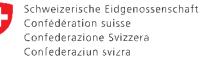
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EU Innovation policies Igniting the potential of Swiss and European Deep Tech Start-ups & Scale-ups





Mission of Switzerland to the European Union





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Welcome words

Dominique Gruhl-Bégin Innosuisse

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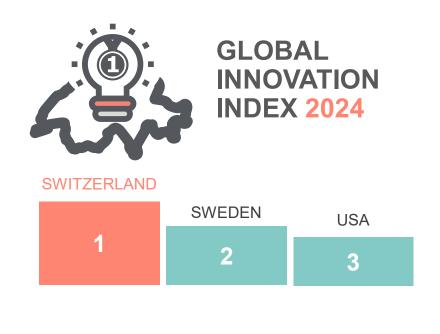
COLLABORATION TO MOVE THE WORLD WITH SWISS (AND EUROPEAN) INNOVATION

DOMINIQUE GRUHL-BÉGIN ceo, innosuisse

SwissCore Innovation Briefing 14.11.2024

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WHY SWITZERLAND IS AMONGST THE MOST INNOVATIVE COUNTRIES IN THE WORLD



WORLD'S BEST UNIVERSITIES

2 Swiss universities are among the top 30 in the QS ranking (2025)7 Swiss universities are among the top 150 in the THE ranking (2024)

VERY HIGH EXPENDITURES ON RESEARCH AND DEVELOPMENT (2022) - #8 WW with 3.31% of GDP

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SWITZERLAND AS LAND OF SMEs



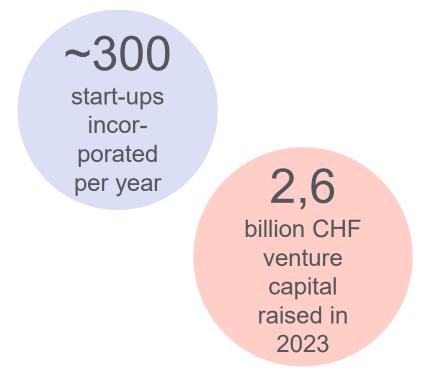
... who are also innovative! Why?

- Strong collaborations with universities and research institutes
- Innovative culture
- International outlook
- Access to skilled labor
- Strong investments in R&D

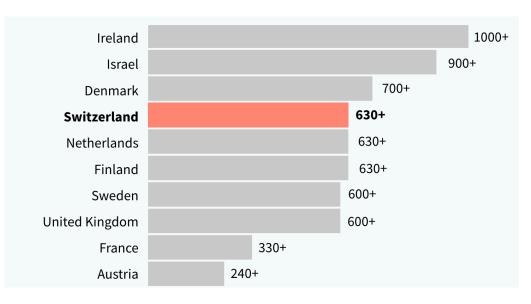


Sources: ETHZ/KOF Innovation Surveys

SWITZERLAND IS ALSO A START-UP NATION



Start-ups per million inhabitants

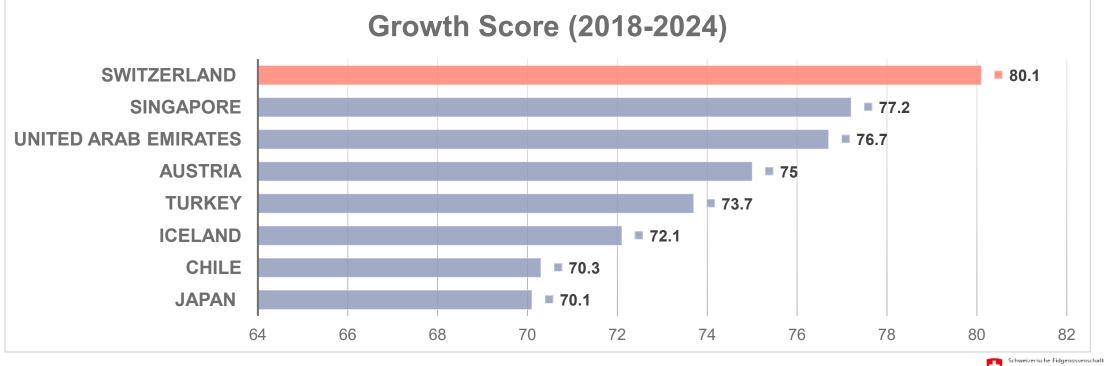


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Sources: startupticker.ch & SECA, Venture Capital Report

