

Circular
TwAIIn



21
Partners



11
Countries



7,2M€
Budget



36
Months

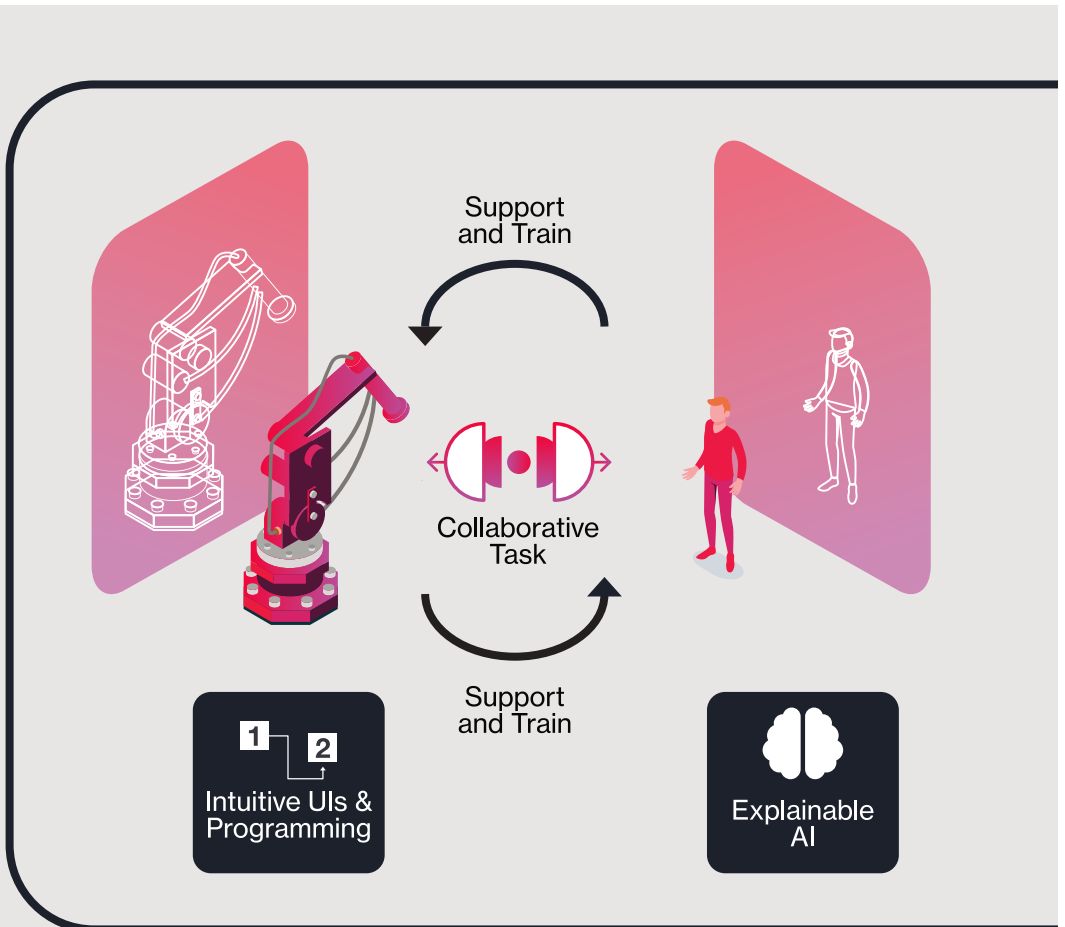
AI Platform for Integrated Sustainable and Circular Manufacturing



Co-funded by
the European Union

The Project

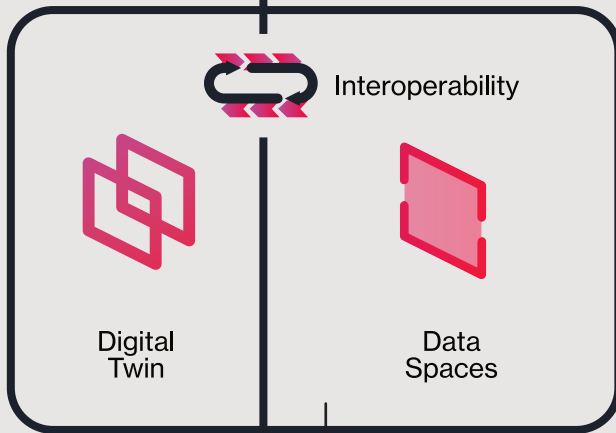
Circular TwAI researches, develops, validates, and exploits a **novel AI platform for circular manufacturing value chains**, which will support the development of interoperable **circular twins** for end-to-end sustainability.








