



European
eic INNOVATION
Council

EMPOWERING EUROPEAN INNOVATORS

*The European Innovation Council:
lessons from the pilot phase and
perspectives for the full EIC*

Confindustria, 4 February 2021

Giovanni La Placa – EASME A2

Research and
Innovation



- ✓ Why the European Innovation Council
- ✓ Experience from the Pilot (2018/20)
- ✓ The EIC in Horizon Europe at glance

European Innovation Council – why?

What's holding back European innovation?

Innovation performance

- **Strong research performance not translated** into innovation
- **Lack of breakthrough/disruptive innovations** that create new markets

Innovation funding

- Financing gaps (2 “valleys of death”) in:
- **Transition** from lab to enterprise
 - **Scaling up** for high-risk innovative start-ups

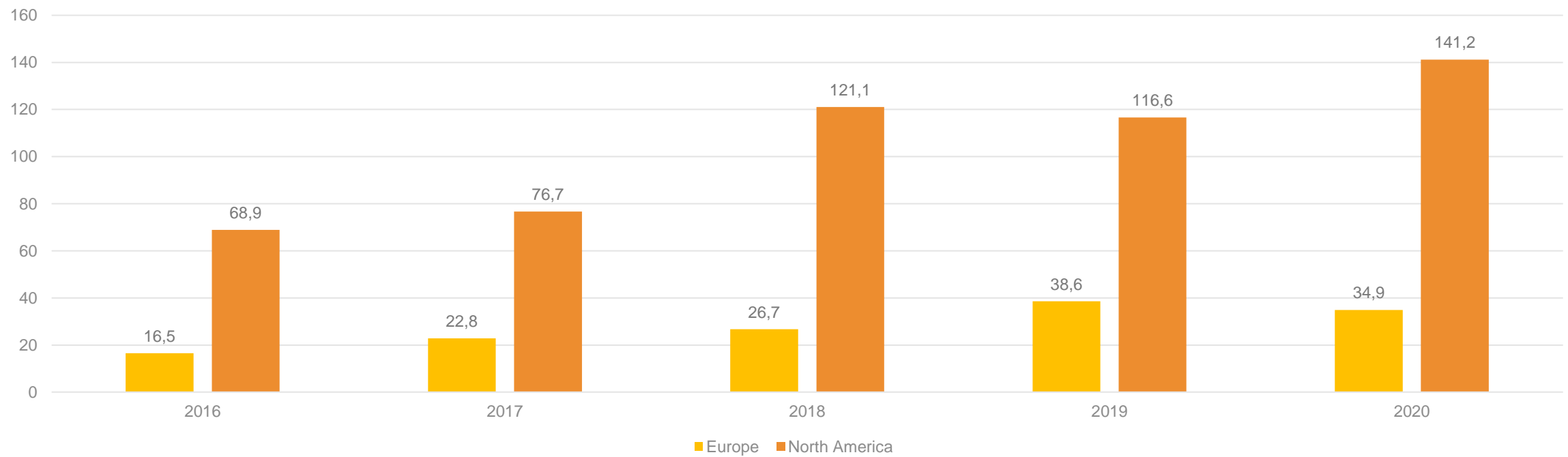
Innovation ecosystem

- Many national and local ecosystems, but **fragmented at European level**
- Need to **include all regions and all talent** (especially female innovators)

Funding gap for scaling up highly innovative start-ups and SMES

US venture capital investments are 4-5 times higher than EU

Capital invested by year (B\$)



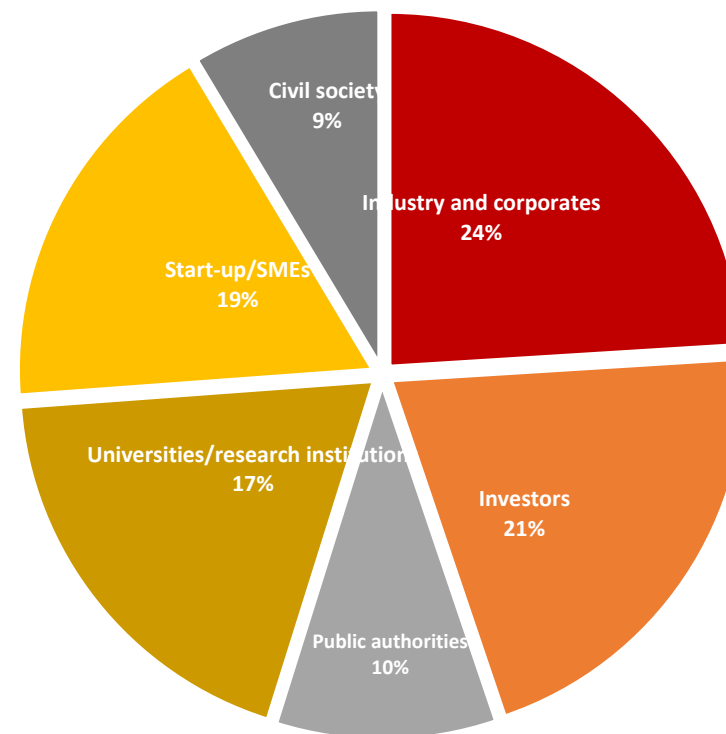
Source: [Invest Europe, Pitchbook]

