



Long Life to Micromobility

ABOUT THE PROJECT

LIFE2M aims to make micromobility more **accessible, durable** and **sustainable**, both environmentally and economically.

The project addresses **technical, regulatory** and **economic barriers** currently limiting the spread of micromobility in urban and peri-urban areas.

KEY OBJECTIVES



Integrate hybrid supercapacitors into electric microvehicles to replace lithium batteries



Retrofit existing bicycles - reduces resource consumption and extends lifespan



Designing and testing durable micro vehicles made from recycled materials



Deploy solar-powered fast-charging stations for micromobility fleets



Address legal and regulatory challenges that limit micromobility adoption



Raise awareness through communication campaigns on safety, sustainability, and innovation

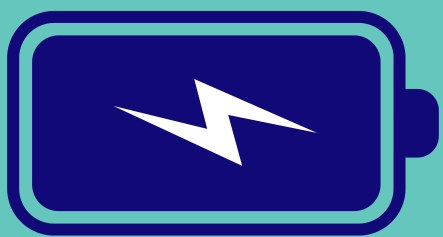


Develop scalable business models for both private and shared use

TECHNOLOGICAL INNOVATIONS

HYBRID SUPERCAPACITORS

Charged in
20 minutes!



- **10 x** longer life cycle
- No critical raw materials
- **Safer** and more **stable** in extreme temperatures
- Ideal for high-intensity use

VEHICLE RETROFITTING

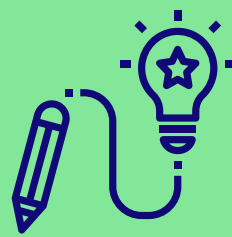


Converting traditional bicycles into e-bikes using SC kits

Cost effective and environmentally sound

Pilot in partnership with **AMAT Palermo** for public fleet upgrade

ECO-DESIGNED



Prototypes made with:
recycled carbon fiber, multi layer wood, bioresins

Designed for **durability, safety and ease of maintenance**

Includes upgraded **LEONARDO vehicle**



SOLAR FAST-CHARGING STATIONS



- Powered by **photovoltaic panels**
- Built with **recycled plastic** and **modular infrastructure**
- Urban curbside and pergola-integrated versions
- Enable **rapid recharging** for fleet operations

MONITORING & DATA COLLECTION

Real time platform for tracking:

Vehicle performance



Charging cycles

Environmental impact

User behaviour

Data used to **refine technologies** and **inform policy**



EXPECTED IMPACTS

ENVIRONMENTAL



Fewer emissions



Less e-waste - long life SC



Lower material consumption

TECHNOLOGICAL



Faster and **safer** recharging



Stronger, lighter, recyclable vehicles



Proof-of-concept for SC-powered fleets

SOCIO-ECONOMIC



Reduced total cost of ownership



Viable **business models** for **logistics** and sharing



Local supply chain development and **upskilling**



CONSORTIUM



Coordinator: University of Florence



Partners: EUAbout, Università Guglielmo Marconi, UNEED.IT, Silidea, Esco Mobility, F&N Compositi, Comune dell’Aquila



Expertise: academic, industrial, municipal



Total budget: €4.36 M

PILOT CITIES



FLORENCE



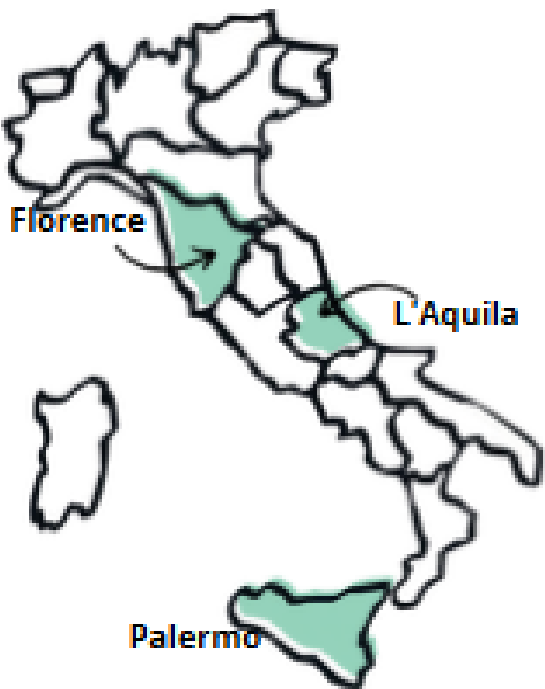
PALERMO



L’AQUILA



BRUSSELS



MORE INFORMATION



Website: www.life2m.eu



LinkedIn: Long LIFE to Micromobility



Instagram: @life2_m



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