Based on the use of trustworthy AI techniques, the project enables **human centric sustainable manufacturing**, fostering the transition towards Industry 5.0 as well as the integration and combination of different data from various

sources, with the intent to exploit the advantages of seamless data sharing within trusted and effective manufacturing data spaces, over the entire product life cycle considering sustainability aspects.

Collaborative AI



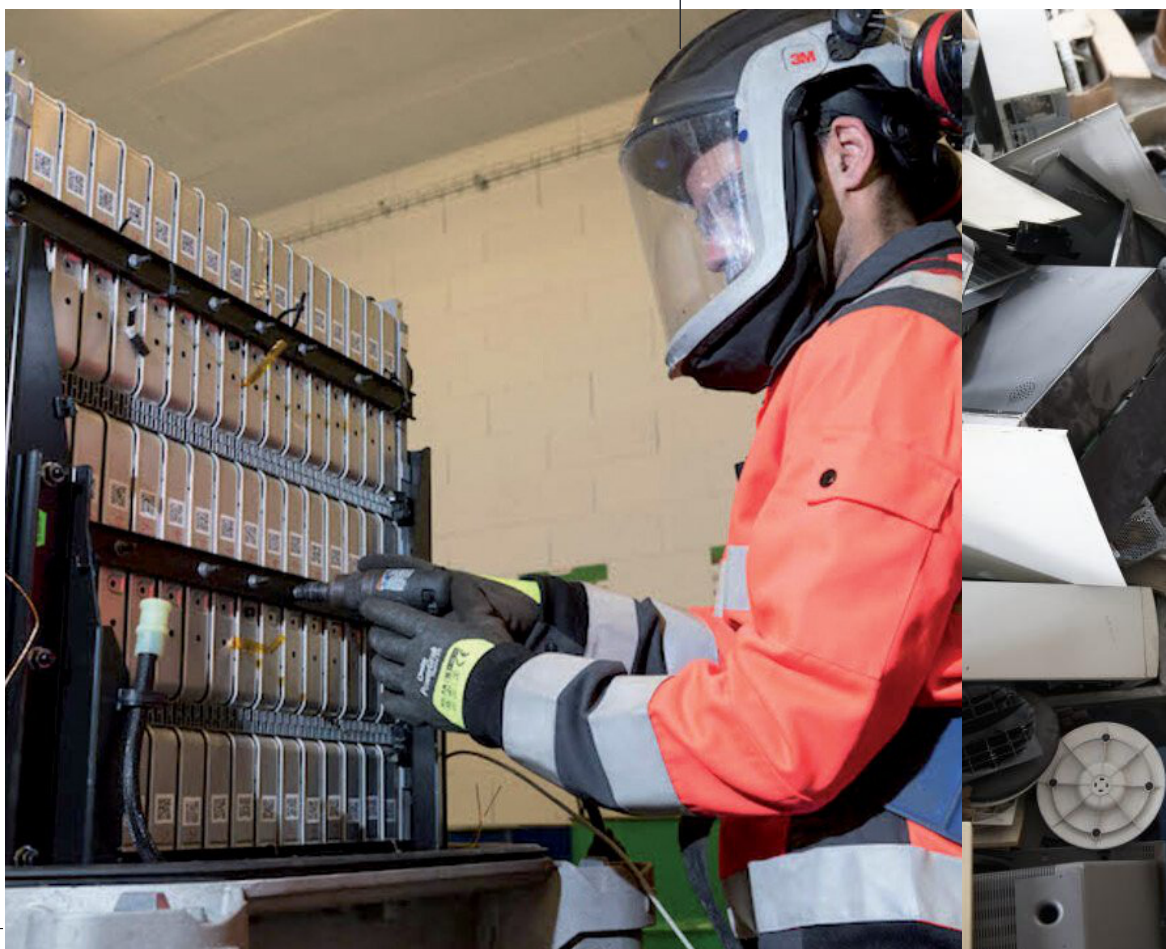
Seamless Data Sharing

-  **Circular**
-  **Data**
-  **Models**
-  **Orchestration**
-  **Optimisation**

