



Consiglio Nazionale  
delle Ricerche

The Italian MATerials Technologies Infrastructure

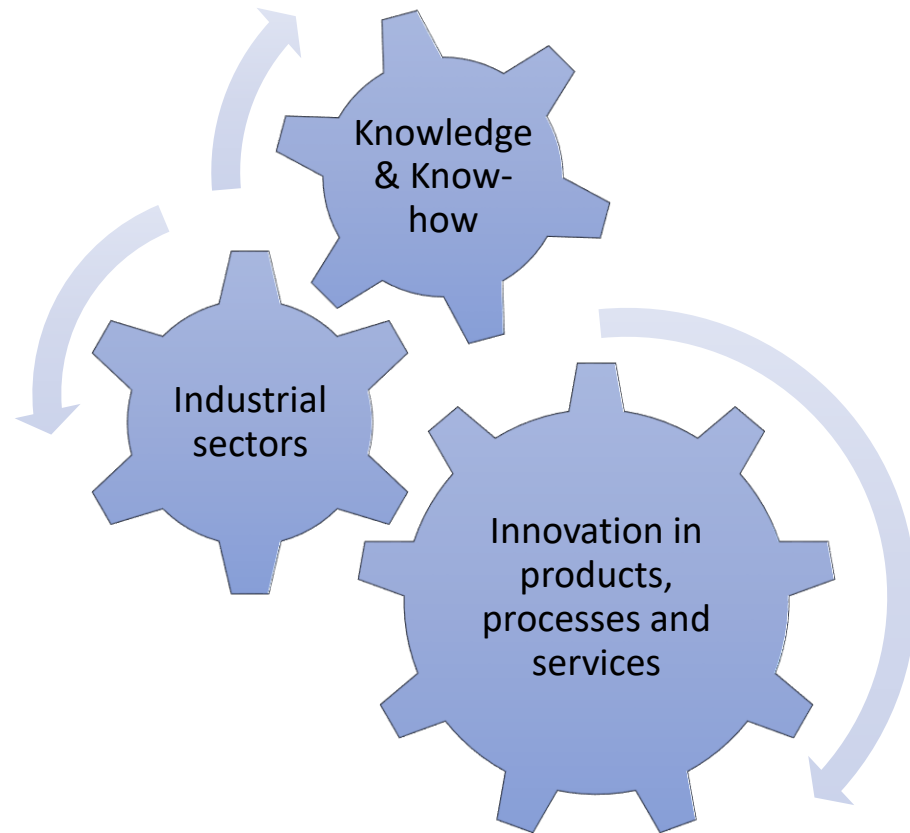
i-MATT

IN RESPONSE TO THE NOTICE OF THE MINISTRY FOR  
UNIVERSITY AND RESEARCH (MUR)  
FOR GRANTING FUNDING FOR THE IMPLEMENTATION  
OR UPGRADING OF TECHNOLOGICAL INNOVATION  
INFRASTRUCTURE

