





Dialogues between Lombardy and Consular Corps: how to involve companies to become a smart & green land



MISSION

In order to an efficient use of the Recovery Funds:

 To compare Lombardy Region with other foreign Regions and Countries in terms of SMEs incentives and policies for improving digitalization and sustainability.

 To reinforce the role of Consular Corps as channel to promote market opportunities of their Countries to lombardy companies.



HOW?

Stimulating

trilateral dialogue in strategic sectors

to make our territories smart and sustainable,

comparing more and less advanced areas of the world.



CICLE OF 3 WEBINARS ON...

Clean energy

With the participation of the Consulate General of Australia and Brazil and the collaboration of the Lombardy Energy Cleantech Cluster.

Webinar date: 26 May 2021



Artificial intelligence

With the participation of the Consulate General of Canada and Poland and the collaboration of the Lombardy Cluster Associazione Fabbrica Intelligente.

Webinar date: 22 June 2021



Sustainable mobility

With the participation of the General Consulate of Mexico and Finland and the participation of the Lombardy Mobility Cluster.

Webinar date: 8 July 2021



Dean Salamanca:



(Clean energy is not an alterantive anymore, but a necessity. Countries must collaborate, not compete, to face climate change»

CLEAN ENERGY



ITALY & LOMBARDY



Italy has invested 70 billions in clean energy during the last 5 years

LOMBARDY TARGET: from 15% to 30 % of energy mix until 2030

Hydroeletric is the most relavant renewable resource in Italy

1/4 of the hydroeletric national production is located in Lombardy



LE2C

http://www.energycluster.it/en

LE2C is the regional technology cluster for energy and the environment: it works to support the growth, innovation and competitiveness of production in Lombardy.





FOCUS AREAS













SECTOR PROFILE IN LOMBARDY:

N.Companies: 500

Turnover: 23 billion euros

Employees: 15.000



Lines of intervention of the Lower Emission Tecnology Statement:

- **Clean hydrogen** target: to become the producer. In progress cooperation agreement with Corea and Japan.
- Low Carbon Materials
- Carbon Capture and Storage

Half billion dedicated to increase partenerships with foreign Countries.

AUSTRALIA

From 2017, 30 billions invested in clean energy. Energy production using renewable resources come from rural areas: solar, eolic, etc...

Committed to circular economy and waste to energy.



Electric components is increasing: 18 billions of investments which created 13.000 new jobs.

BRASIL

Producer of 7% of clean energy in the world.

46% of energy come from renewable resources (83% if only electricity is considered).

From 2000 to 2019 registered an increase of **75%** in the supply of **renewable energy**.



Main national objectives: decarbonization and to guarantee a secure national energy supply.



It launched a program for the diversification of the energy resources: from oil and fossil fuels to biofuels and electric. Target: increase clean energy of the 60%, attracting 50 billions of foreign investments in the sector thanks to incentives and tax relief. It provides specific calls and procurement for foreign partners which represent a best practice.

Consular Corps Coordinator Michelangela Vismara:



«Al evolution started in 1956 with industrial algorithm, the **machine learning** era is now in full expansion

the **global AI market value** of 0.69 trillion dollars in 2017 is likely to reach **6.40 trillions in 2025** "

ARTIFICIAL INTELLIGENCE



ITALY & LOMBARDY



Italian PNRR represents a big occasion to introduce AI in companies: **26,7 billions** are dedicated to **digitalization**, innovation, and competitiveness in manufacturing system.

After financial services, manufacturing is the 2° sector spending on technology and artificial intelligence.





AFIL is the regional cluster on advanced manufacture which promotes best practices and enables technologies among companies to support and develop the leadership and the competitiveness of the Lombardy production system.

It supports Lombardy Region in defining R&I strategies regarding the manufacturing sector.



Lombardy is the **first manufacturing Italian Region** and **third in Europe** for number of **employees**.



SECTOR PROFILE IN LOMBARDY:

N. Companies: 88.743

Turnover: 250 billion of euros

Employees: 890.773

CANADA

In 2017, was the first Country that adopted a **national AI strategy**: the Pan-Canadian AI Strategy, which started with the **definition of industry needs and standards**. It worth \$125M.



- 100+ Al research chairs attracted
- 1.200+ graduated students trained at the Al Institutes
- \$600M in VC funding for Canadian AI startups. 650 startups with AI projects
- 45 new AI R&D labs in partnership with major multinational companies.



Canadian AI firms are mainly involved on application development to solve commercial problems.



Al firm domain in Canada: Healthcare, Government and FSI sector.



CANADA

170 formal partnerships between the private sector and 3 main Al Institutes - Vector Institute, Mila and Amii - to commercialize and discover Al applications.

