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MILANO 1863

DEPARTMENT OF MECHANICAL  
ENGINEERING

# *LaserEMobility*

Network and know-how for laser based manufacturing in the eV sector



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Ali Gökhan Demir, Politecnico di Milano

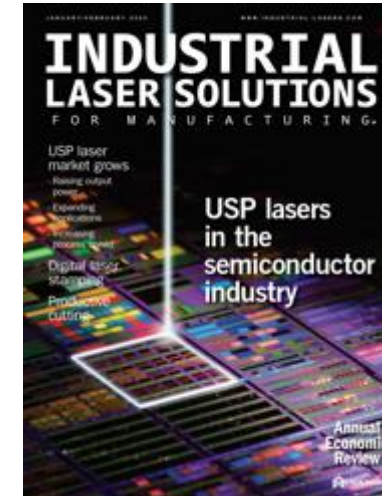
*LaserEMobility* Workshop 2022  
10-11 March 2022, Bologna



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# Lasers for e-mobility: Opportunities and challenges

- Lasers, optics, and sensors are **established tools** for e-mobility
- Lasers, optics, and sensors are becoming **commodities**
- A series of solutions available in the market – **Almost excessive**
- The market demand is **high** – The diffusion is **limited**
- What is the reason for the current **blockage**?
- How do we define the **process/product metrics**?
- How do we **qualify** the process/products?
- What is the **next leap**? Solid batteries, hydrogen...

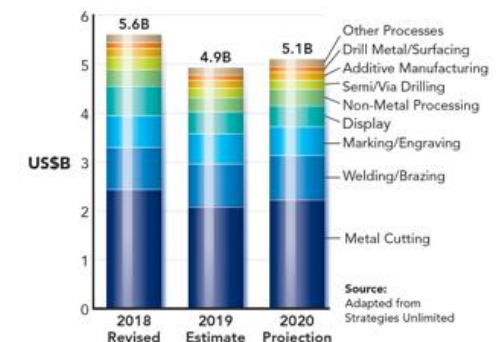


[www.industrial-lasers.com](http://www.industrial-lasers.com)

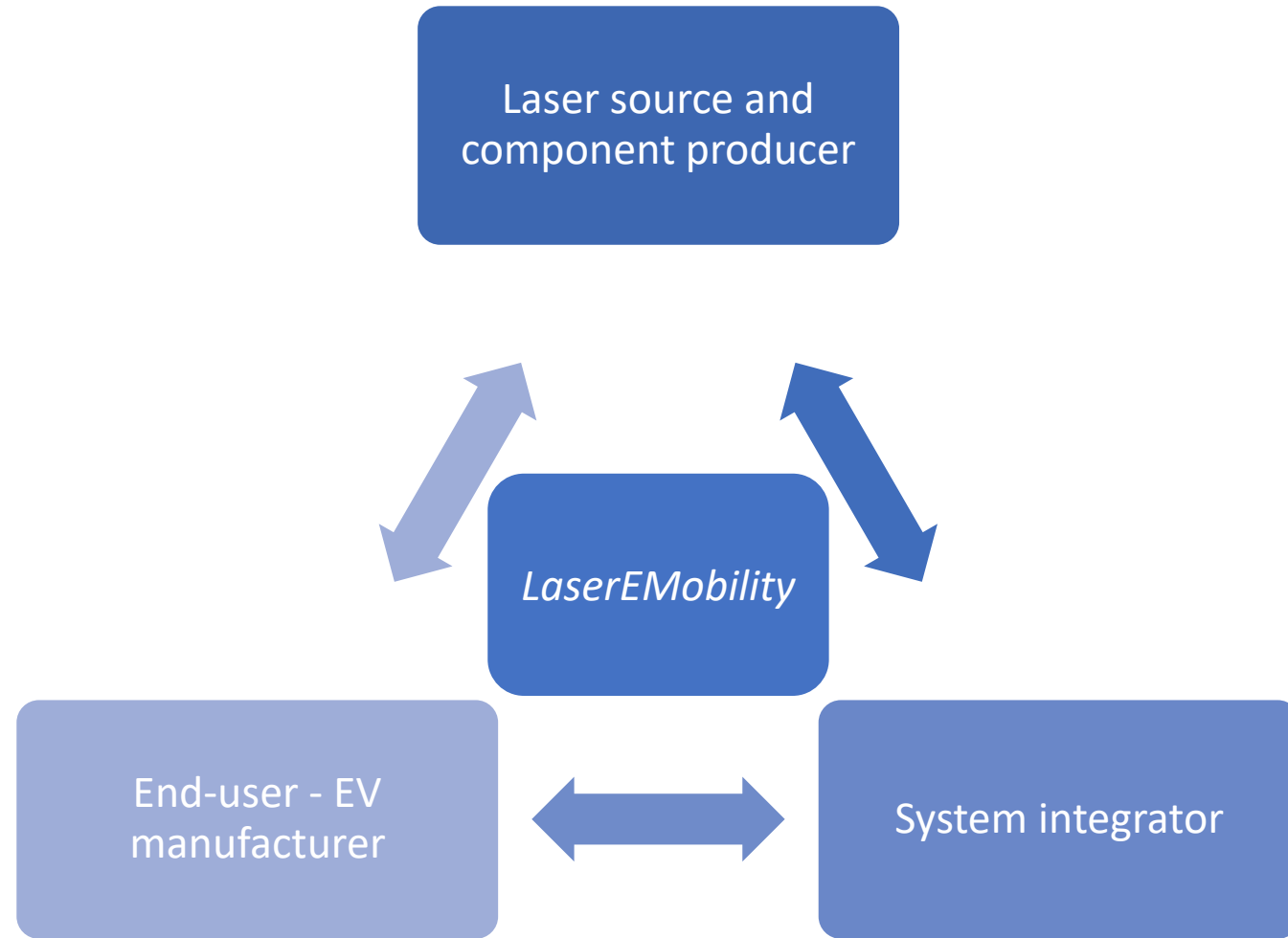
FIGURE 2. Global Industrial Laser Revenues (US\$M)



FIGURE 3. Industrial Laser Revenues - Processes



## Lasers for e-mobility: The key players



*An effective collaboration is fundamental for the next few years*



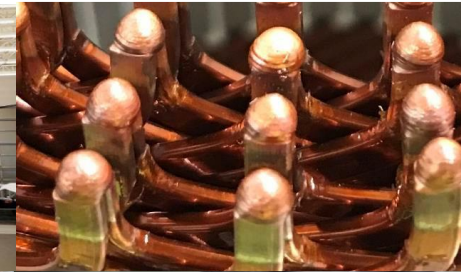
# Lasers for e-mobility serving the e-vehicle manufacturing demand



## LaserEMobility



Network and know-how for laser based manufacturing in the eV sector



*LaserEMobility* is a section of AITEM constituted in April 2021

Founded by 3 academic and 3 industrial partners

A network for know-how and progress the EV sector needs

**An international group ready for expansion**

**Where to start**

**Call for partners**

**An atlas of *LaserEMobility* applications - 2022**

Application, solution, quality metrics, measurement outputs

**PhD for the emerging *LaserEMobility* applications - 2023**

Industry supported PhDs for defining metrics and comparing solutions

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