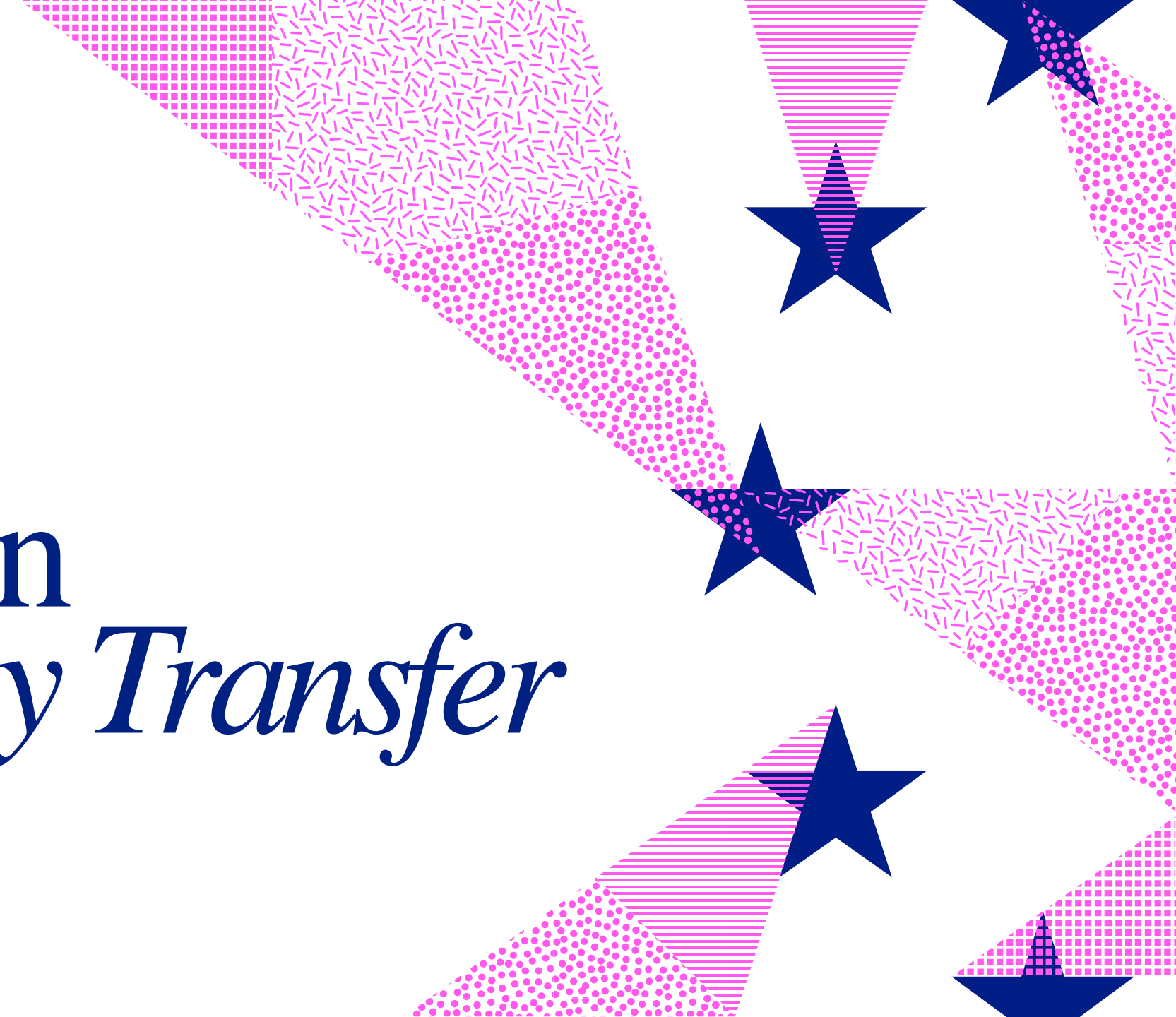


Investing in *Technology Transfer*

*EIF - Jerome Samson
EARTO Webinar*

21.04.2023



Agenda

- 1 About EIF
- 2 Why investing in TT is (more than ever) necessary
- 3 EIF's TT fund model
- 4 Portfolio & performance, Challenges & Success factors
- 5 Perspectives

About EIF

*A European institution
dedicated to SMEs*

EIF's unique approach

We design financial instruments that share risks with our partners, multiplying public resources and increasing the supply of finance

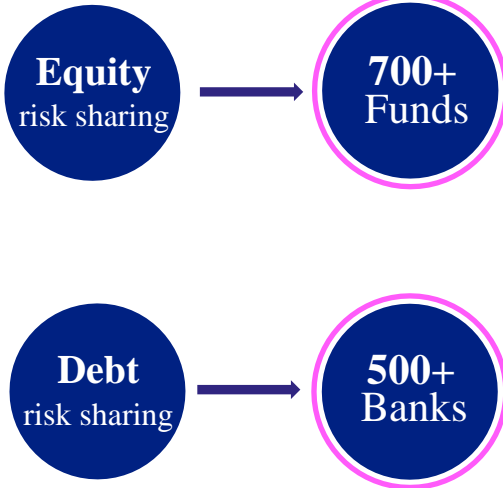
Our resources

- European Commission
- European Investment Bank
- Local authorities & National Promotional Institutions
- Other investors*

