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Switzerland innovation ecosystem meets MIND (Milan Innovation District)

Sample Report of the scoping study commissioned by the General Consulate of Switzerland in Milan and Swiss Business Hub Italy

Introduction

The report commissioned by the Swiss General Consulate of Milano and S-GE to [PlusValue](#) presents the strengths of the Milan Innovation District (MIND), a long-term value creation project fostering collaborative innovation in Milan, and the Swiss innovation ecosystem, to promote cross-border collaboration between the two regions. Accordingly, this report examines three sectors of specialized compatibility: Life Sciences, Sustainable Construction & Infrastructures, and Investments for Sustainability & Innovation, utilising a combination of desk research from world-renowned sources such as the OECD, consultancies including PwC, and semi-structured interviews with leading experts from public and private institutions. As a result, the findings presented offer insights into both macro economic trends and key players in each sector, including incumbents, start-ups and research institutions offering innovation.

Structure of the Report

This sample report offers a brief overview of some of this study's key findings. However, the complete report initially describes the development of MIND, a leading-edge innovation district with EUR4.5b total private and public investment. This report then examines the three sectors, including the vision for each and key ecosystem actors. Switzerland is then explored in terms of its overall environment for innovation and investments: as the highest-ranked country in terms of innovation for the 11th consecutive year according to the Global Innovation Index, Switzerland offers key innovative strengths in research and industry. Finally, this report examines how these systemic advantages translate into each sector, before offering prospective views on how these will affect life in the future.

The findings informed events at the House of Switzerland in Milan in 2022. Additionally, they informed the Consulate General's approach in promoting the image of Switzerland as a competitive and leading innovation and technology hub for MIND.

Content of the Report

"Switzerland meets MIND"



Introduction

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Chapter 2 - "Switzerland: innovation nation"

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Chapter 3 - "Big Trends 2032"

- Application of AI to Healthcare
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- Blockchain For Good
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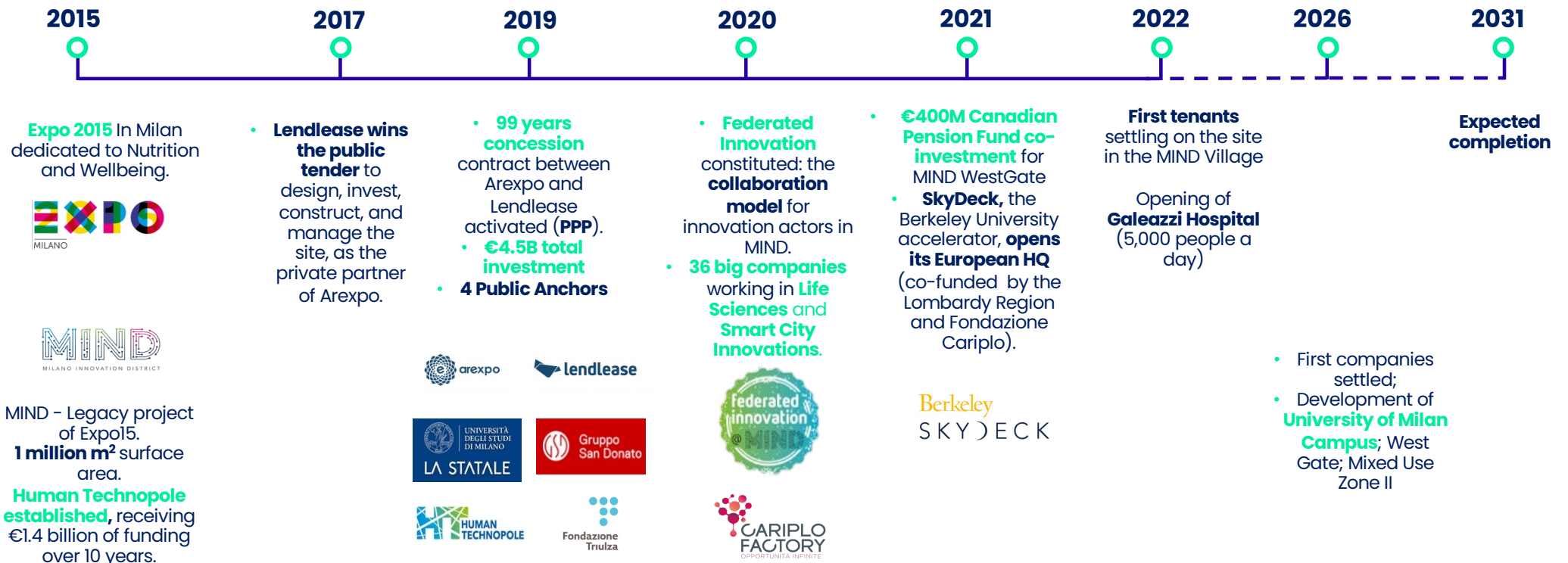
Conclusions: Interview Outcomes

