





## "Dialogues between Lombardy and Consular Corps: how to involve companies to become smart & green"



### **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.





Undersecretary to the Presidency of the Lombardy Region

Alan C. Rizzi:

«As the Consular Corps of Milan and Lombardy play a key role in promoting international economic cooperation, the Lombardy Region strongly wanted to involve them through the organization of a webinar cycle, which focus on manufacturing and sustainability.»





#### CYCLE 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 to face together climate change»

## **CLEAN ENERGY**





#### **ITALY & LOMBARDY**



Italy has invested 70 billions euro 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 billions euro** 

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 AUD 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.

## **BRAZIL**

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 increased by 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: clean energy increased by 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 dollars in 2025** "



## ARTIFICIAL INTELLIGENCE





### **ITALY & LOMBARDY**



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

Manufacturing is the **major investor** in **technology and Artificial Intelligence** after financial services.





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 billions euro

**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:

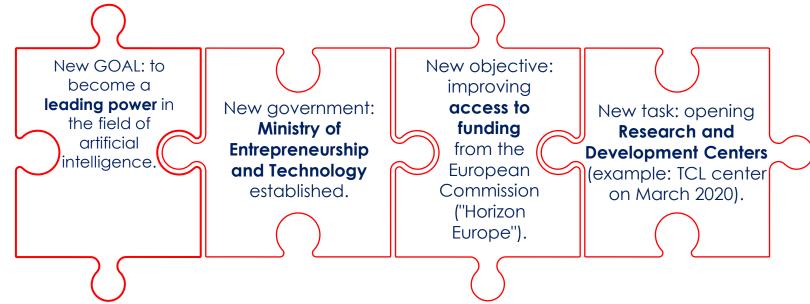
- tap into the Canadian Al talent pool
- establish collaborative work environments between Canada-centric labs and international headquarters
- Utilize government subsidies and investment incentives.

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 is **benefical not only for the environment** but **also for people**, entailing better life style and wellness»



# SUSTAINABLE MOBILITY





#### **ITALY & LOMBARDY**



**Lombardy** is the Italian major producer of **bio-methane**, 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.

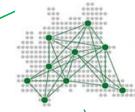




https://www.clusterlombardomobilita.it/EN

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 billions euro

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 CO2 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