Dealroom & startupticker.ch

GLOBAL GROWTH SCORE OF STARTUPS (TOP 8)



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für Innovationsförderung

Innosuisse – Schweizerische Agenti

Quelle: Pitchbook, June 2024

INNOSUISSE – YOUR PARTNER FOR INNOVATION

How Innosuisse supports your science-based innovation:

Implementing innovation projects

Networking and expanding knowledge

Creating and developing a start-up

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Start-up innovation project to connect superconducting quantum computers via secure optical communication channels

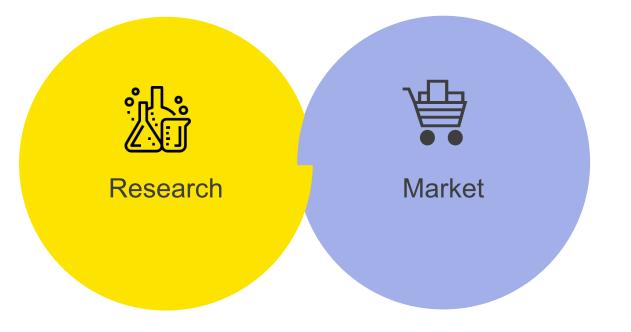


Innovation for scalable quantum computing experiments Zurich Instruments with ETH Zurich and Paul Scherrer Institute PSI



COLLABORATION FOSTERS BOTH DISRUPTIVE AND INCREMENTAL INNOVATION

The Swiss system fosters the transfer of cutting-edge technology and knowledge from academia to companies:



This is at the heart of the innovation promotion of Innosuisse – the Innovation Agency of the Swiss Confederation

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START-UP INNOVATION PROJECTS: DIRECT PROJECT PROMOTION PRIOR TO MARKET ENTRY



GOAL

→ Financial support for start-ups **prior to market entry** in realising science-based innovation projects

→ Preparing start-ups for entering the market for the first time

→ Bringing new products and services onto the market quickly and efficiently.

- Direct financial support for start-ups
- Applications may be made to Innosuisse on an ongoing basis
- Part of the permanent funding portfolio of Innosuisse

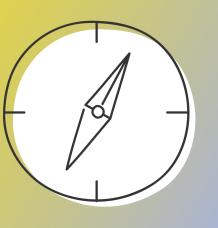
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DO YOU ALSO WANT TO DEVELOP INNOVATIVE SOLUTIONS FOR THE FUTURE?

The Innosuisse Guide helps you find the right support offer in just a few steps:



www.innosuisse.guide



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MOVING THE WORLD WITH INNOSUISSE



THANK YOU

www.innosuisse.ch info@innosuisse.ch

MOVING THE WORLD WITH SWISS INNOVATION



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Introductory remarks: Addressing the Scale-Up Gap

