

Innovation as a key tool to reach safe, inclusive and green mobility solutions

CONFERENCE

Alessandro Finicelli Secretary General Think Smart Mobility @MIND

Panel: "How to establish an effective regulatory framework and standards that facilitate the deployment carbon free and efficient mobility solutions"

Think Smart Mobility @MIND Members (Milano Innovation District)



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Mission: Think Smart, Mobility @MIND was created with the aim of building a public/private partnership, it wants **to be a driver of innovation and contamination**, finding in the MIND exhibition site the ideal place to experiment and implement new network projects. Creating a system, this is the invitation addressed to those who decide to participate in the initiative.

Public Istitutions

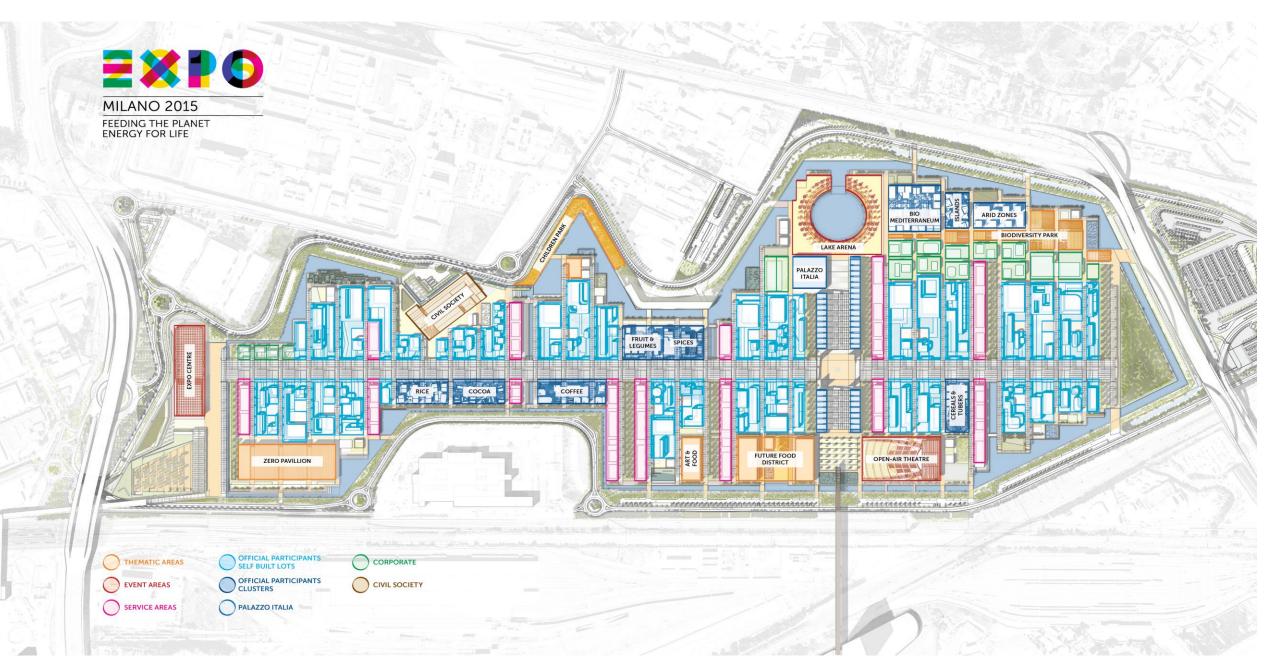
business

school

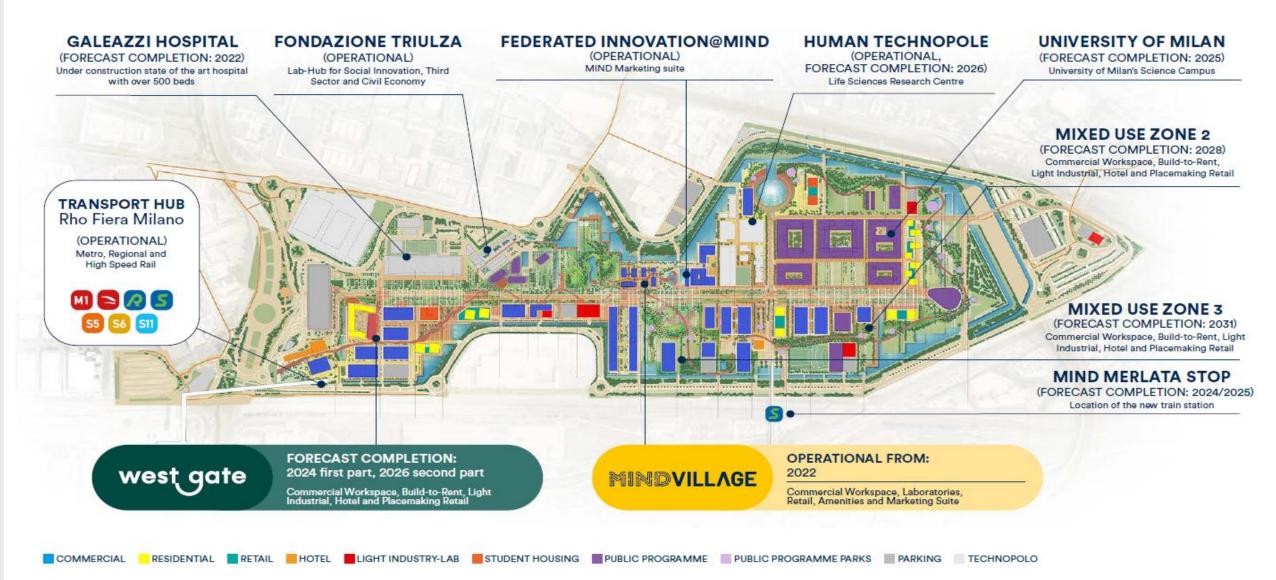
ITS

move

Past: Bricks and Mortar



Present & Future: Bricks and Clicks







THEMES AND CHALLENGES (ENERGY, DATA AND MOBILITY)

1) Hydrogen Mobility

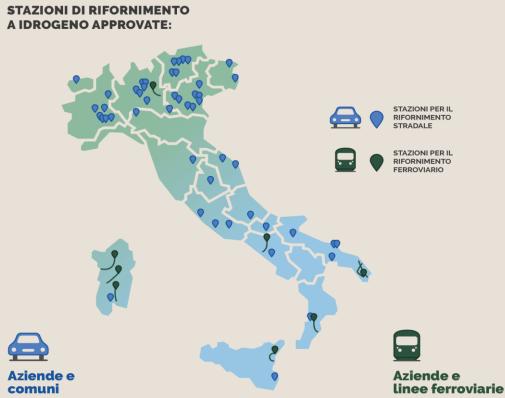
Hydrogen is playing a key role in the race to create a sustainable European economy. **The Lombardy Region has launched important projects in the field of mobility**. Theme and challenges in public/private collaboration between the subjects participating in it.