Our approach

We design and deploy **financial instruments** that target funding gaps

Our portfolio



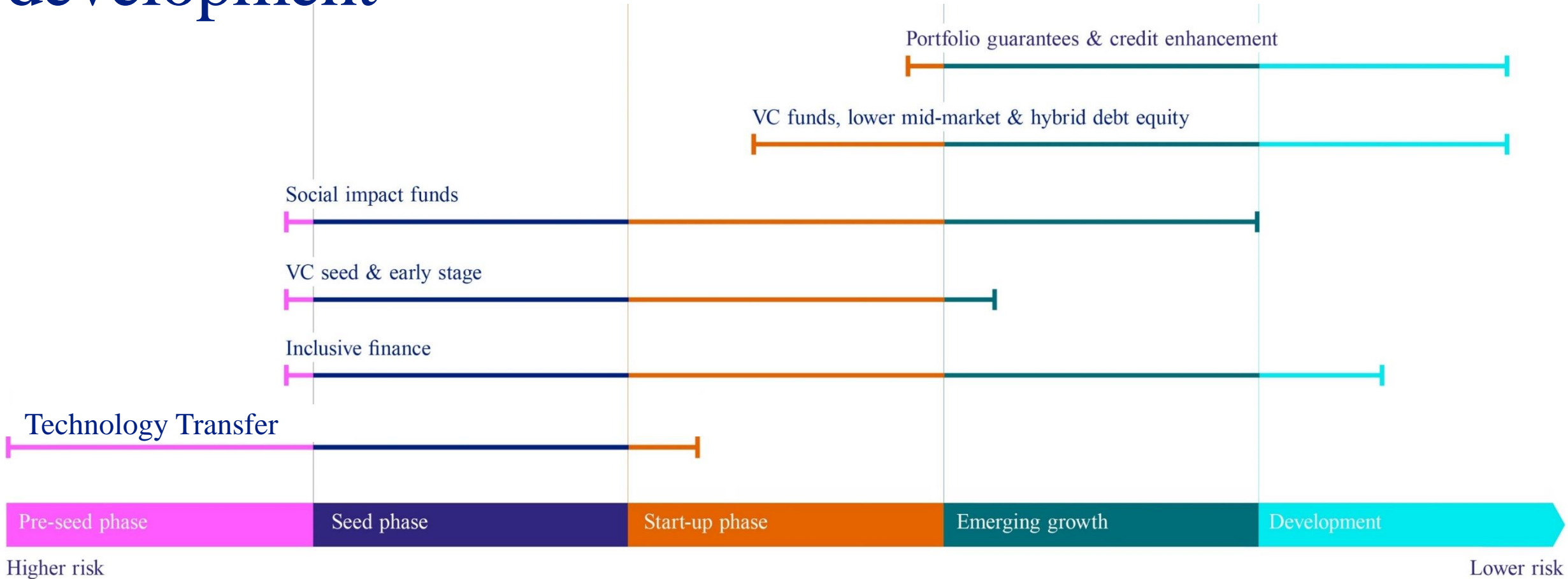
Investees/Businesses



5x leverage of public resources**

*Includes EIF's own resources and other external resources including private investors.
 **On aggregate based on 2022 transactions. Depending on the instrument and the transaction.

Our products help small businesses at every stage of development



Our equity solutions

We make catalytic investments crowding in private investors and increasing long term sustainability

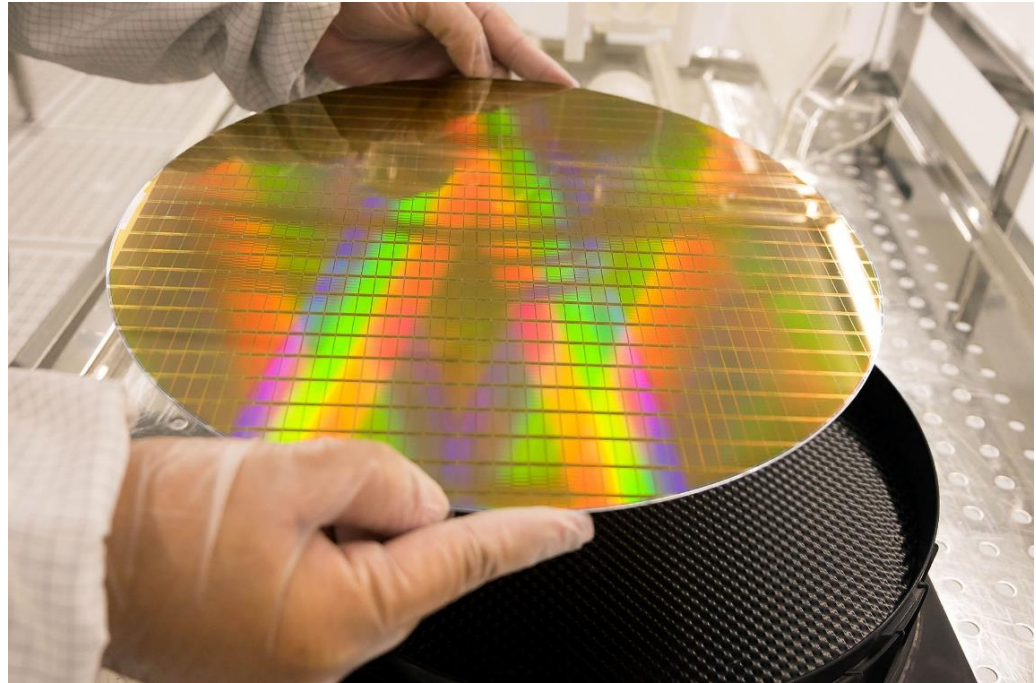
	Technology transfer	Venture capital	Lower mid-market & hybrid debt equity
Risk sharing mechanism	Investment in funds often alongside other public investors	Investment in funds often sending a positive signalling effect to private investors	Investment in funds often sending a positive signalling effect to private investors
Benefit for small businesses	Funding for research projects reaching the development phase	Funding for Europe's most disruptive founders in ICT, life sciences and social impact	Funding to unlock the growth potential and boost internationalization of SMEs and small mid-caps
Net commitments	€1.2bn	€1.78bn	€13.5bn