Appendix

- Interviews
 - Partnerships MIND – Switzerland

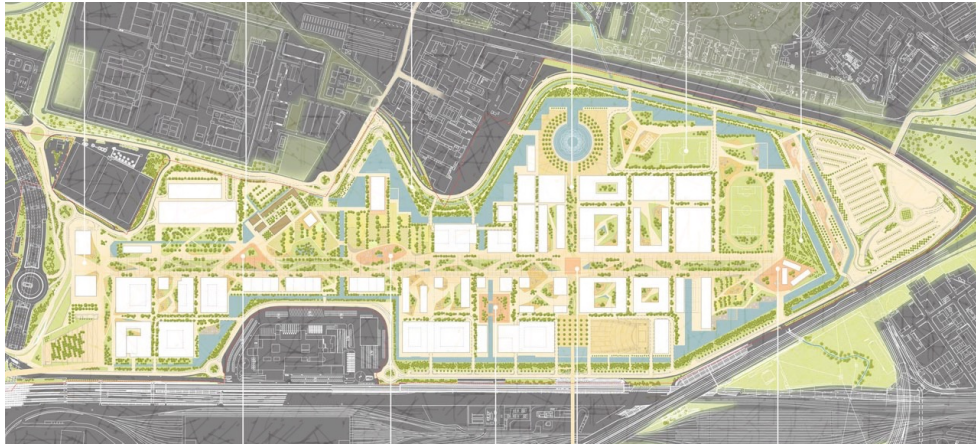
The Development of the Innovation District in Milan

MIND (Milan Innovation District) is a long-term value-creation project.
Construction phase: 10 years. Development: 99 years.



MIND – Milan Innovation District

Socio-economic Value



- **Public-Private Partnership** with **€4.5m total investment**
- **1 million m²** surface area
- **€2.6b** committed investments by private partner (Lendlease) over 99 years (Gross Development Value)
- 60,000 people living and working when fully operational
- 35,000 m² laboratories and light industrial facilities
- 40 hectares public open space

Strengths

R&D is integrated in the city embedding **urban regeneration** & research into the **innovation ecosystem** creating ongoing **value creation**

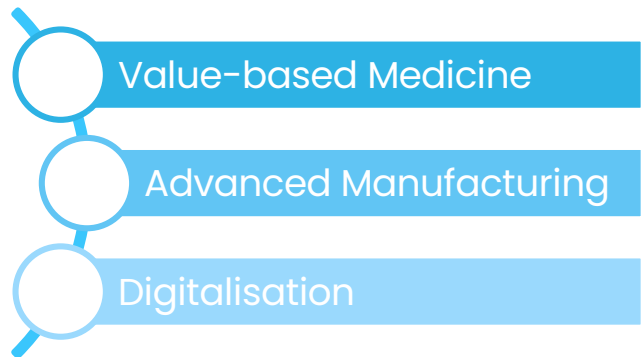
Innovative specializations that build on the strengths of Lombardy's **globally competitive** research institutions and businesses

A prolific ecosystem for testing new technologies and entrepreneurial solutions, especially in the sectors of **sustainable smart cities** and **public health**

Tailored financial instruments to boost innovation, from grants to seed, VC and PE funding, with a focus on **sustainable finance**.