Gap to transition technologies from research to application

Universities consider their weakest ecosystem links are with industry, investors and start-ups

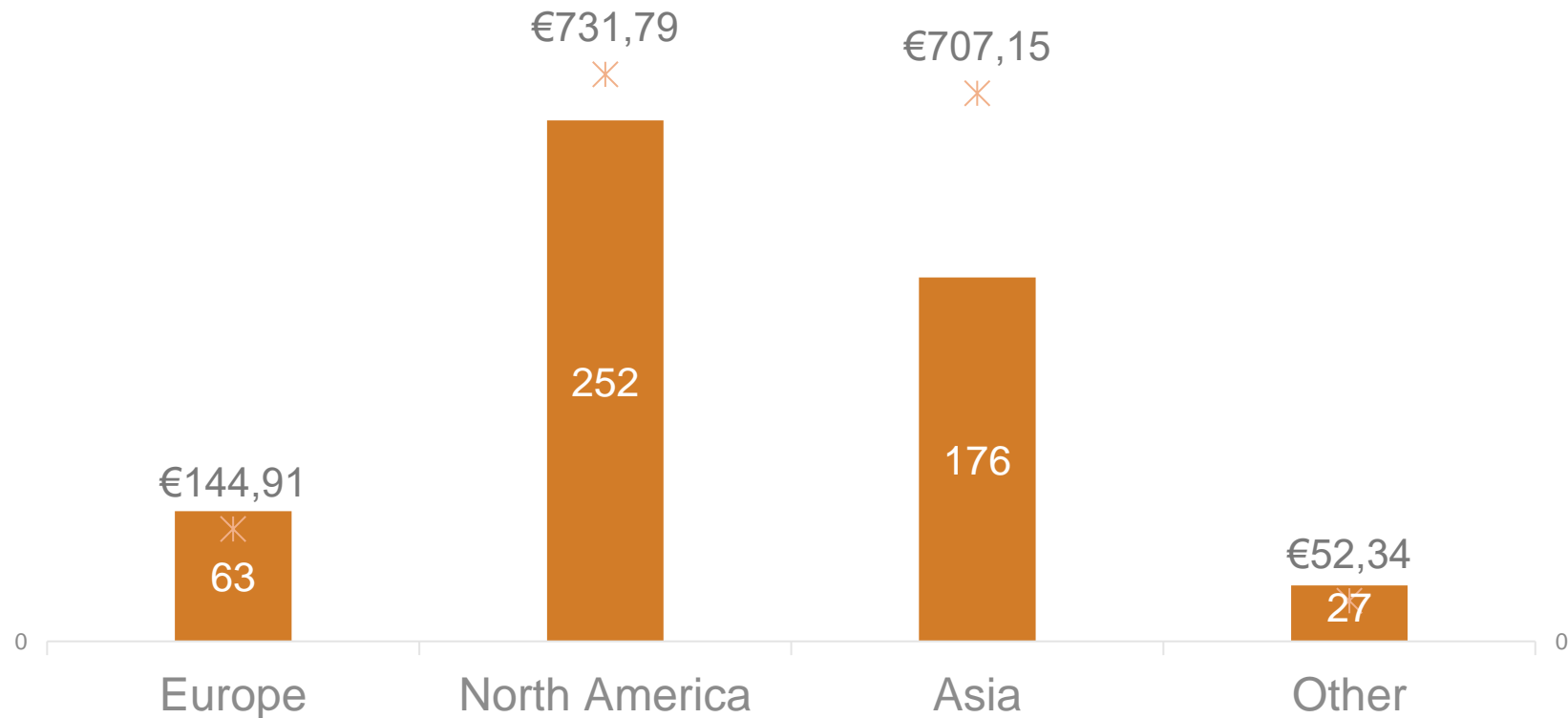
Universities

*Which actors would you **most need to connect to** within the European ecosystem?*



What is at stake: will Europe be home to future “unicorns”?

