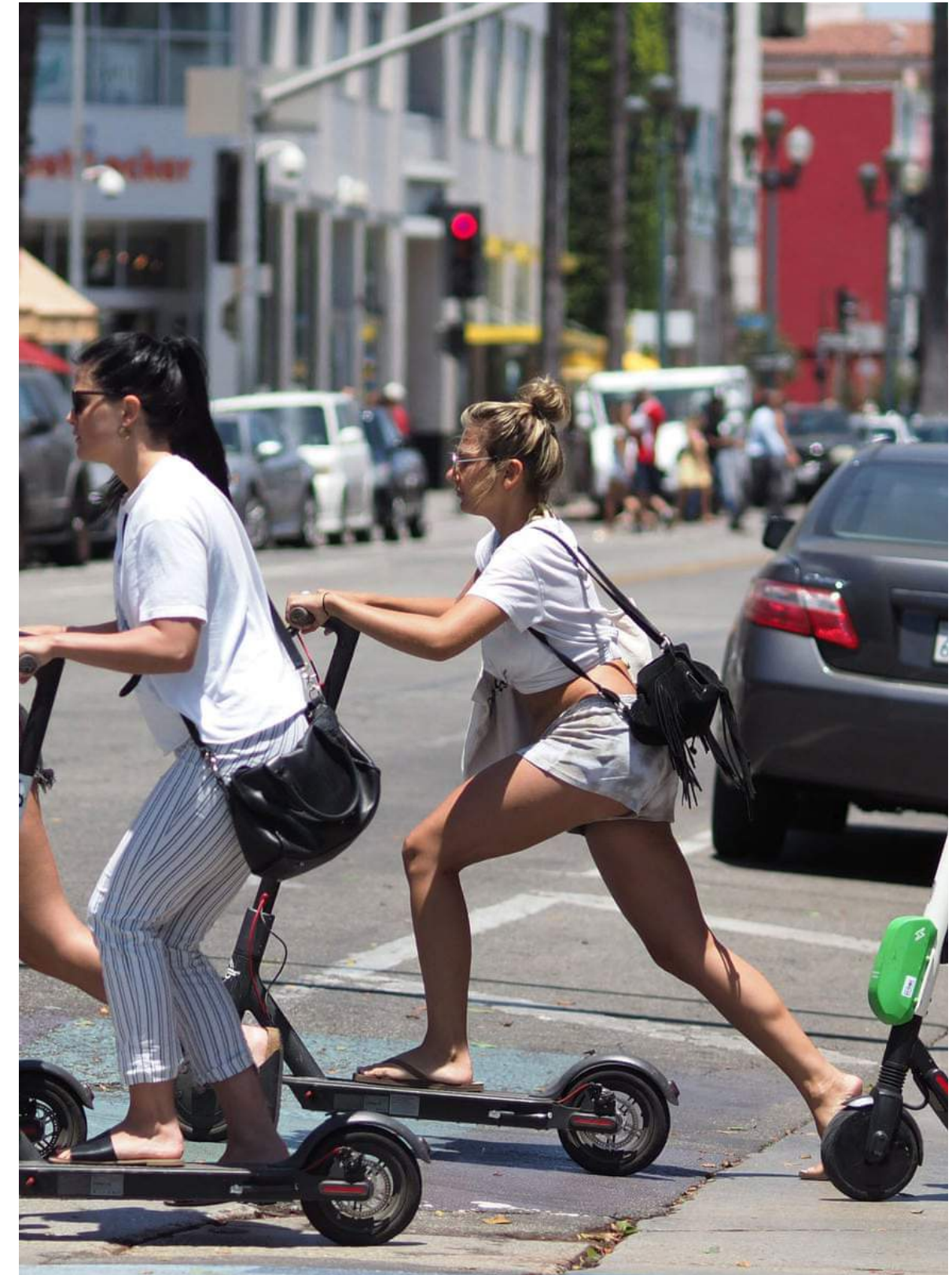
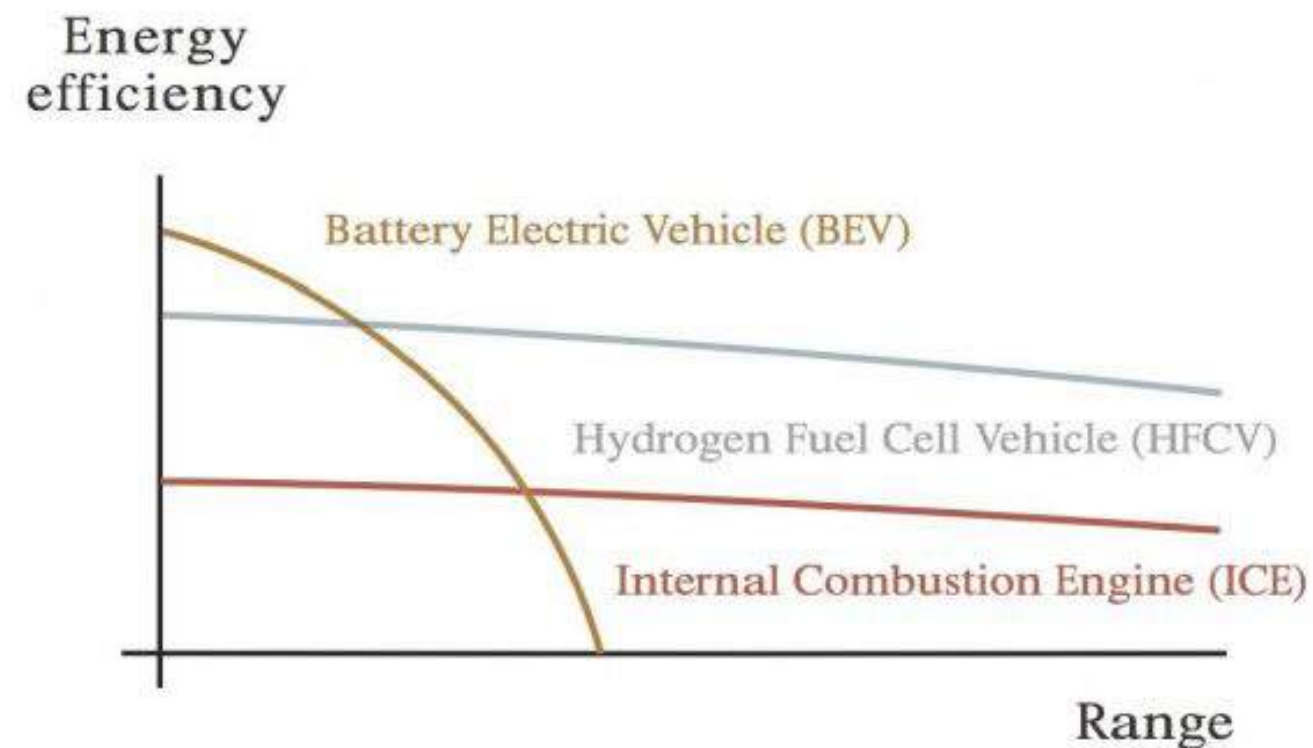
July 4 2021 e-scooter rental scheme aproved by TFL
Still uncertainty around private use, and alternative solutions