Vision and key players

Life Sciences



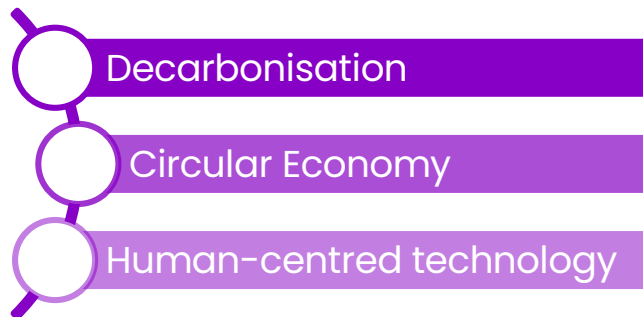
Inclusive, affordable and personalised healthcare

Upscale available precision drugs through advanced manufacturing

Scale-up personalised medicine through Big Data solutions



Sustainable Construction & Infrastructures



Net Zero district by 2025 and Absolute Zero district by 2040

Alternative materials and a 95% onsite recycling goal

Universal 5G, an integrated data platform, and smart mobility



MIND – Milan Innovation District

The Investment Ecosystem - key players

At the basis of the MIND development is a **co-investment model** between **Lendlease** and **other international institutional investors**.

This model allows Lendlease to deliver economic, social and environmental outcomes in line with shareholders ambitions and PPP requirements.

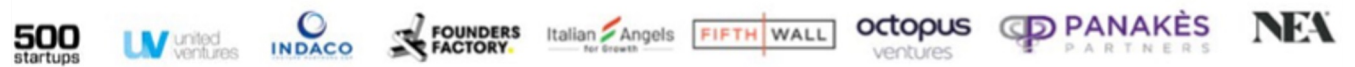
The confirmed equity partner investor is **Canada Pension Plan (€400m)**, while discussions with debt capital providers are ongoing.

MIND's vision is also enhanced by **Skydeck's presence**, the accelerator of the University of California Berkeley. €2.75m in funding from Cariplo Factory and the Lombardy Region, will be allocated to Skydeck start-ups, with a target of funding 60 start-ups in the first 3 years. A 3m VC fund is also being set-up to ensure follow-up funding.

Accelerators, incubators & innovation partners



Venture funds



Sponsors & industrial partners



Matching MIND & Switzerland

LIFE SCIENCES



Leveraging the strengths of the local ecosystem in Milan and the Lombardy Region, MIND is set to become **one of the top Life Science Hubs in Europe**. MIND is designed around the life science sector, fostering a supportive environment that amplifies the socio-economic impacts of the research produced by MIND's partners.

SUSTAINABLE CONSTRUCTION & INFRASTRUCTURES

The MIND site plays a key role in Lendlease's decarbonization strategy in Europe by following a **Roadmap to Absolute Zero Carbon, which aims to achieve 100% renewable electricity by 2030** and targets supply chain partners to achieve Absolute Zero carbon by 2040. In order to practically implement this, the site will incorporate cutting edge green infrastructures, including a Low Temperature Network (LTN) for more efficient heating and cooling. Improved construction sustainability will also be achieved through digital twin technologies, sustainable materials and circular economy approaches.



INVESTMENTS FOR SUSTAINABILITY & INNOVATION



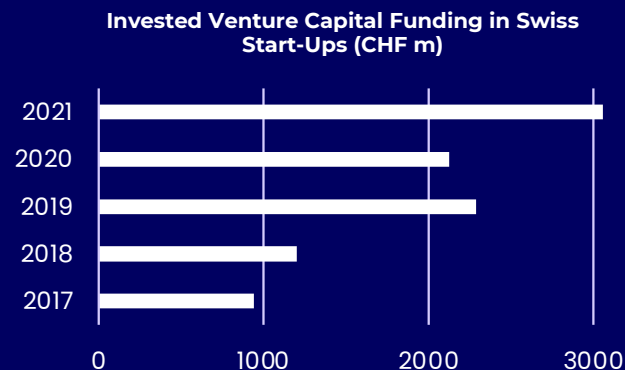
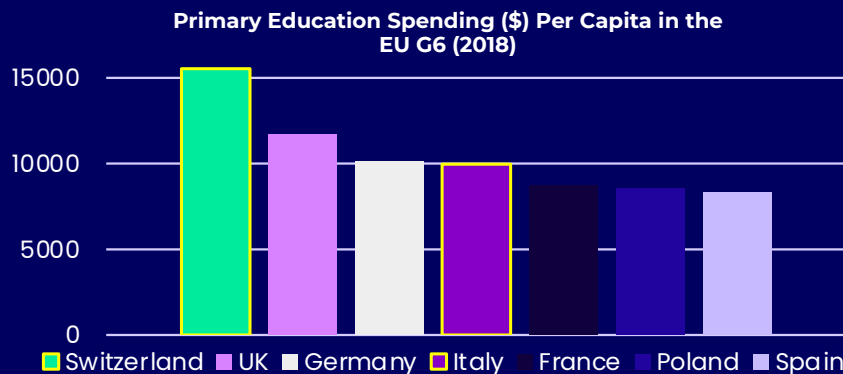
While the real estate dimension would be enough to ensure MIND's economic sustainability, **long-term value creation will come from innovative and sustainable investments**. Lendlease's innovation ecosystem – including the Federated Innovation – will create social, technological and green innovations, setting a benchmark for similar projects in Italy and further afield.