Number and market value of “unicorn” companies (valued at over €1 billion) by regions



Source: CB Insights (Jan 2021)

Experience from the EIC pilot phase (2018-20)

EIC pilot Accelerator (including SME instrument)



Unique offer of funding and support

- Up to €2.5 million grant
- EIC Fund providing equity investments up to €15 million
- Coaching, mentoring, links to corporates, investors, etc.



Growing demand from Startups and SMEs

- 14000 applied to the EIC Accelerator Pilot
- 5700 startups and SMEs supported since 2014 (including previous SME instrument)
- Increase in startups with female founders



90% addressing Sustainable Development Goals

Main themes:

- 30% in Green Deal
- 30% in Digital
- 30% in Health (*including COVID solutions*)

EIC Accelerator Pilot: Overview of achievements 2019-2020

Total number of proposals received since October 2019: **13.994**

Total number of proposals selected: **293**

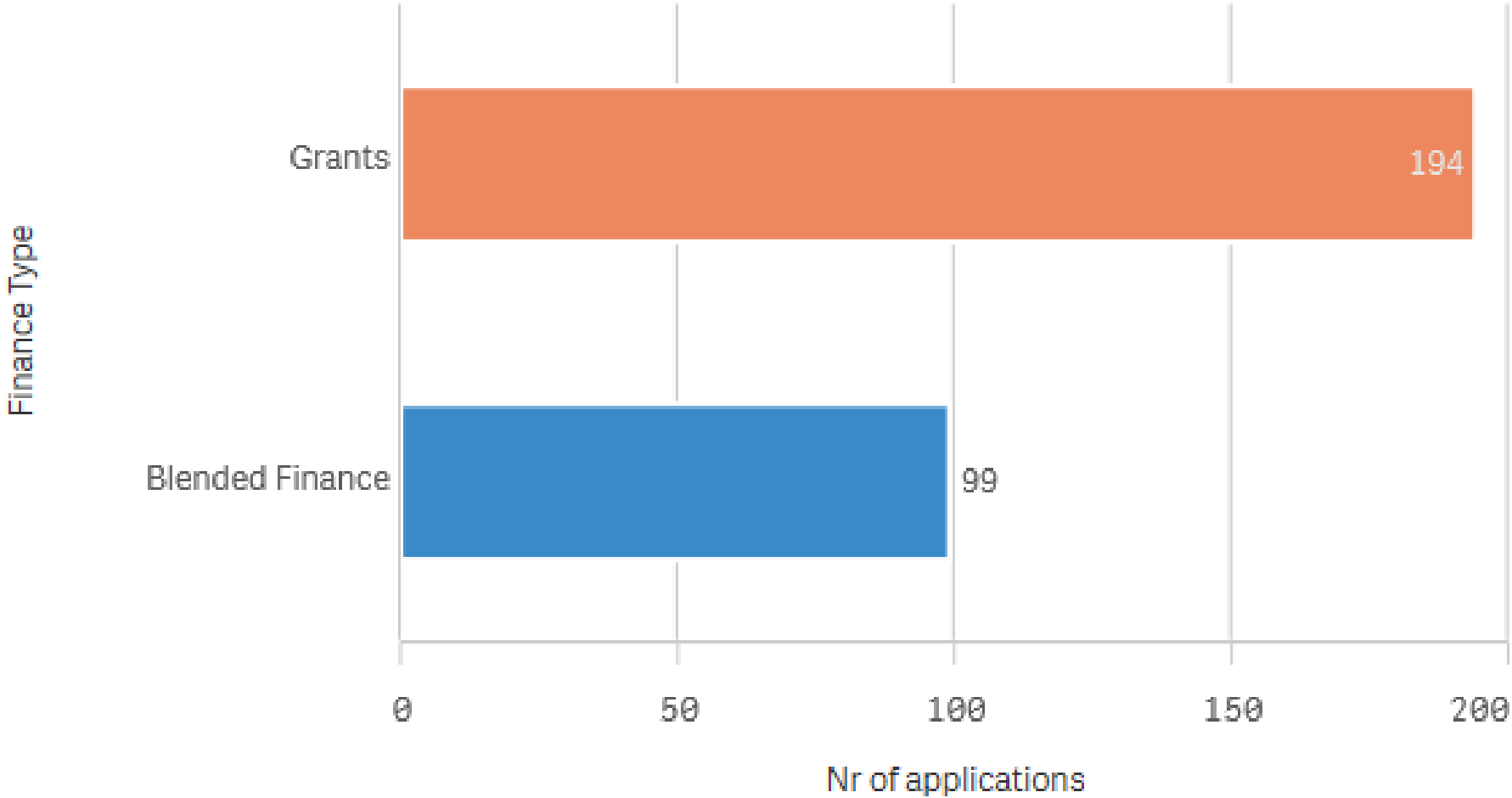
Total budget allocated: **1.257.274.115 €**

