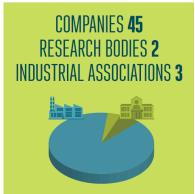




The leading Railway Cluster of Italy, based in Tuscany





















Leader of the Working Group on Railway Transport



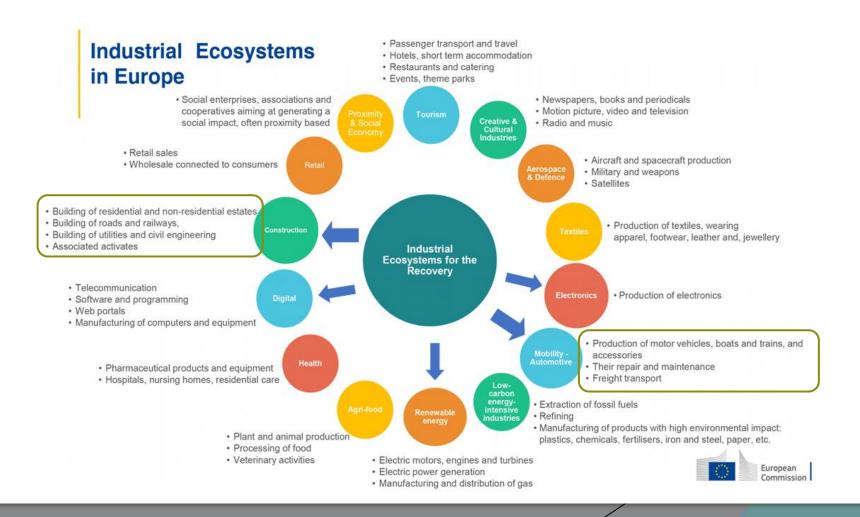
Coorrdinator



Lead Partner



The Railway industrial sector — indeed — is cross-ecosystems:



The Railway sector and its key role for a greener and more resilient EU



Environmentally-friendly and energy-efficient, rail will play a crucial role in helping the EU become climate neutral by 2050. The COVID-19 crisis has also shown how rail transport can facilitate the supply of essential goods such as medical devices, food and fuel in exceptional circumstances.

— Oleg Butković, Croatian Minister for the Sea, Transport and Infrastructure, President of the Council





OF EU TRANSPORT EMISSIONS COME FROM RAILWAYS



Greenhouse gas emissions from transport in the EU (2017)







National Recovery
Plan Guidelines
(September 2020)

6 macro-missions:

- 1. Digitalisation and Innovation
- 2. Ecological transition
- 3. Health
- 4. Infrastructure marked by sustainability
- 5. Education and Research
- 6. Social and territorial inclusion





National Recovery Plan

→ Infrastructure marked by sustainability

Since Recovery Plan funds have to be committed by 2023 and have to be reported by 2026, the <u>projects maturity</u> is key.

For this Italy will fund:

- of the huge majority, infrastructures already included in the «Piano Italia Veloce» drafted in July 2020 and listing 130 strategic infrastructures for whom simplifying the bureaucratic procedures
- few investments in new green and digital innovation





National Recovery Plan

- → Infrastructure marked by sustainability Railway-related ones:
- Railway infrastructures for citizens' mobility and high-speed connections (target: 80% of the population living at less than 1 hour from a high-speed railway station)
- Reduction of infrastructural gap in local mobility (new local trains, buses, etc.)
- Green ports and sustainable logistics
- 2 experimental projects:
 - Brenner digital green corridor (hydrogen)
 - Local Public Transport 4.0 («TPL 4.0») via creation of a living lab in Milan for innovative technologies for the LPT





National Recovery Plan

Were the Italian Clusters involved in the identification of macro-missions or other parts of the Recovery Plan, so far?

No.

So, how can we help?















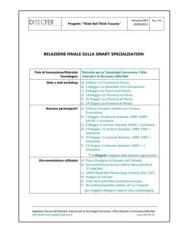




Our contribution for the Tuscany Region

2013 — Identification for the RIS3 of Innovation Roadmaps of the 'Regional Cluster for Railway Technologies' we are managers of

2018 — Mid-term Review of the Innovation Roadmaps for the RIS3









RESEARCH AND INNOVATION STRATEGIES FOR SMART SPECIALISATION

















Set in the year	Our Innovation Roadmaps for RIS3
2013	Manufacture Greener Trains
2013	Manage the end-of-life of vehicles
2013	From revamping to eco-sustainable retrofitting
2013	Make Infrastructures greener
2018	Digital Railways and Autonomous Vehicles
2018	Safe, more secure, capable and reliable Infrastructures
2018	More maintenable Infrastructures
2018	Mobility-as-a-Service (MAAS)



In conclusion: (1/2)

Italy is delivering a National Recovery Plan that complies with a socio-economic EU growth driven by *Green Deal* and *Digitalisation*.

The Plan is being drafted without any clusters' involvement.

The Plan will have to be «pragmatic», because if you want to deliver in our field — that require long-term works — you have to focus on more «mature» projects, not on new innovative ideas.

However, thanks to the fact that Clusters like ours have identified since years Innovation Roadmaps for the S3/RIS3 compliant with *Green Deal* and *Digitalisation* drivers, a Cluster like ours can have an impact in the Italian National Recovery Plan during the implementation phase thanks to innovations we are delivering.

What will be key for our companies in this, will be the *instruments* to complete the R&I processes quickly and not wasting time sitting on the bed of innovation's «valley of death». Our green and digital <u>innovations</u> *must* reach the markets <u>better</u> and <u>quicker</u>, and ultimately they must be requested by the market, and the European (public) market must be ready to pay for them. Only in this way we'll be able to contribute to a full National and European recovery.



Current forms of collaboration among European Railway Clusters we are involved in will be key to drive the *recovery along cross-national industrial railway ecosystems*.

In conclusion: (2/2)