Emily Sinnott European Investment Bank



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Addressing the Scale-up Gap



Emily Sinnott, Head of Policy and Strategy Division,

Economics Department

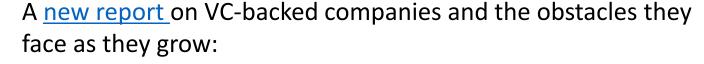
Brussels, 14 November 2024

THE SCALE-UP GAP: FINANCIAL MARKET CONSTRAINTS HOLDING BACK INNOVATIVE FIRMS IN THE EU



The scale-up gap

Financial market constraints holding back innovative firms in the European Union



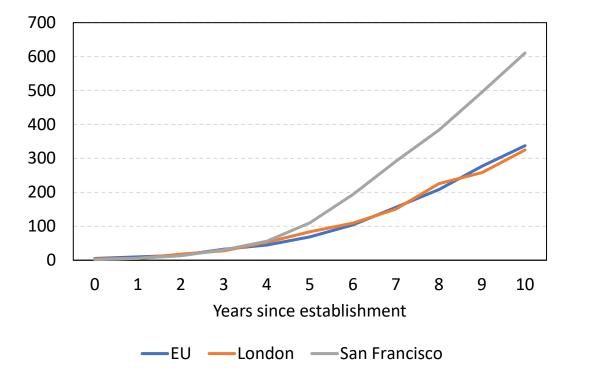
- We follow cohorts of VC-backed companies (2013-2023) in the EU, London and San Francisco, reaching market valuation between USD 500mn and 10bn.
- The report examines the **financing** they receive and the **type of investors** they attract as well as **exit outcomes**.
- Innovative EU companies grapple with significant financing constraints. The scarcity of EU investors able to provide financing at the scale-up phase pushes many EU companies to seek funding abroad and, at exit, look for foreign buyers or get listed on foreign stock exchanges.



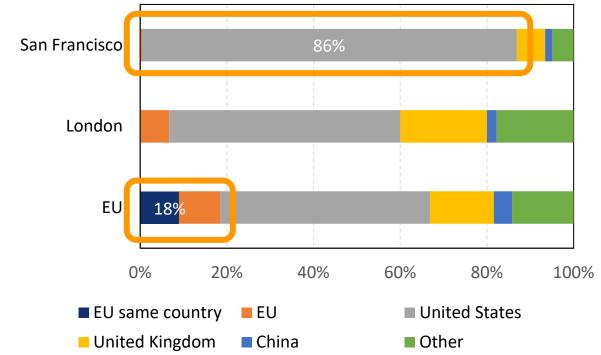
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FINANCING GAP FOR INNOVATIVE COMPANIES

Cumulative capital raised since establishment by scale-ups (average, current \$m)



Nationality of the sole/lead investor in scale-up deals (% of deals)

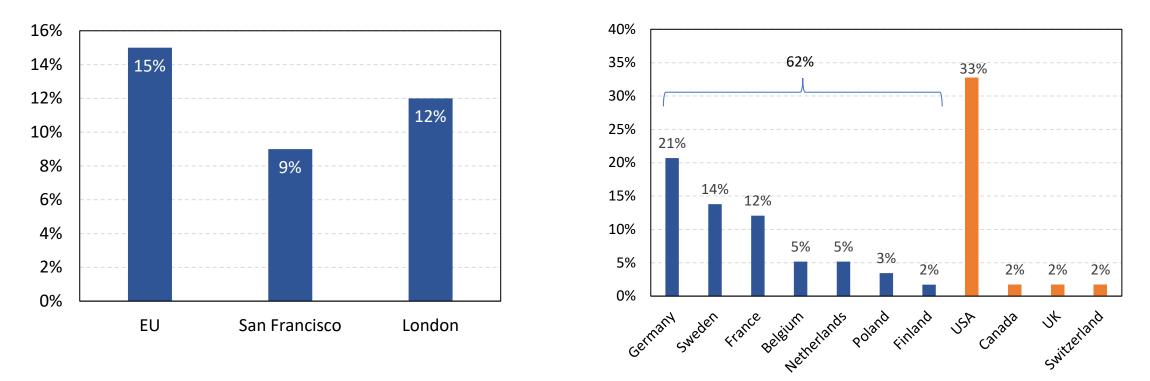


Source: Fratto et al. (2024) based on PitchBook data. Note: the sample consists of companies that between 2013 and 2023 had market valuation between USD 500mn and 1bn. The data has not been reviewed by PitchBook analysts.