(Grant: 563.540.216 € - Equity: 693.733.899 €)

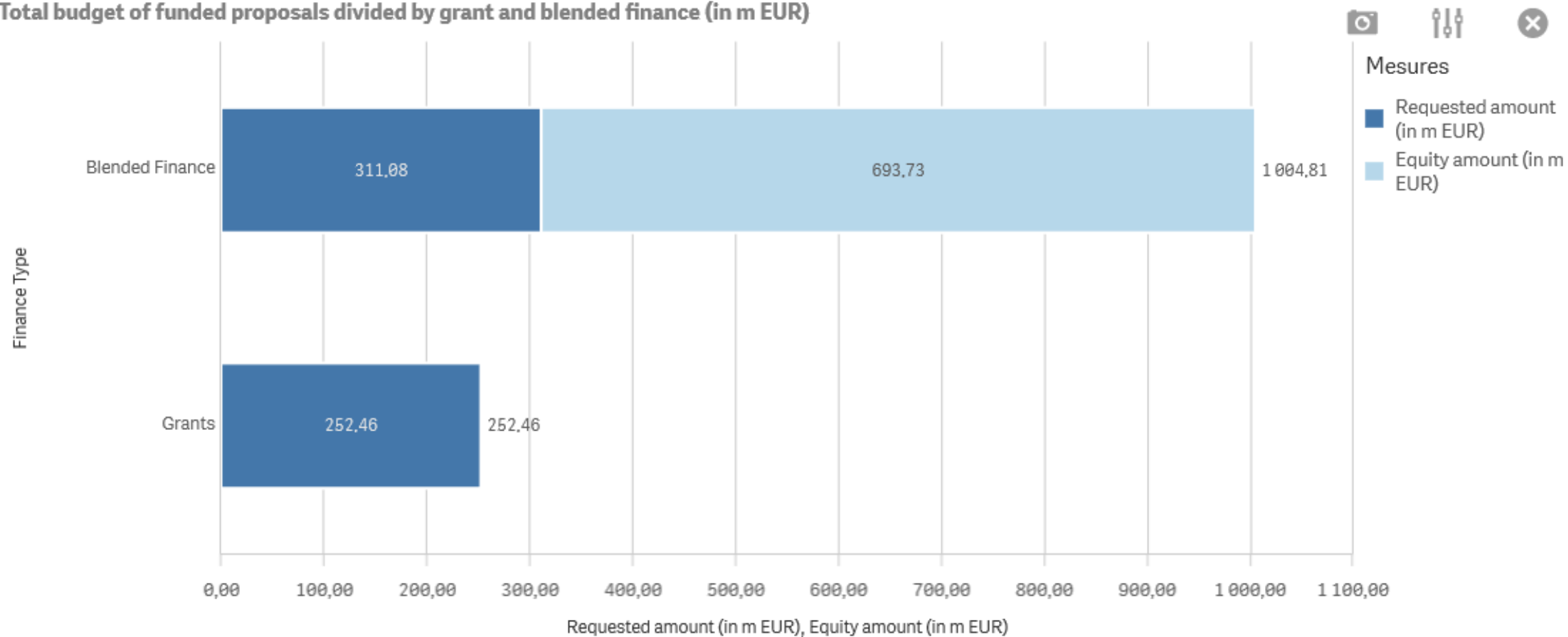
EIC Accelerator Pilot proposals

Call	Evaluation Date	Submitted	Funded	SoE	Success Rate
Totaux		13994	293	3828	2,09%
H2020-EIC-SMEINST-2-2019_09-10-2019	9/10/2019	1852	75	584	4,05%
H2020-EIC-SMEINST-2-2020_08-01-2020	8/01/2020	1849	44	573	2,38%
H2020-EIC-SMEINST-2-2020_18-03-2020	18/03/2020	3969	72	818	1,81%
H2020-EIC-SMEINST-2018-2020-4_19-05-2020	19/05/2020	2101	64	562	3,05%
H2020-EIC-SMEINST-2-2020_07-10-2020	7/10/2020	4223	38	1291	0,90%

Number of funded proposals divided by grant and blended finance



Total budget of funded proposals divided by grant and blended finance (in m EUR)