Notes: Transaction level data based on net commitments (signatures), excludes selective debt.

Source: SPA reporting, data as at 31/12/2022.

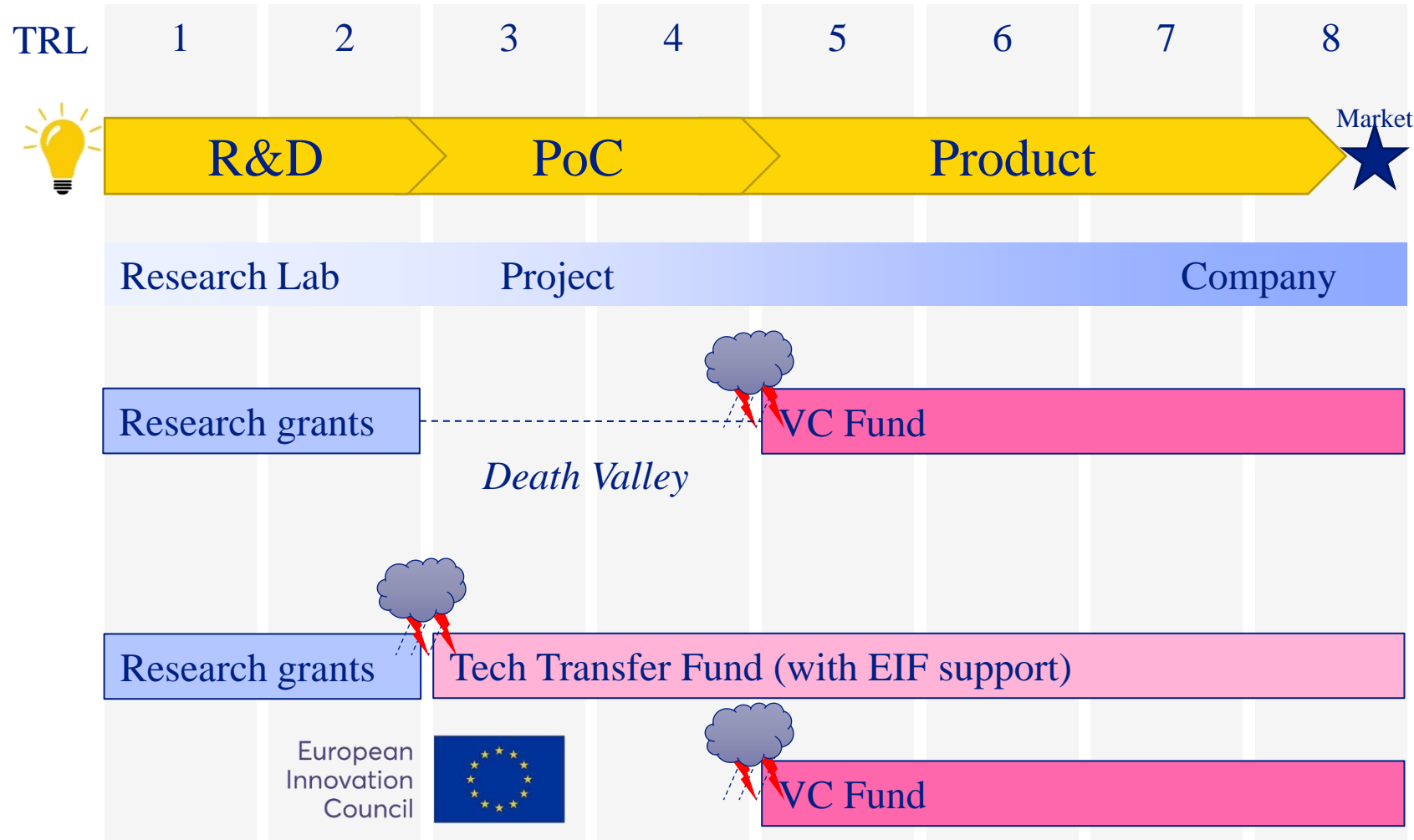
Why IT is necessary

*If I have seen further
it is by standing
on the shoulders of giants
Isaac Newton, 1675*