The Swiss Innovation Ecosystem

- ✓ **Top-quality Educational and Research Institutions:** world-leading universities underpinned by a dual-track education system, with 44% of people in Switzerland having apprenticeships as their highest qualification (2021).
- ✓ **Effective Tax and Regulation System:** with an average corporate tax rate of 14.5%, Swiss cantons can more effectively attract MNCs than other European Economies. However, regulatory complexity –has affected the business environment.
- ✓ **Availability of Financial Tools:** Private and public financial programs are fundamental to innovation promotion. Innosuisse, for example, increased yearly the funding for start-ups CHF 313.2m in 2020. While VC funding remains high, risk aversion creates some challenges to scaling up.

Global Innovation Index 2021

Rank	Country	Score
1	Switzerland	65.5
2	Sweden	63.1
3	USA	61.3
4	UK	59.8
5	Rep. of Korea	59.3
6	Netherlands	58.6
7	Finland	58.4
8	Singapore	57.8
9	Denmark	57.3
10	Germany	57.3
29	Italy	45.7



Thriving Ecosystem - key players

Switzerland's Innovation Parks



As part of domestic innovation promotion, Switzerland is constructing 6 innovation parks across the country.

Park Zurich alone is predicted to create up to CHF 2.5b of added value per year and up to 14,000 new jobs. The other parks currently of note are:

- **Park Basel** – HQ of Novartis and Roche; 50,000m² park with 1.000 workers.
- **Park Biel/Bienne** – 15,550m², producing 750 jobs across specialist labs including Advanced Manufacturing and Healthtech.

Public Actors

Innosuisse - Swiss Innovation Agency



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Innosuisse

Swiss federal agency promoting science-based innovation, investing CHF 29.6m on knowledge and technology transfer in 2020.



Switzerland Global Enterprise

Featuring 23 Business Hubs around the World, S-GE promotes interest in Swiss Innovation globally.

World-leading Universities and Professional Schools



European leader in scientific research, 1st in Europe for Engineering and Physical Sciences, 2nd in Life Sciences. Its 34 spin-offs raised CHF400m in 2021.



World-leading university for fintech innovation: highest ranked European University in the "CoinDesk Blockchain University Rankings 2021" due to its Blockchain Center.



Ranked fourth in Europe for Engineering and Physical Sciences. Creates one spin-off every two weeks, including unicorns like SOPHiA Genetics.



The University of Applied Sciences and Arts Western Switzerland spread over 7 cantons. With 47 bachelor, 23 master and 80.000 students is the largest university of applied sciences in Switzerland.

Sectoral Innovation & key players

Life Sciences

- 39% of Swiss exports are in chemicals and pharmaceuticals.
- Some of the world's largest biotech firms – Novartis, Roche – are headquartered in Switzerland.
- More than a third of private R&D expenditure is invested in Life Sciences as a result.



Sustainable Construction & Infrastructures

- Switzerland has a thriving construction industry, with dedicated investments accounting for 10% of its GDP, fostering steady growth in cleantech and proptech.
- Three of its cities – Zurich, Geneva and Lausanne – featured in the top 10 of IMD's Smart City Index in 2020.