2) Smart Mobility, Data and Artificial Intelligence

Accelerate the affirmation of Smart and Artificial Intelligence for mobility in Lombardy, with skills capable of making the territory a point of reference in the regional strategy. Theme and challenges in public/private collaboration between the subjects participating in it.

3) Smart Rails, Smart Roads and Infrastructures, Autonomous Mobility

The Lombardy Region intends to create an **Innovation Hub (HUB)** for the research and experimentation of assisted and autonomous mobility solutions, intelligent infrastructures capable of communicating with vehicles. Theme and challenges in public/private collaboration between the subjects participating in it.



Alperia Greenpower Srl Brunico (BZ) Autostrade del Brennero

Lavis Est (TN) Lavis Ovest (TN) Verona Vipiteno (BZ)

Gemmo Spa — Simplifhy Sb Srl Azienda Prov. Trasporti San Donà di Piave (VE)

Monfalcone (GO) **Beyfin Spa Soc. Benefit** Cortona (AR)

CFFT Spa Civitavecchia (RM)

Spa

Hope Srl

Bari

Dilella Invest Spa Italgas Reti Spa Sestu (CA)

ENI Spa S. Mobility

Pianodardine (AV)

Green Factory Srl

Casale Monferrato (AL)

Milano Serravalle Spa

Q8 Petroleum Italia Spa

Carugate Est (MI)

Tortona (AL)

Porpetto (UD)

Roma

Carugate Ovest (MI)

Cassano d'Adda (MI)

Paese (TV)

IP S.P.A.