Why TT funds are necessary?

and represent a strategic activity for the EU



to increase the TRL of **breakthrough technologies**

to enhance their likelihood of **reaching the market**

TT, a strategic element for EU

But we need more to really change the global dynamics

- **R&D is key**
 - to Europe's competitiveness
 - to position Europe as a leader in strategic sectors

- **... but TT is key to economic impact**
 - TT is structurally underfunded in EU
 - hindering the development of **strategic sectors** where EU is a leader at R&D stage

*A drop of TT support
in an ocean of R&D:*

Public R&D spending in EU28

EUR 100b+ / year⁽¹⁾

European TT funds

c. EUR 200m / year⁽²⁾

(1) Eurostat, 2017 data last update 2019-03 [rd_e_gerdfund]

(2) Yearly average total commitments in TT funds supported by EIF 2012-2018

EIF TT Fund model

EIF TT – Our Current Model

What are we looking for?

Access to innovation

- First class level
- Strong partnership
- Buy-in from bench to board

Funding gap

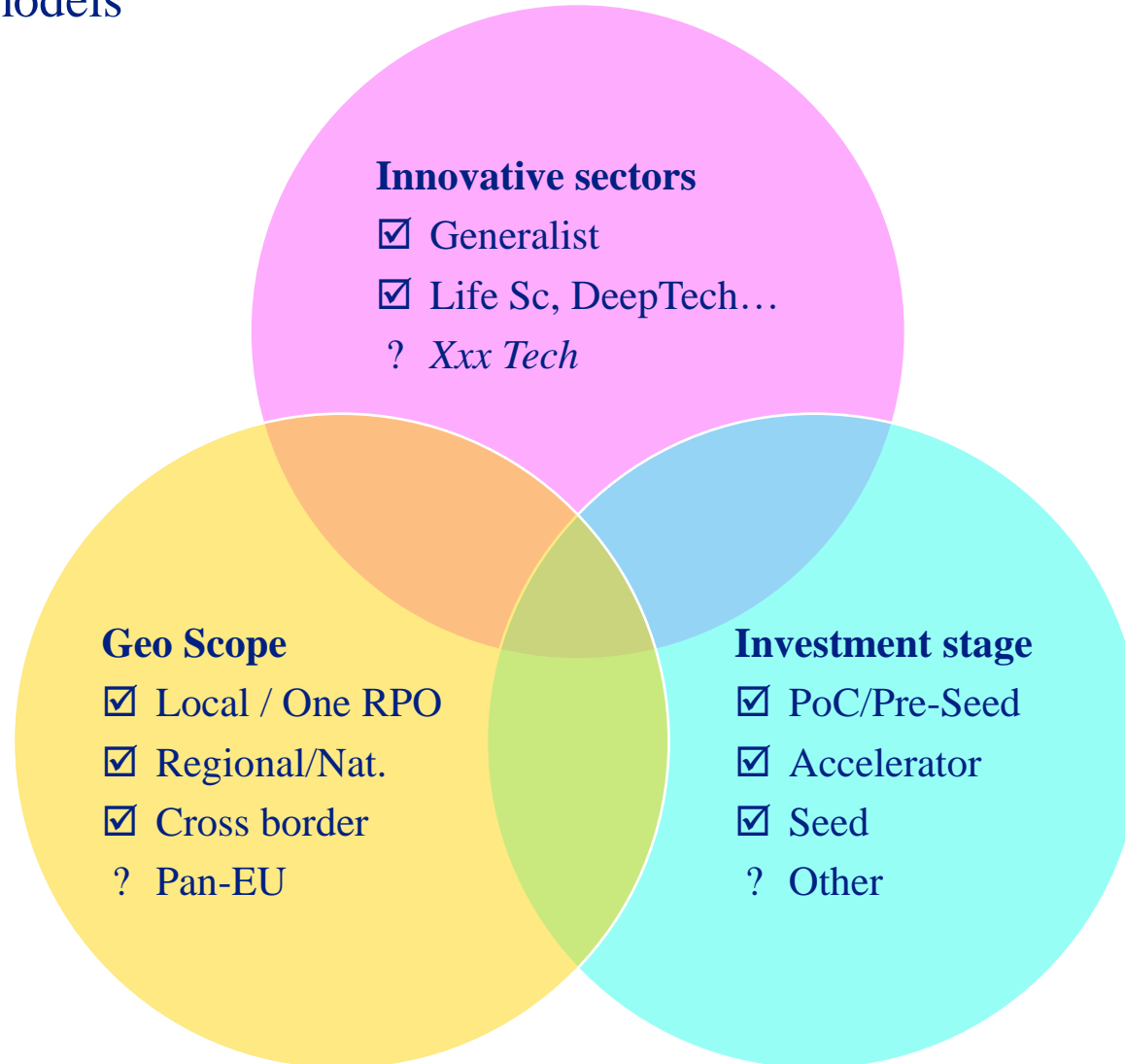
- Under-invested sectors
- Value creation
- Capital intensity