Nr. 3265/28-12-2021



# The Vision of i-MATT – 1/2

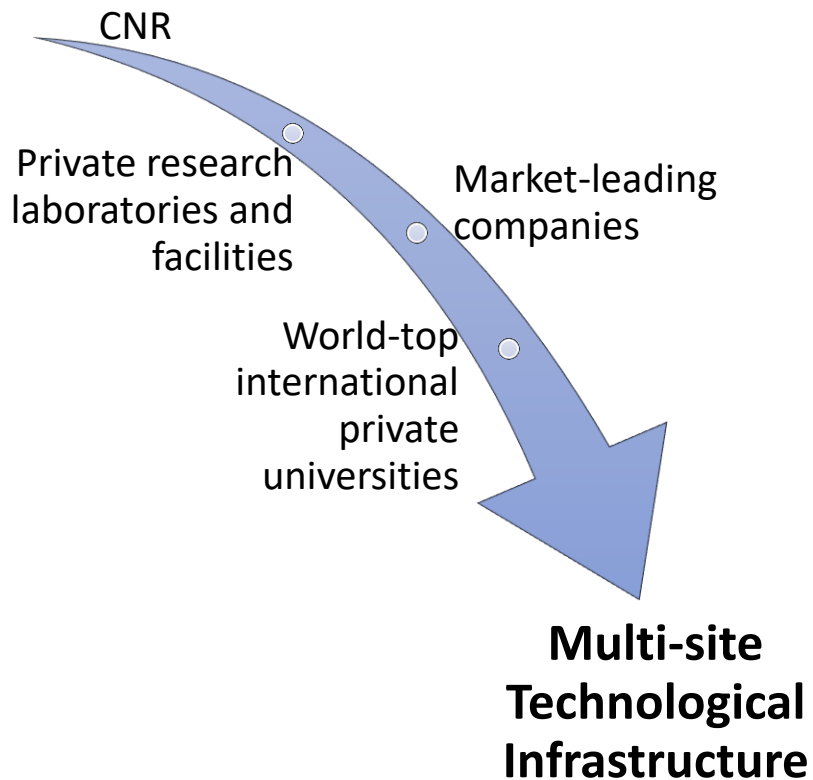


**Materials**, related processes and digitalization, are a **fundamental technology platform** for a sustainable industrial development and to enable the needed ecological transition.

i-MATT will be focused on:

- **developing** knowledge and practical know-how in the field of **advanced materials**
- **activate** efficient pathways to transfer knowledge to relevant industrial sectors,
- **foster** innovation in products, processes and services.

# The Vision of i-MATT – 2/2



i-MATT will be:

- a **multi-site technological infrastructure** formed by the synergic integration of **CNR**, **market-leading companies**, private **research laboratories and facilities**, world-top international **private universities**;
- organized through a **Public-Private Partnership (PPP)**;
- able to **test** and **develop** processes, create components, semi-finished products and finished prototypes, **integrating** state-of-the-art **processes**, analysis **equipment** and **digital** platforms.

# Focus on Develop and Deploy



i-MATT will address a **broad range of TRL** (from 5 to 9) relevant for stakeholders along the whole technological and industrial value chain.



The i-MATT actions will cover the **entire cycle of innovation on materials and components**:

- **studies** and **research** on a laboratory scale,
- **design** and **engineering** of products-processes-technologies,
- **experimentation** at a **pilot** and **industrial** facility level,
- **prototype** construction of systems and products,
- **reliability, safety** and **tracing** of materials and processes,
- **Recycling** and **environmental impact** of by-products and materials.



# Strategic Assets







- **i-MATT** will be stable at the core of its **partnership**, allowing new members to join and work effectively in **close cooperation** with other relevant innovation actors and structures;
- **i- MATT** will be a **scalable** distributed **infrastructure** enabled through a Central Hub located at CNR Bologna;
- **i-MATT** will act as a **multi-sided ecosystem** facilitated by local and trusted access points;
- **i-MATT** will develop **demand-driven services**;
- I-MATT services will be developed through a green and digital **transition-driven approach** and an **evidence-based** business planning.