The formal partnerships offer an ability to:

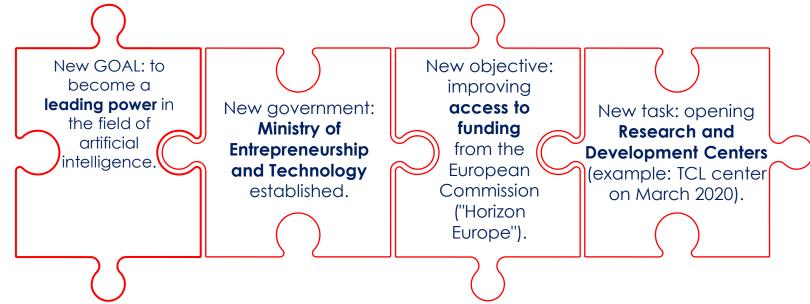
- tap into the Canadian Al talent pool
- establish collaborative work environments between Canada-centric labs and international headquarters
- Utilize government subsidies and investment incentives.

Canada's IP performance in AI and machine learning has exceeded many expectations by producing the most patents per capita among G7 nations and China between 2015 and 2018.



POLAND

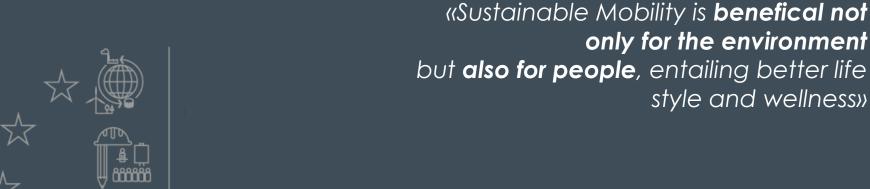
The national plan is focused on **public-private collaboration**.



Main challenge: lack of data quality and accessibility.



Dean Salamanca:



SUSTAINABLE MOBILITY



ITALY & LOMBARDY



Lombardy is at the top of the world for the production of **biomethane**, which is less polluting than electricity.

Lombardy is also advancing in **hydrogen sector**, working on one of the **first hydrogen-powered railways in Europe**, which will be located on Lake Iseo.





https://www.clusterlombardomobilita.it/EN

CLM is the regional cluster for mobility. It oversees the automotive, marine, railway, ITS and intermodal sectors (transport and infrastructure) and promotes their competitiveness.

It develops synergies and research projects in collaboration with several universities, such as Politecnico di Milano.



CLM Cluster Lombardo della Mobilità Lombardy Mobility Cluster

It elaborates a Periodical Report regarding business and technical development scenarios on mobility sectors.

Lombardy is the 4th automotive industry in Europe and the second in Italy:

N. Companies: 1.000

Turnover: 20 billion euros

Employees: 50.000



CLM FOCUS AREAS:



Electric Mobility.





Innovative materials.



Intermodality, Co-modality and Logistics.



Sport.



Methane, Biomethane and Hydrogen.



On-board sensors&Connected vehicles.



Sustainable mobility



Local Public Transport.



Mass, reduction of vehicles





FINLAND

The National Plan is based on 3 pillars:

- decarbonisation of the entire sector and of the entire transport chain aviation, maritime, rubber, focusing on replacement
- renew the fleet, with regard to vehicles used for public transport, vans and trucks
- move towards electric and hybrid cars. The government forecasts to add 700.000 electric cars until 2030.

The sale of electric and hybrid cars grew by 18% thanks to bonus policy.

A consistent part of the **Recovery Fund** will be used for improving the **hydrogen sector**.





FINLAND

It adopted a National Plan to reduce emissions of 95% before 2030.

Several programs to promote connectivity, vehicle automation, data security and data protection.

Finland wants to become an **European manufacturer and** supplier of batteries.

It is leader in the Litium battery industry, as it is significant the availability of raw materials for battery.

100+ of companies provide services of Machine Vision.

It is committed on **battery recycle** as well as **reseach in EV**.





MEXICO

A National Stategy which puts people at the center. It:

- provides legal framework for sustainable mobility
- allows young people to move towards safer, more accessible and resilient mobility
- reduces pollution coming from the internal combustion of vehicles
- optimizes energy saving and consumption
- fosters the use of **energy from renewable sources**, mainly **electric**. Importation of electric vehicles is exempt from customs.
 - 193 new electric units.
 - New electric metro bus line.
 - 600 km of cycle paths.

Taxi replacement program with electric and hybrid vehicles.



CONTACT:

CONFINDUSTRIA LOMBARDIA Via Pantano 9 - Palazzo Giò Ponti- 20122 Milan Phone: +39.02.58370800

CHIARA JACINI
e-mail:
c.jacini@confindustria.lombardia.it