infrastructure

Still a lack of infrastructure for in street charging.

Technology

EV's perfect solution for city mobility.

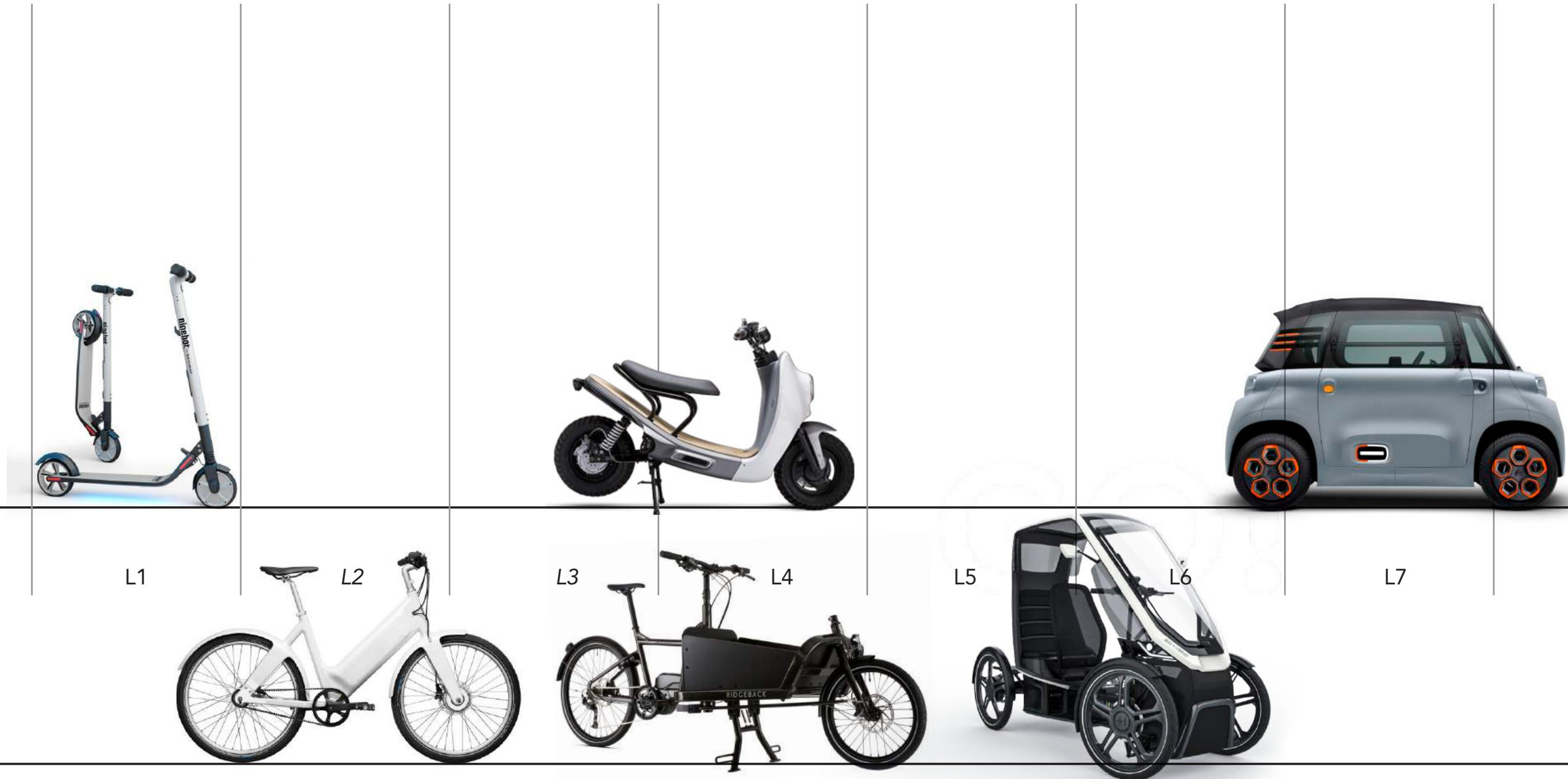


Micro Mobility

Identifying Opportunities

To find areas of opportunity a clear understanding of the sector is important:

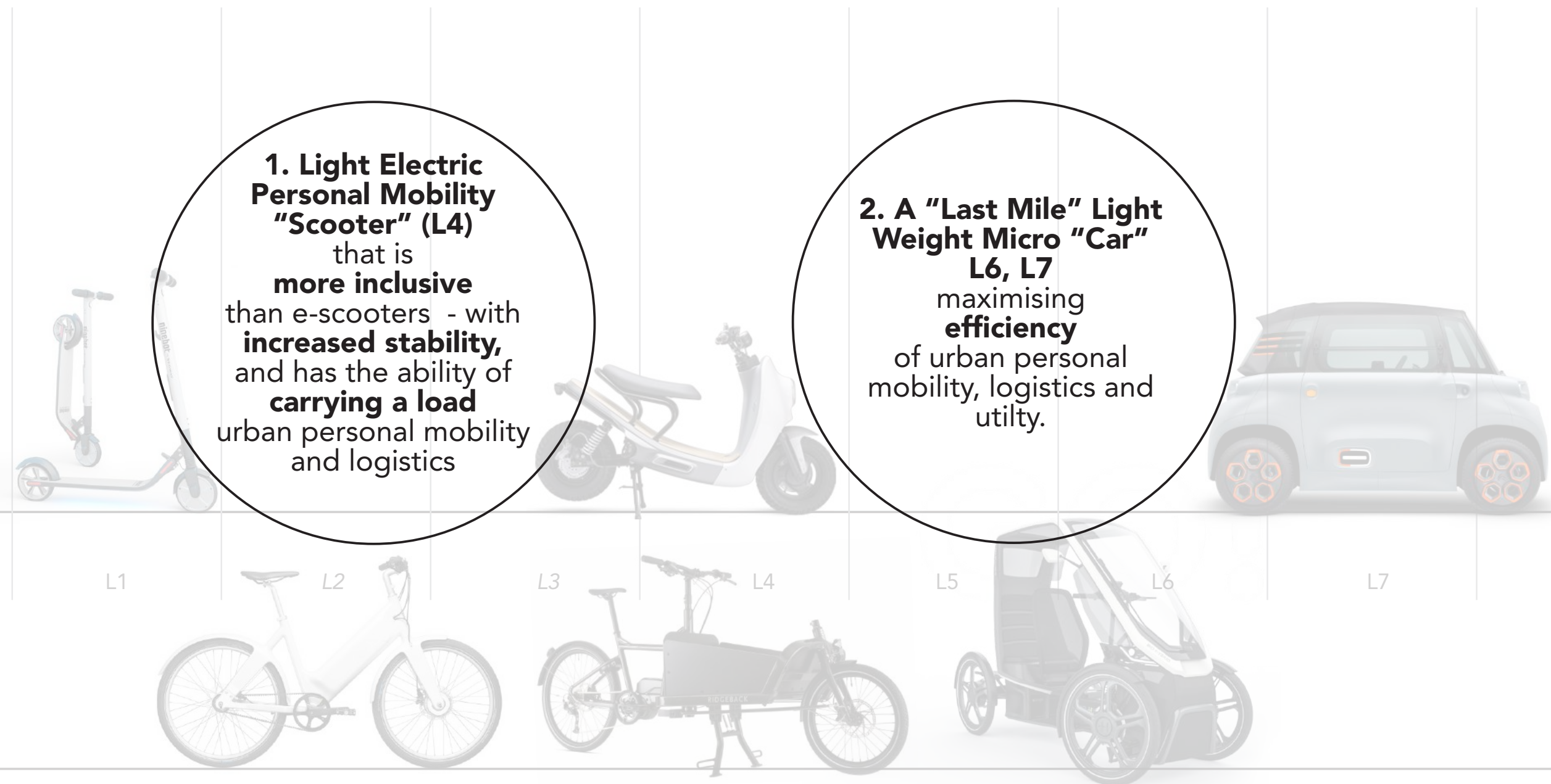
Changing Market Needs - Competitors - Relevant Technology - Legislation