Fund set-up

- Investment team
- Co-investors
- Governance
- Minimum size

EIF-supported TT Funds

High diversity of models



- **Irish Universities Fund**
 - Generalist
 - Pan-Ireland / TCD & UCD
 - PoC to Seed
- **Kurma Diagnostics I / II**
 - Life Sciences / Diagnostics / HealthTech
 - French/Paris RPOs
 - Seed
- **SINTEF Ventures**
 - Generalist
 - SINTEF / Focus on Norway
 - PoC to Seed
- **Special Mandates**
 - ITA-Tech

EIF TT Funds – Typical example

- **Typical Fund supported by EIF**

25 PoC projects @ 200k	€ 5.0m
15 initial investments @ 1.5m	€ 17.5m
Reserves for follow-on	€ 20m
Total (investable)	€ 45m
Total (incl. managt. fee)	€ 60m

FOR EXAMPLE
ONLY!
CASE BY CASE
ADJUSTMENTS

(typically up to 50% from EIF)

- 5 years investment period + long term follow-up (10 +5)

Focus on Life Sciences

- c. 45% of EIF TT commitments in TT Funds with a significant focus on Life Sciences
- Special funds dedicated to early stage Drug discovery
 - CD3 KU Leuven
 - KHAN LDC / Max Planck
 - CRT Pioneer Fund Cancer Research UK
 → More to come
- High risk, long term investments
- European Life Sciences VC market segment maturing
 - Strong & Sustained support from the EIF
 - Now bearing fruit!
- Most of the « seed & early stage » VC Life sciences investors work actively with academic research institutions