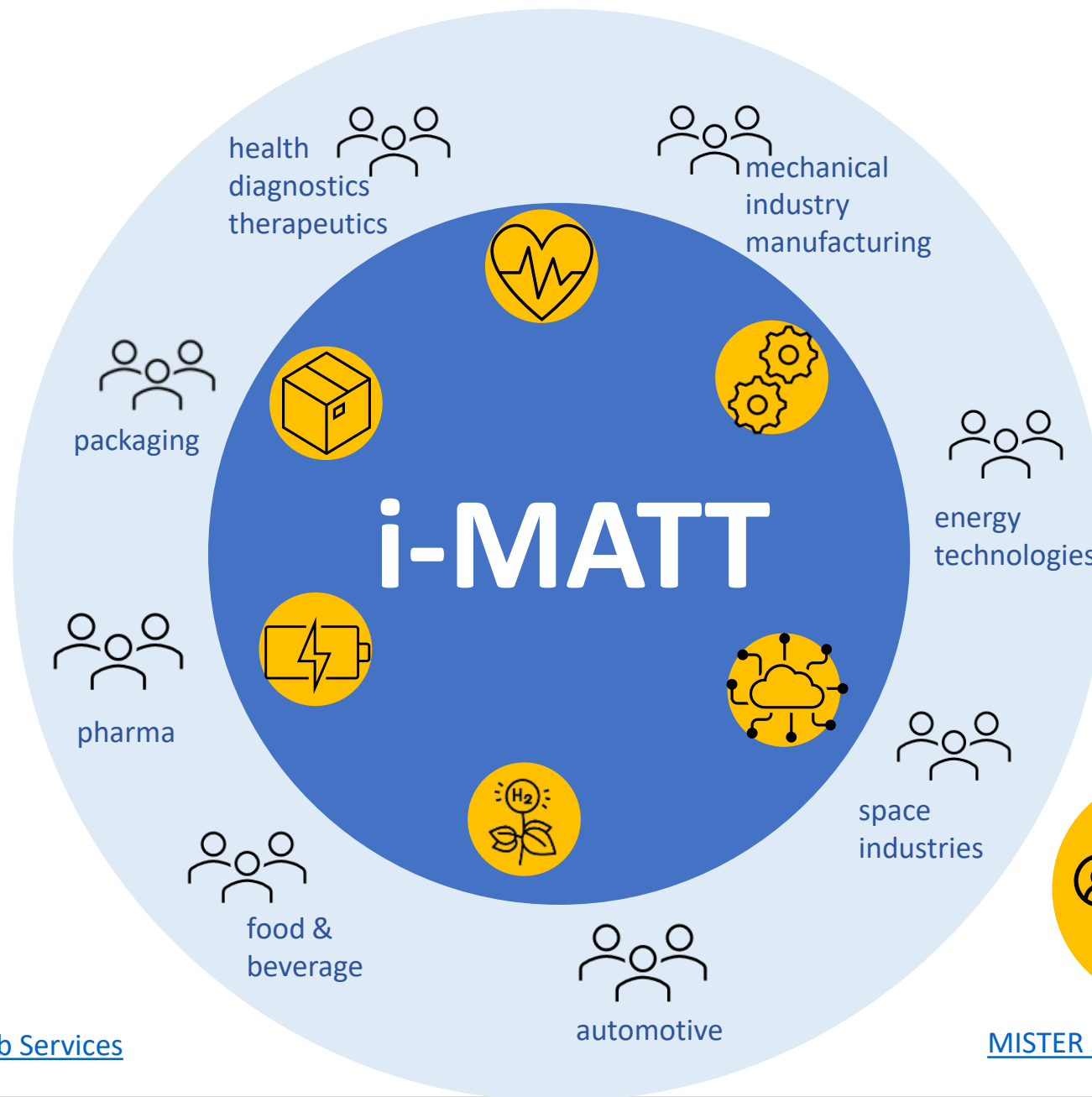


# Industrial and Technological Sectors

i-MATT will provide services to **transversal industrial applications**, to cope with the **innovation demand** that urges from **key sectors** such as advanced mechanics, packaging, energy and health, providing solutions for:

-  Materials and processes for **packaging**, both flexible and rigid, to enable plastic-free packaging
-  Materials and processes for advanced **mechanics**
-  Materials and processes for **energy** storage
-  Testing of components and systems in real application environment for large scale **hydrogen** technologies
-  Materials, processes and protocols for **health**
-  **Digital** platforms for data management, processes and protocols digitalization.

# i-MATT PPP



[SACMI, SIC](#)



[Bormioli Pharma](#)



[ICI Caldaie](#)



[RSE](#)



[Medtronic, John Hopkins University](#)



[Spindox, Bureau Veritas, Amazon Web Services](#)



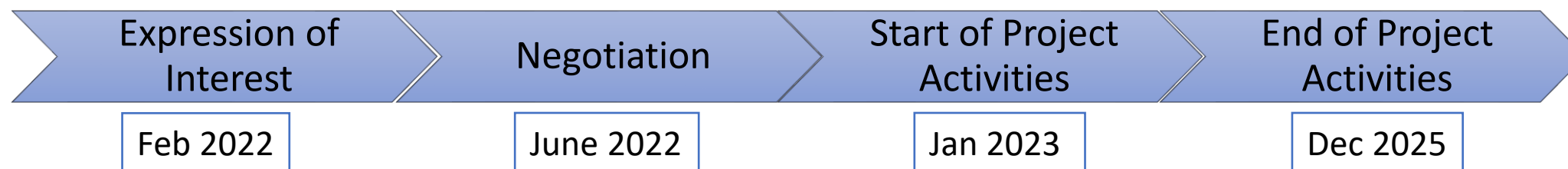
[MISTER Smart Innovation](#)

# Roadmap of i-MATT



A public call for Expression of Interest gathered 18 “early-bird” adhesions to the i-MATT project from large enterprises and SMEs

- **Negotiation** phase expected in June 2022
- **Activities** start on 01/01/2023
- **Duration** of 36 months
- **Budget** €39.425.500





# Thank you for the attention

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Resources:



<https://www.gea.mur.gov.it/Bandi/Itec>

<https://www.urp.cnr.it/segnalazione.php?id=35>