Micro Mobility

Identifying Opportunities

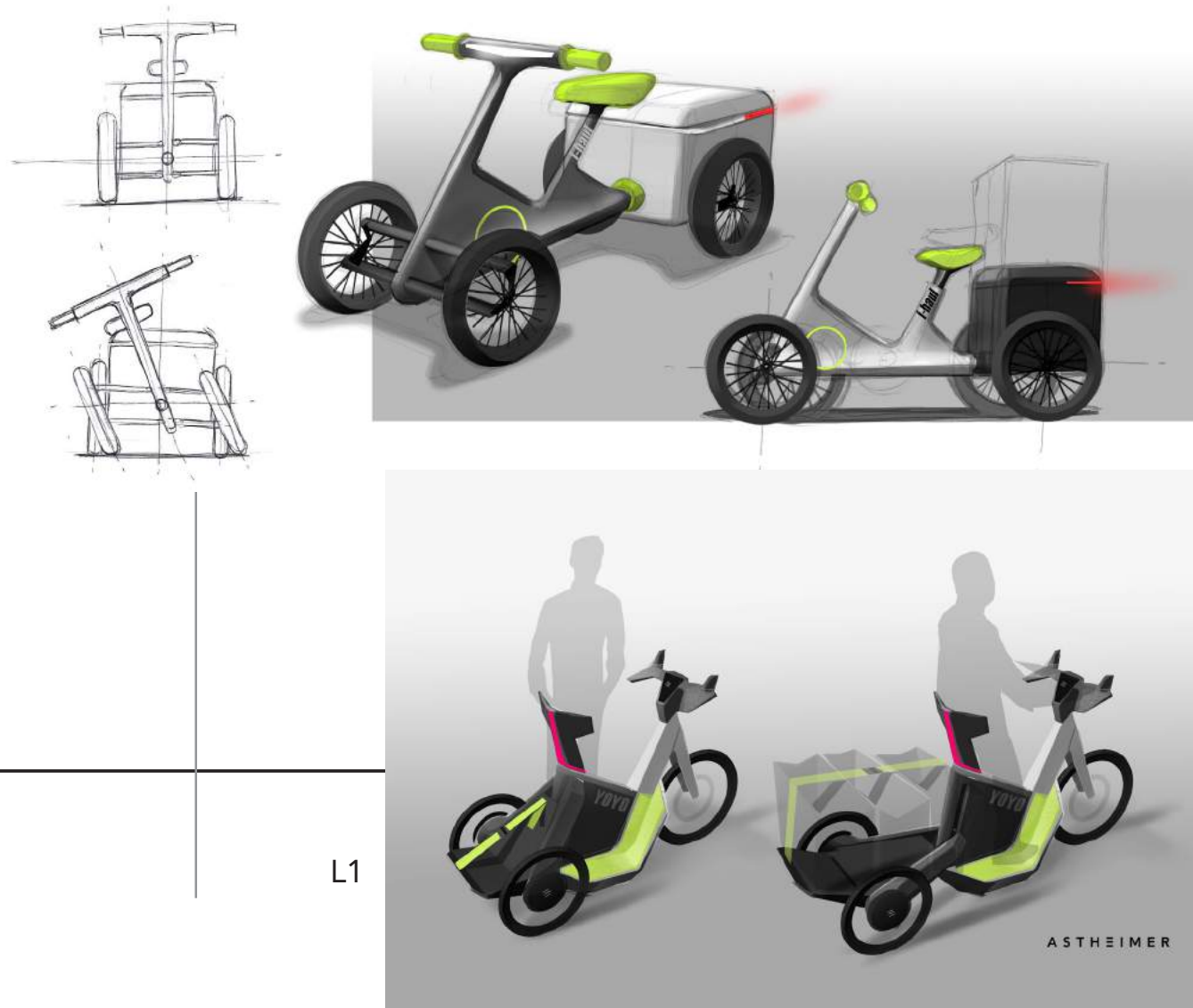
There are 2 clear areas of opportunity:



Micro Mobility

Opportunities

1. Light Electric Personal Mobility "Scooter" (L4)
more inclusive with increased stability, carrying a load
for urban personal mobility and logistics. (Max 500W, 55kg)



L1

2. A "Last Mile" Light Weight Micro "Car" L6, L7
maximising efficiency
for urban personal mobility, logistics and utility.