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OBSTACLES TO GROW FORCE COMPANIES TO RELOCATE

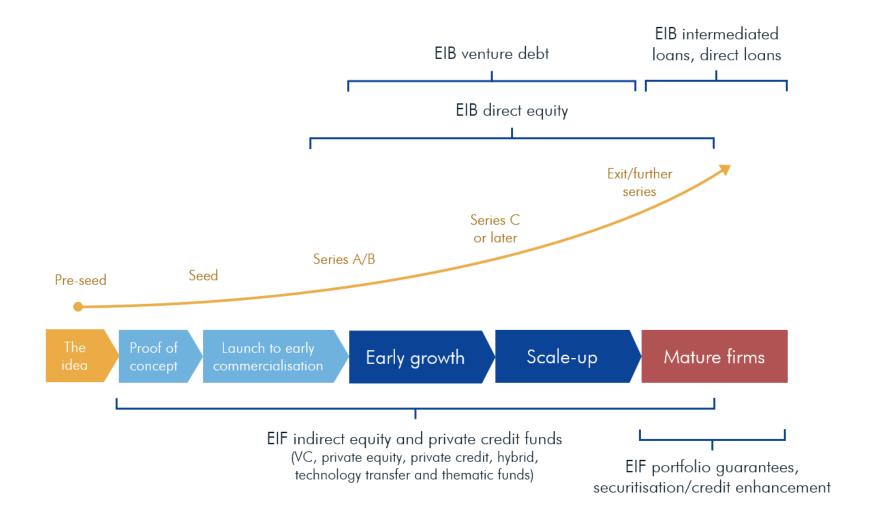
Share of scale-ups that relocate by initial headquarter location



Source: Fratto et al. (2024) based on PitchBook data. Note: the sample consists of companies that between 2013 and 2023 had market valuation between USD 500mn and 1bn. The data has not been reviewed by PitchBook analysts.

Stock exchange location in IPOs involving EU scale-ups

EIB GROUP SUPPORT IN THE LIFECYCLE OF A COMPANY



Source: EIB and EIF (2024), "EIB Group support for EU businesses: Evidence of impact in addressing market failures".

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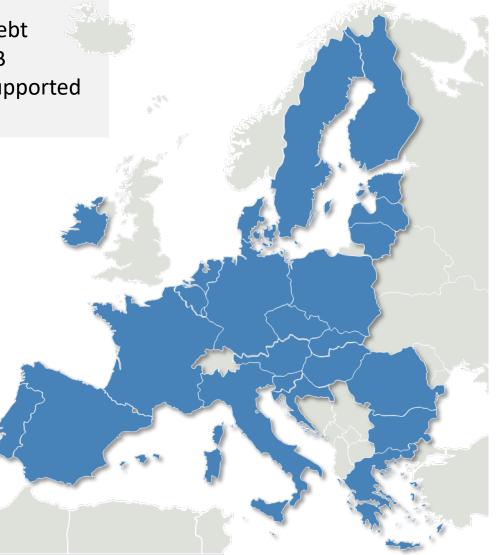
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EIB GROUP SUPPORT IN THE LIFECYCLE OF A COMPANY

The EIF supports **40-50%** of venture capital-backed startups in Europe in a typical year.

€6.8bn+ venture debtprovided by the EIB300+ companies supported





EIB GROUP SUPPORT TO ADDRESS MARKET FAILURES AND INVESTMENT NEEDS

Market failures and investment needs		Standard/ established (M)SMEs, mid-caps	Startups: Early/later-stage, and scale-ups
Structural:	Asymmetric informationScreening costsDiscrimination	Guarantees invest	Venture investments:
Cyclical:	 Credit rationing Capital constraints Flight from risk 	(such as risk sharing, securitisation)	 VC/PE Mid Market EIC Fund Venture Debt (such as first-of- a-kind, scale-up) Co-investments (such as under ETCI)
Strategic goals:	Innovation/digitalisationSustainability	Thematic MBILs	
Market development:	 Nascent markets Strategic industries Establishing market scale 	 Thematic guarantees 	

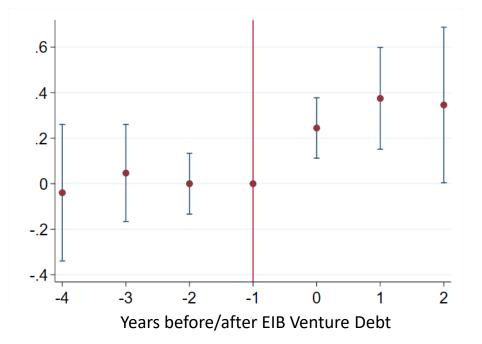
Source: EIB and EIF (2024), "EIB Group support for EU businesses: Evidence of impact in addressing market failures".