EIF Portfolio

Over EUR 1b invested

EIF Portfolio of Tech Transfer Funds

- **55 investment vehicles**
 - avg. size c. EUR 47.8m

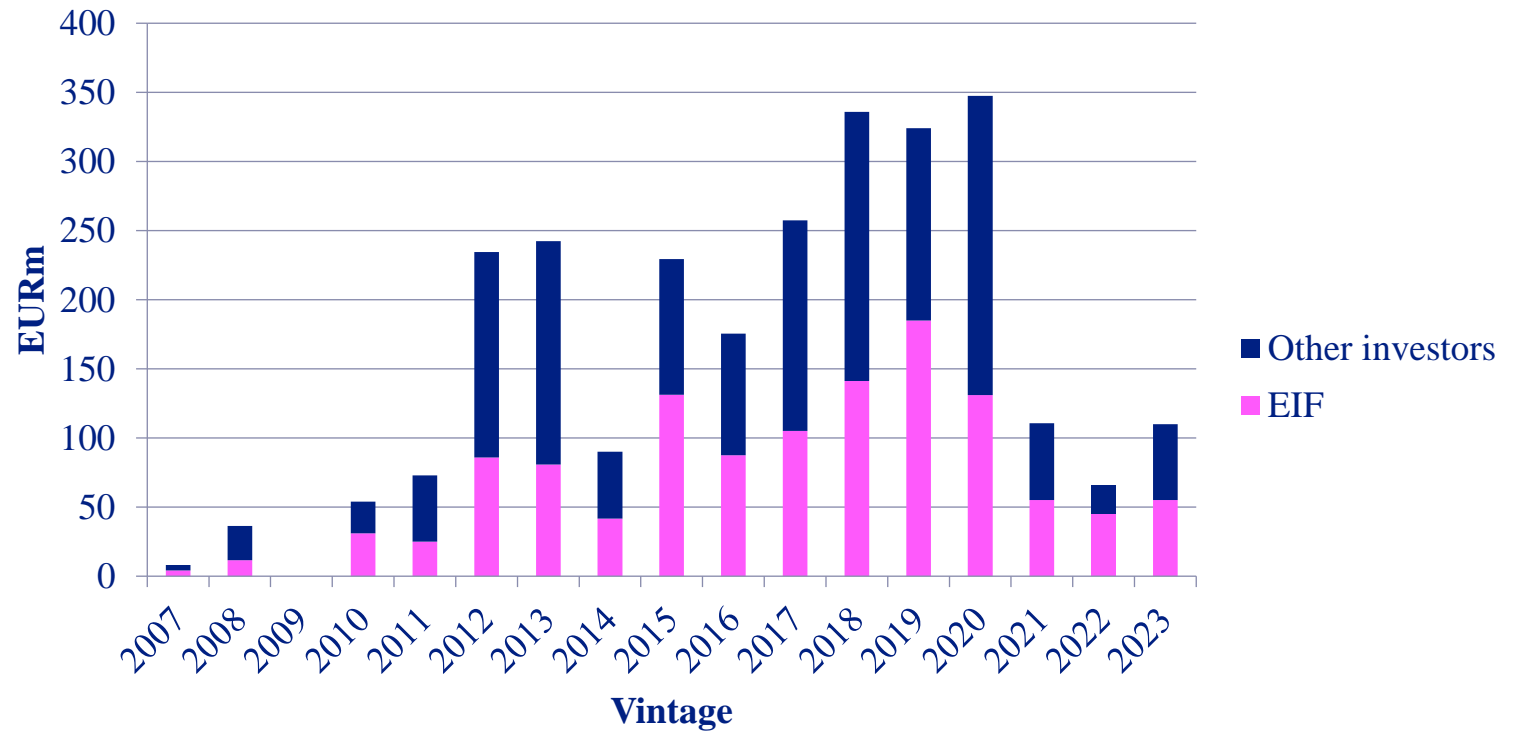
- **Commitments⁽¹⁾**

	<i>EUR</i>	
• EIF	1,2b	45%
• Other investors	1,5b	
• Total	2,7b	

- **Recent acceleration**










EIF commitments in TT Funds



TT Funds – Examples

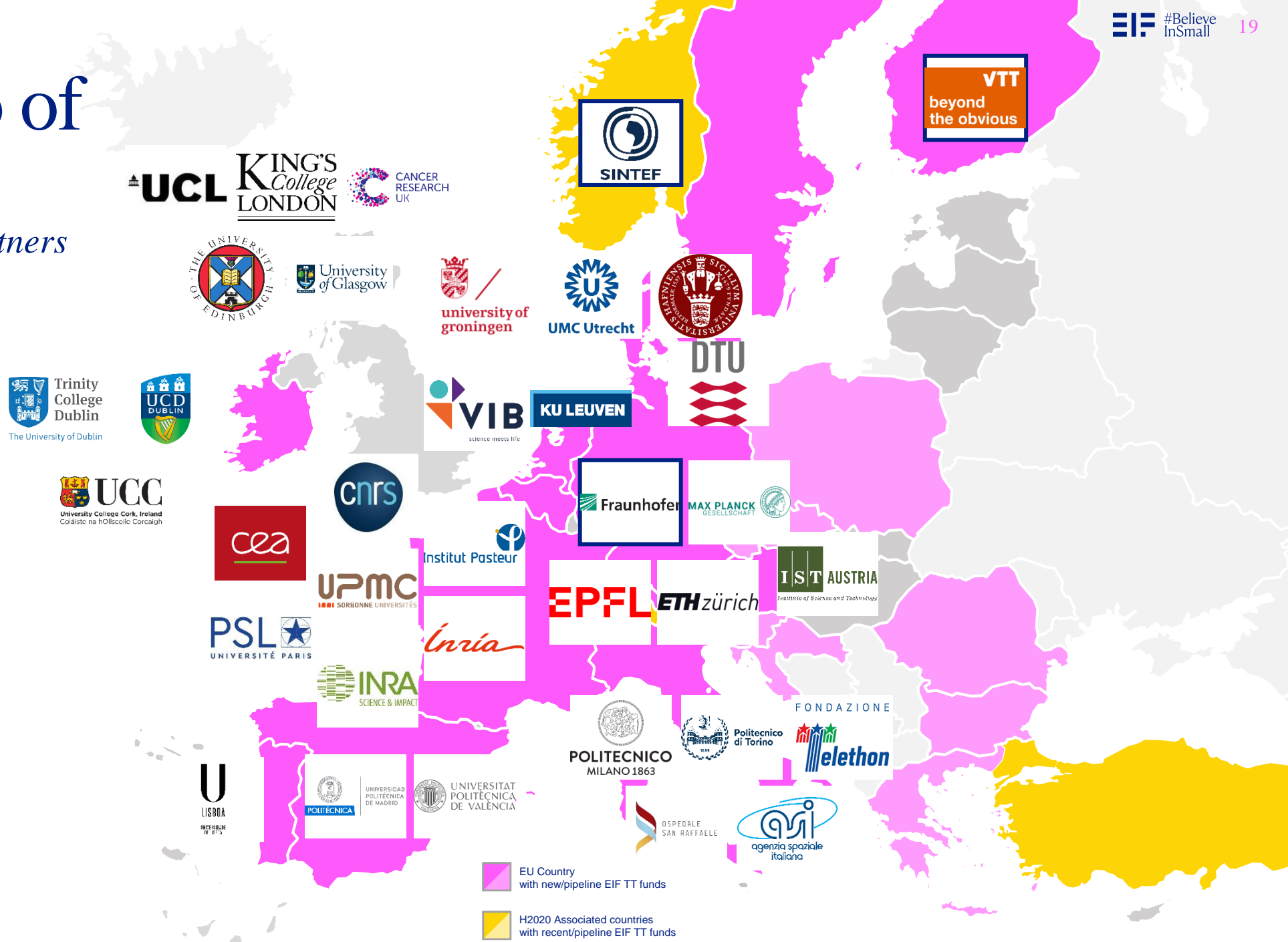
Each situation is unique / One size does not fit all

Invest. team	Structure Highlights	Partner Institution(s)		Fund(s)	Focus	Significant investors
Semi-Captive	Framework Agreement		BE	CD3 I, II & III 2007, 2010, 2016 EUR 8 + 16 + 60m	Drug Discovery Projects & Cies	KUL
	Embedded team in the TTO		NO	SINTEF Ventures IV, V 2014, 2018 EUR 21, 51m		SINTEF Local banks
Independent	Independent fund manager	 Trinity College Dublin <small>The University of Dublin</small>	IE	University Bridge I & II 2016, 2021 EUR 60m / EUR 60m	Generalist (PoC & Companies)	TCD, UCD, EI, AIB, BoI
		 UCD DUBLIN				 UCC <small>University College Cork, Ireland Colaiste na hOileacoile Corcaigh</small>
			DE	FTTF 2018 EUR 60m		Fraunhofer
			FI	Voima Ventures II 2019 EUR 45m		VTT Family offices

EIF Portfolio of TT funds

Thanks to our research partners

EIF TT network covers most of the leading R&D clusters in Europe



Lessons learned

Trends & Success factors

Sector specialisation vs. Geographic focus

Concrete examples

- CD3 → multiple programs in the clinic
- EARTO members:
 - VTT, Sintef, Fraunhofer

Unicorn ambition vs. Reality of the market



Challenges

Return objectives & historical performance of the asset class

Fundraising

- RPOs, non-profit foundations / endowments
- NPIs / regional development funds
- strategic corporates, private market?