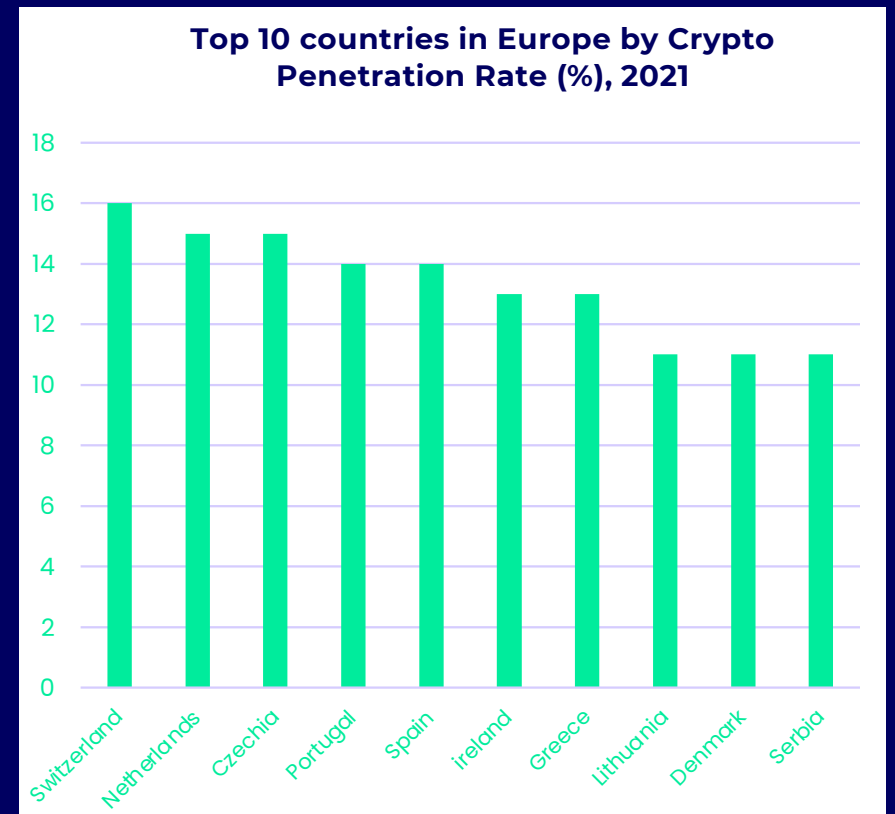
Investment Ecosystem

- Switzerland total sustainable investment volumes make up 13.7% of the whole European sustainable investment market.
- Partly, this is due to its regulatory system which facilitates massive fintech innovation.



Fintech and Crypto Valley

- Switzerland is considered the “crypto nation”. Crypto Valley Zug has been referred to as **the Silicon Valley of Finance**, featuring 919 firms, including **11 Unicorns** with a cumulative valuation of **USD 459.3b**.
- Switzerland was ranked joint 4th with Singapore in the PwC Annual Global Crypto Tax Report 2021, which evaluates a country’s level of tax competitiveness based on new government acts and regulations.
- Switzerland also features the highest demand for crypto in Europe, with 16% of its population having traded or owning crypto.



Matching Opportunities - Big Trends 2032

Application of AI to Healthcare

With greater risks to global health posed by urbanisation and climate change, there is larger demand than ever for efficient healthcare, with AI therefore becoming more important than ever.



Construction and the Circular Economy

The global construction sector accounts for 38% of worldwide emissions ([World Economic Forum, 2021](#)). As a result, the industry has strong incentives to decrease embodied carbon through circular economy principles

Blockchain for Good

Blockchain and decentralised finance offer transformative opportunities for the sustainability agenda by both facilitating vast improvements to transparency in companies' ESG efforts and green blockchain initiatives.



Transforming Aviation

Though flying accounts for 2.1% of all annual man-made CO₂ emissions, the turn to electric power is transforming the whole aviation sector by not only reducing emissions but increasing the quality and number of innovative services,.

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Thank you.

Filippo Addarii

Managing Partner and Co-founder

filippo.addarii@plusvalue.org

Valeria Soliano

Project and Communication Manager

valeria.soliano@plusvalue.org



9 Perseverance Works, Kingsland Rd
E2 8DD London (UK)

Corso Monforte 41,
20122 Milano (IT)



@plusvaluetweets



PlusValue (PV)



plusvalue.cloud