EIB VENTURE DEBT CROWDS IN PRIVATE INVESTMENT

EIB venture debt support allows firms to grow faster (increase in asset accumulation) and crowds in debt

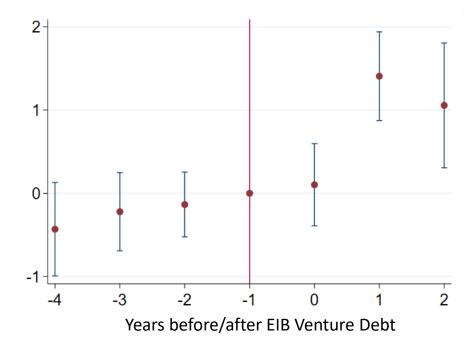
Total assets

(Cumulative effect relative to baseline)



Source: <u>Gatti et al. (2022)</u>. *Note:* Shows the effect of receiving EIB venture debt on firms' total assets.

Additional long-term debt (Cumulative effect relative to baseline)



Source: <u>Gatti et al. (2022)</u>. *Note:* Shows the effect of receiving EIB venture debt on additional long-term debt. Additional debt is defined as a firm's debt minus the volume of the EIB venture debt loan. Coefficients are normalised with respect to the year prior to loan signature (t=-1) and can be interpreted as the cumulative effect of VD with respect to this baseline.

Public

WHAT ABOUT THE FUTURE? DRAGHI ENVISAGES A LARGE ROLE FOR THE EIB GROUP

Draghi's report:

- is strongly aligned with **EIB Group strategic priorities**
- recommends
 - increasing EIB Group capacity to take on more risk and finance innovation and start-up/scale-up
 - better **coordination** with EIC and NPBs
- recommends focusing on supporting cleantech breakthrough innovations: providing de-risking tools, financing larger riskier projects, support scaling up of innovative companies/technologies.

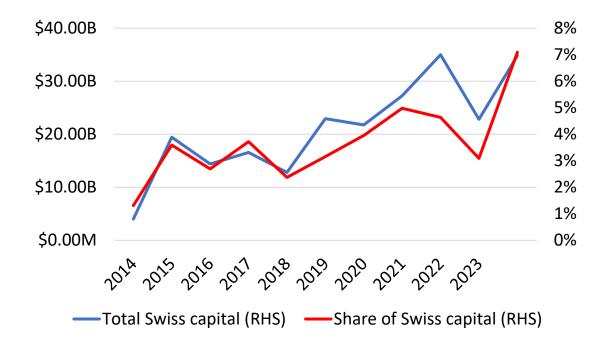
REFERENCES

- EIB Investment Report 2023/2024: Transforming for Competitiveness
- Impact Assessment of EIB Venture Debt
- <u>The Scale-up Gap: Financial Market Constraints Holding Back</u> <u>Innovative Firms in the European Union</u>
- <u>EIB Group Support for EU Businesses: Evidence of Impact in Addressing</u> <u>Market Failures</u>

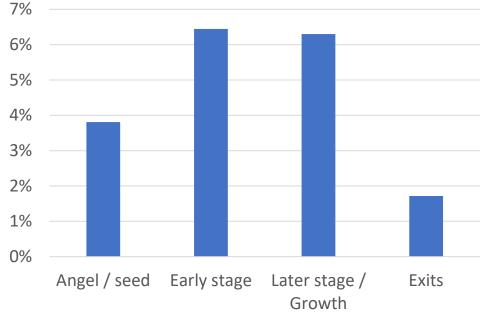
GROWING PRESENCE OF SWISS CAPITAL IN THE EU PREVALENCE IN EARLY & LATER STAGE

Public

Total Swiss capital and share of Swiss capital invested in the EU



Average share of Swiss capital invested in the EU by deal type

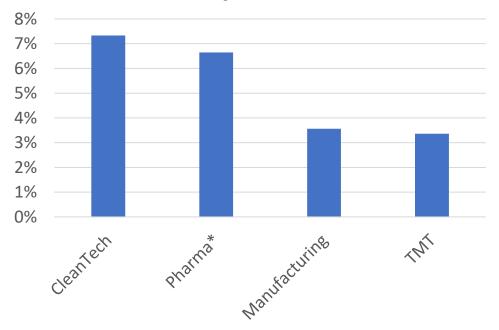


Notes: Average share over 2014-2023.