Portfolio companies funding in follow-on rounds

- COVID-19

Access to dealflow

Learning curve for new funds / teams / RPOs

FTTF - EIF/Fraunhofer partnership

EUR 60m Deeptech focused fund



- History
- Setup: fully independent manager
- Part of the Fraunhofer Spin-off support tools
- Success stories
- Challenges:
- 70 research institutes



Quantum-safe communication through quantum key distribution



Operating system for autonomous mobile robots



Ultra-fast, high-precision metallization of solar cells



Functionalized surfaces with bio-inspired laser textures



Mass-spectrometer that can measure gases and liquids in real-time



Asphalt additive, made from non-recyclable plastics - less CO2 and better performance



Large scale, data-driven soil analytics for agriculture



New textile coating - environmental-friendly, anti-bacterial, water-repelling



Nano-scale 3D printer based on Two-Photon Polymerization (TPP)

Next steps?

*Will EIF continue
with this strategy?*

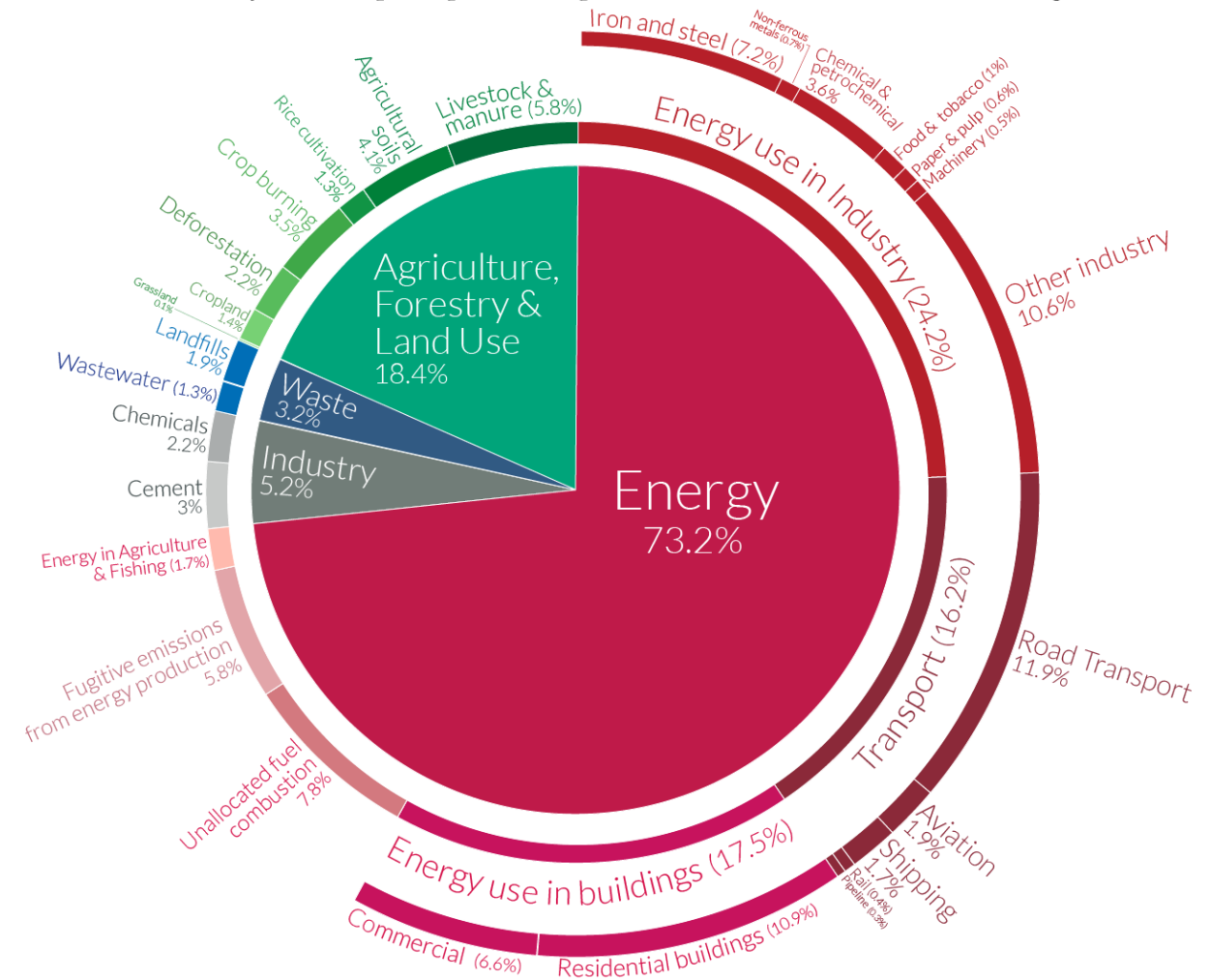
Innovation required to meet Paris Agreement targets?