L4

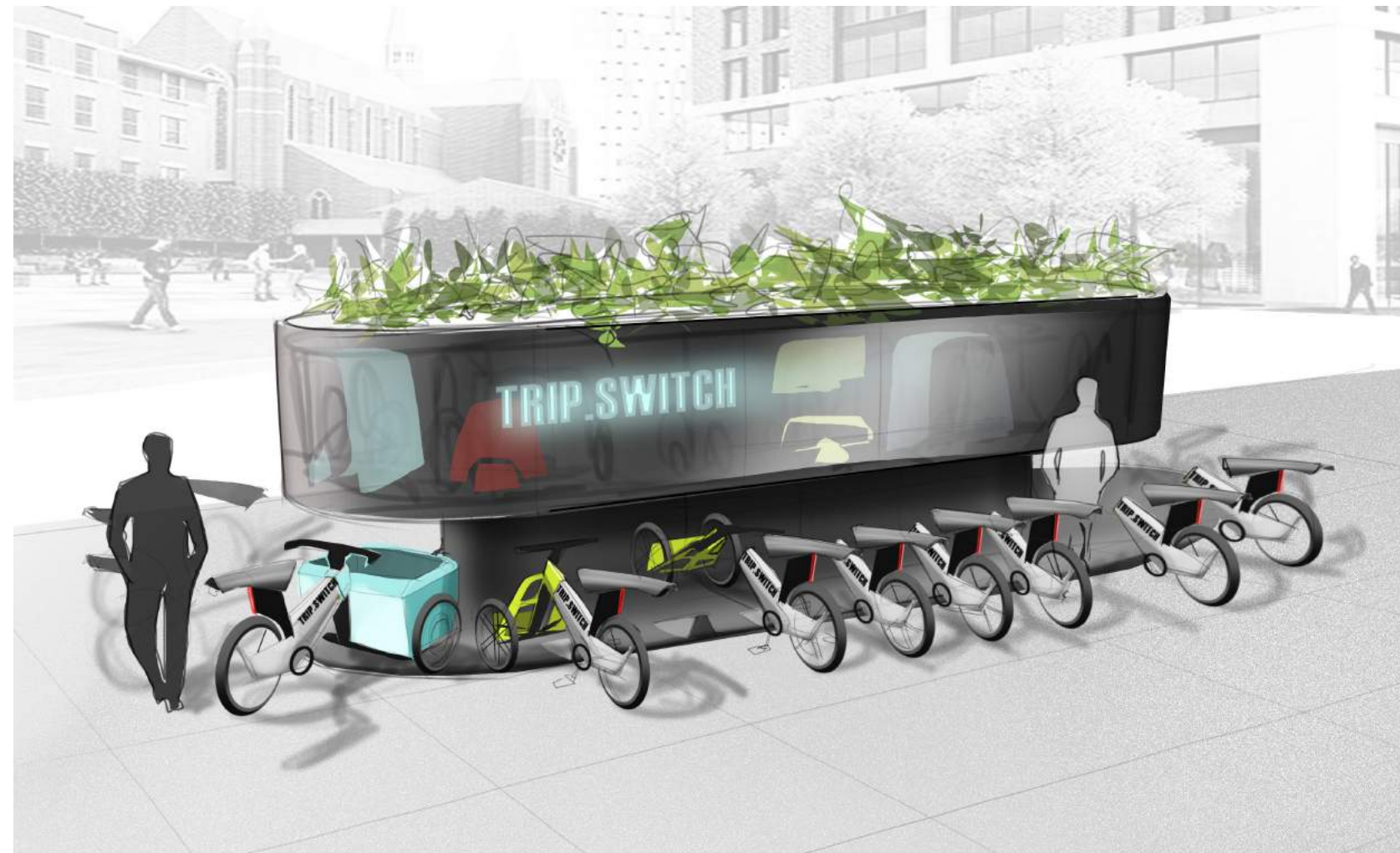
L5

L6

L7

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Astheimer

Unit 9, St George's Park
Warwick, CV34 5DR
+44 (0) 1926 842 354
carsten@astheimerltd.com
astheimerltd.com