SWISS CAPITAL FINANCING CLEANTECH AND PHARMA IN THE EU

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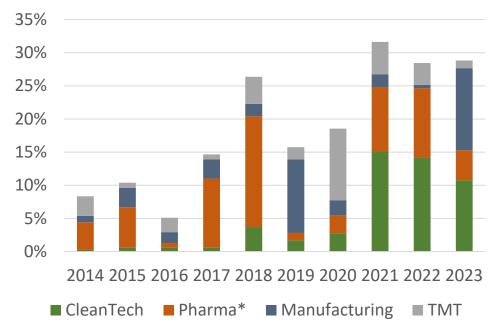
Average share of EU VC and PE from Switzerland, by sector



Notes: Average share over 2014-2023.

*Pharma includes the following verticals: Life Sciences, HealthTech and Oncology

Average share of EU VC and PE from Switzerland, by sector and year



Notes: *Pharma includes the following verticals: Life Sciences, HealthTech and Oncology

TWO BIG PLAYERS IN THE SWISS VC ECOSYSTEM: NOVARTIS AND NESTLÉ

Public

Novartis venture fund



- Corporate Venture Capital (Primary Type)Growth/Expansion
- Fund manages over USD 750 million in committed capital and more than 40 portfolio companies
- Large ticket size (median \$25m)
- Target companies located in Germany, France, Ireland and the Netherlands

Novartis marks new investment in high-tech BioCampus in Mengeš

05 July 2023

- With the investment EUR 111 million, Novartis will build the largest technical development center for modern innovative biotechnology in Slovenia and one of the largest in the region. The new BioCampus is planned to create an estimated 100 new jobs in the next few years.
- The BioCampus in Menges will enable increased speed and flexibility in early development of innovative biotherapeutics.
- With the new investment Novartis will strengthen its position in Slovenia as the first fully fledged innovative medicines company in the history of Slovenian pharmaceutical industry.



- Focus on food and nutrition
- Fund manages USD 130M
- Target companies located in Germany, France, Italy and the Netherlands
- Invests into three areas:
 - Health sciences
 - Innovation
 - Sustainability

THANK YOU

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Growth drivers for European Start-ups: the experience from the beneficiary's perspective

Jurgita Miseviciute Proton

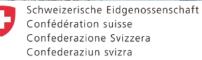


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Proton

Cybersecurity and privacy made for everyone

November 2024

A successful European story born at CERN

An idea that emerged among scientists

Proton was launched in 2014 in Switzerland, when a group of scientists who met at the European Center for Nuclear Research (CERN), decided to create an end-to-end encrypted email service.

Following the success of Proton Mail, the company created additional encrypted products, such as **Proton VPN**, **Proton Calendar, Proton Drive** and the first **encrypted password manager**.

A successful European story

Today, Proton has become a leading provider of privacyfocused and secure tools for individuals, public organizations and business, including small and mediumsized enterprises (SMEs).



Proton

The most secure and private services

Our suite of products includes **Proton Mail, Calendar, VPN, Drive,** as well as a **password and identity manager**.

Privacy and **end-to-end encryption** are integral parts of Proton's services, ensuring that no one, including Proton itself, can access, or misuse user's data.

All our products are **open source**, so anyone can use and improve them. They are also **independently audited** by third-party security experts.

Proton uses the **latest technologies** to protect sensitive information from potential cyber threats.





Proton in numbers today

+ 100 million active accounts

+ 180 countries with Proton's users

130.000 phishing attacks blocked every day

+ 500

employees

+ 90 countries covered by our servers

24/7 analyzing threats



Millions of people and companies trust and support Proton

More than 100 million people and companies trust and support Proton, among newsrooms, large, small and medium companies, activists, international organizations, Nobel-prize winners, or movie characters.