Use Cases

Li-Ion Battery Packs in E-mobility

Deploying collaborative AI and ML to overcome the challenges of LIB packs' de- and re-manufacturing.



Consumer Electric and Electronic Equipment Waste

Overcoming the limitations of customer WEEE de- and re-manufacturing.



Petrol-Chemical Production Plants

Utilising advanced technologies to optimise energy consumption during the Petrol-Chemical production process.





**Sustainable
manufacturing
through
AI technologies**



**End-to-end
sustainability in
industrial
production**

Consortium

**The Consortium is
composed by
21 Partners across
11 European countries.**



netcompany

intrasoft

EXPERT AI

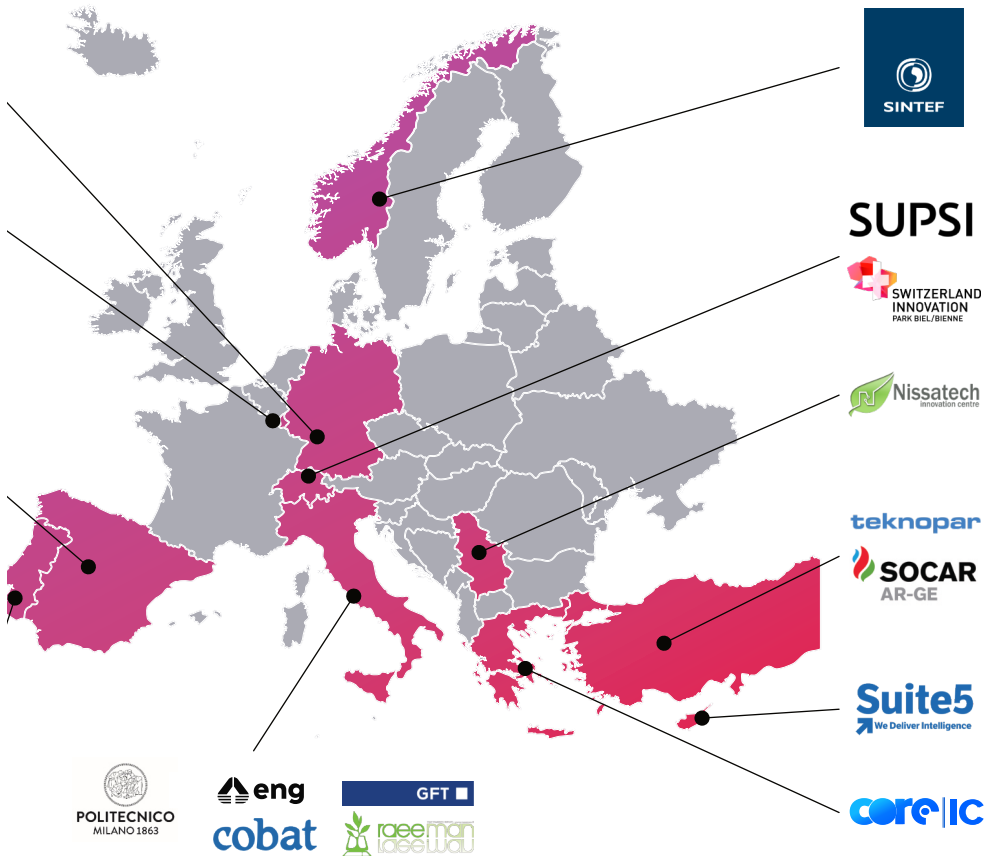




**Industry agility
and resiliency**



**Advanced circular
manufacturing
technologies
throughout the
product's lifecycle**





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