San Donato Milanese (MI)

F.M.C. Srl - Base House Srl

Taranto

Mestre (VE)

EDISON Spa Meolo (VE) San Bonifacio (VR)

Piacenza Carisio (VC) vercelli San Severo (FG) Ferentino (FR) frosinone Malpensa (MI)

Energie Techfem Srl Società benefit Bellocchi di Fano (PU) **Res - Recupero Etico** Sostenibile Spa Pettoranello del Molise (IS)

Priolo Gargallo (SR)

Sapio Srl - Keropetrol Spa Mantova Vicolungo (NO)

Sasa Spa Bolzano Merano (BZ)

Snam 4 Mobility Spa Arquata Scrivia (AL) Avezzano (AQ)

Belforte Ovada (AL) Limena (PD) Monselice (PD) Torrazza Piemonte (TO)

Sol spa Pollein (AO)

Teca Gas Srl

Renco Spa - Az. Agr. Del Poggio Sas - Immo Del Poggio Srl Falconara Marittima (AN)

Res Integra S.r.l.

Torre a Isola (PV)

Lamezia Terme (CZ)

Arst Spa Sassari-Alghero Macomer-Nuoro Monserrato-Isili

Ente Autonomo Volturno s.r.l.

SMCV-Piedimonte Ferrovie del Sud Est e Servizi Automobilistici s.r.l.

Lecce-Gallipoli Novoli-Gagliano Casarano-Gallipoli

Ferrovie della Calabria Cosenza-Catanzaro

Ferrovienord Spa Brescia-Iseo-Edolo **Gestione Governativa** Ferrovia Circumetnea

Circumetnea

Next GenEU Hydrogen Refuelling Stations

Challenges:

- FCEV Vehicle (2.5x / (UE) n.406/2010 Omologation, NO Service, Maintenance and Ispection Regulation / NO Incentive Buy, Park, LTZ / BEV regulation extention needed)
- H2 Refuelling Costs (500 Km / 90 eur / 18 eur x 100 Km / NO contribution)
- H2 Colours/Production (Grey, Blue, Green, Pink) Market Deployment
- H2 Safety Station/Vehicles/Garages (UE 2014/94/UE / DM 2018)



Pilot Ongoing: MIND Area (MIND Innovation Week May 2024 BUS / CAR)



What's next? MIND Area / MED / Rhine-Alpine TEN-T Logistic Corridors (LIGHT AND HEAVY TRUCKS) Pilot with Retrofit H2 Technology





Smart Roads paving the AV way



Challenges:

- AV Vehicle Costs/Availability: Buy / Rent
/ Lease / Public Transport / Taxi only ???
Industry process ongoing

- AV Legislation (DM 70/2018 Italy / NO Car Maker Permission, Pilot only / NO Public Roads / No Interaction with other vehicles / No Insurance / DL 76/2020 «Sperimentazione Italia» 1Y only for testing / AUTONOMOUS ACT LAW Germany benchmark / SAE L5 Private Area

- Roads and Highways AV ready (HD Maps
/ Traffic Signs / Speed Limits / No Service /
Maintenance / Inspection Regulation)

- **Social Impact** (Public education about automated vehicles is needed)



Smart Roads paving the AV way

What's next? Pilots

MIND Area Fiera Milano Exhibition Center Fiorenza Train Maintenance Center Galeazzi Hospital / Municipality of RHO

Target: 1000 Robotaxi Selected Users





Alessandro Finicelli



<u>https://www.linkedin.com/in/alessandrofinicelli/</u> <u>https://www.linkedin.com/company/think-smart-mobility-mind</u> Thanks for your attention !