Learn about our community



Companies using **Proton**

More than **20,000** companies from large corporations to SMEs trust Proton



Being a startup, I am somewhat sensitive to price, but I don't expect email to be a major expense. I simply need it to work. My plans and contracts get delivered to my clients. I also need access on both my computer and phone. With Proton Mail, I get all of that and the security is a bonus.

1

Glen Sibbeston Principal Engineer



66

Proton Mail's encryption means I don't have to worry about my mail being read before it reaches the recipient. Other companies fail to respect my privacy.

> Dr. Cappelli CEO

NGOs using Proton

Several NGOs trust Proton to ensure that confidential information is protected.

GREENPEACE

Greenpeace's Investigation Unit uses Proton Mail to receive alerts and confidential information. Proton Mail ensures that all information received is encrypted and secured.

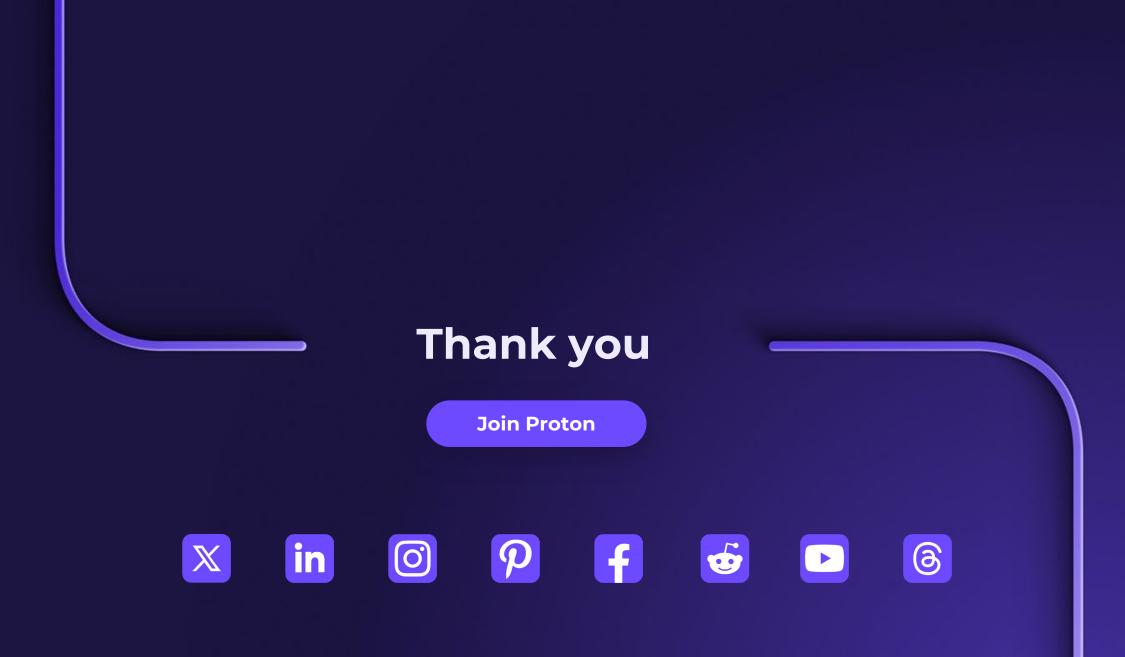


As an organization defending press freedom and access to information, privacy is both an ideal and a requirement. When we revamped our email communication architecture, Proton Mail provided adequate cornerstones: internal E2EE, audited open source and a growing secure ecosystem, thus allowing us to fulfill the latter and to approach the former.

Thomas Slätis Vice-President

Proton

- Importance of Swiss and EU public support
- Challenges faced during Proton's growth
- Proton's recommendations to policymakers to better support start-ups and scale-ups



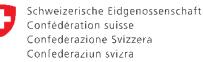
Proton | Privacy by default

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How to build trust between the European Innovation Council, Venture Capitalists, and Institutional Investors

Keith Sequeira, European Innovation Council Piotr Michałowski, European Investment Bank Martin Bresson, Invest Europe Eva Camerer, Innovation Norway Otto Bruun, SERI

Moderation by Luca Cruciato, SwissCore



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Closing Remarks

Dominique Gruhl-Bégin Innosuisse

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