An urgent challenge

- New generation nuclear powerplants (SMR?)
 - Energy storage
 - Electrification & Grid optimisation technologies
 - AgTech
 - Industry decarbonation
 - Enabling technologies
- EIF expects to receive more dealflow from emerging teams focused on energy transition and decarbonation

Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.



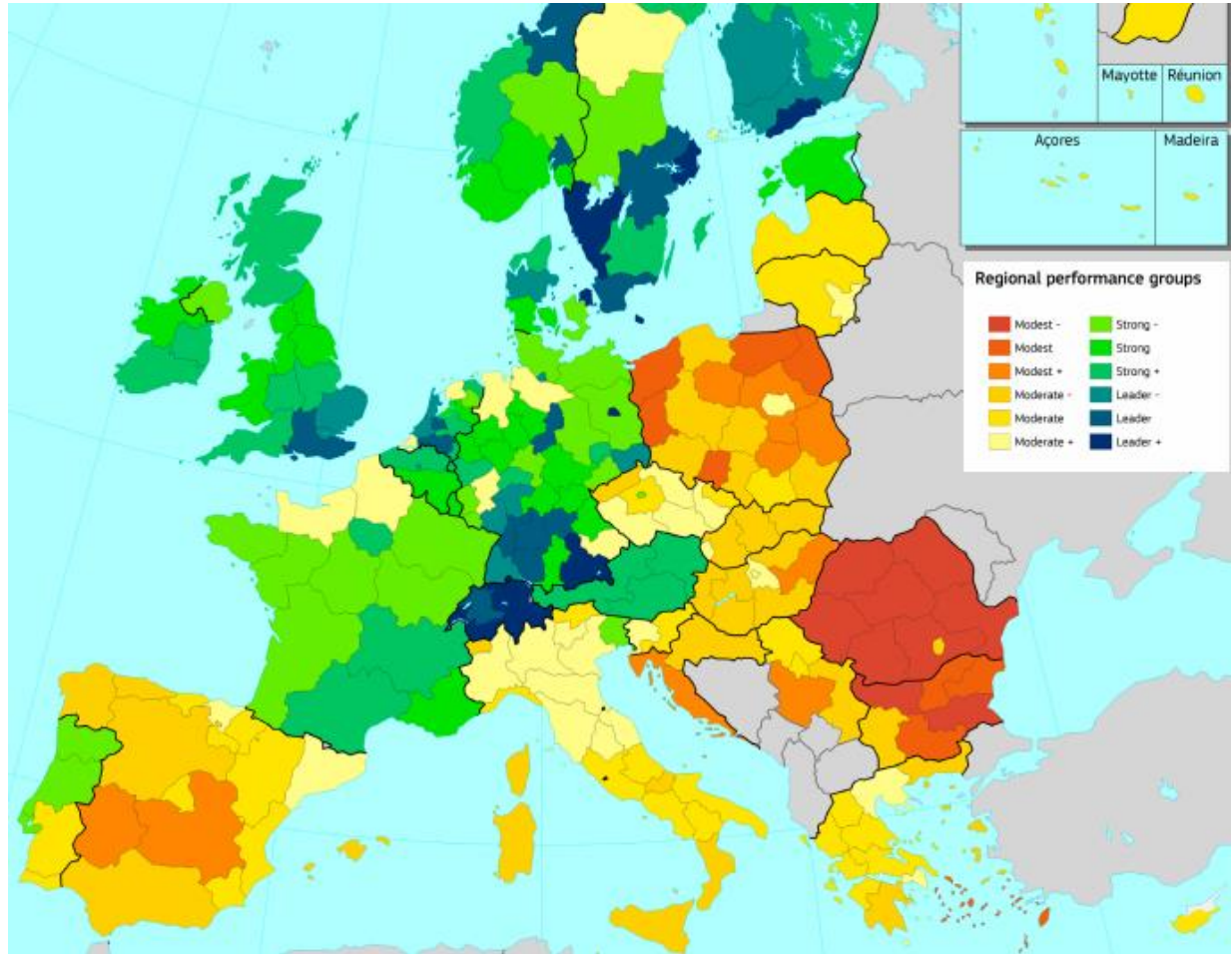
Develop TT funds in Central & Eastern Europe

Additional challenges

- Lack of critical mass in a single country/region
- Lower maturity of the VC ecosystem for follow-on rounds

Attractivity

- Untapped potential
- Exceptional entrepreneurs
- World class research labs in several places
 - e.g. IOCB in Prague



Long term funding for TT

- **InvestEU**
- **EU Green Deal**
- **TT strategy embedded**
 - within the Market Building objective of EIF
 - within each vertical targeted
 - Disruptive Technologies
 - Life Sciences
 - Climate & Environment

Impact investment trend

- Intentionality & Materiality

Performance of the current portfolio

→ key for fundraising

*Looking forward to continue
accelerating TT together!*



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