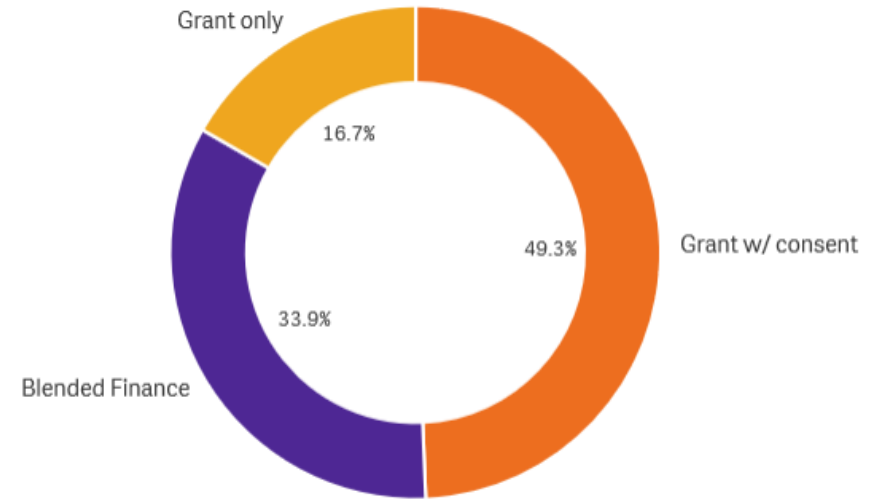
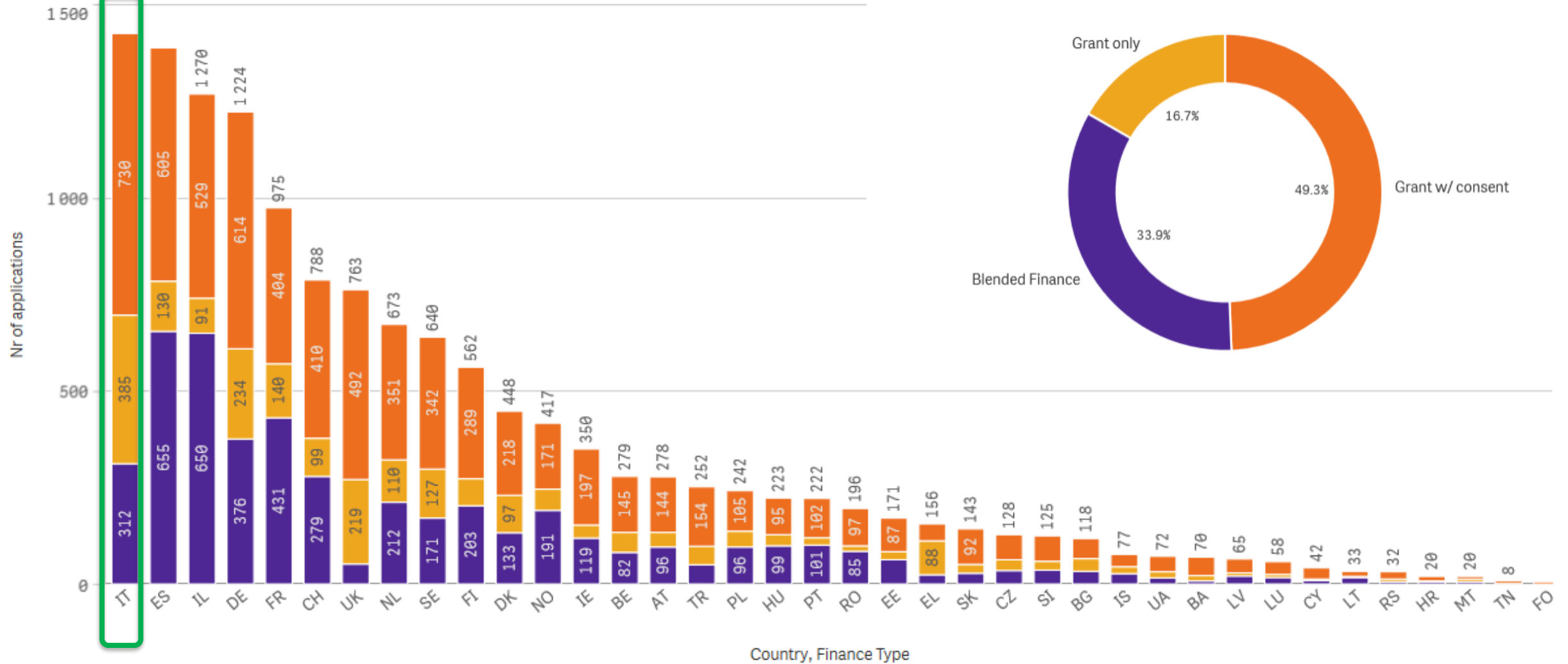


EUROPEAN INNOVATION COUNCIL

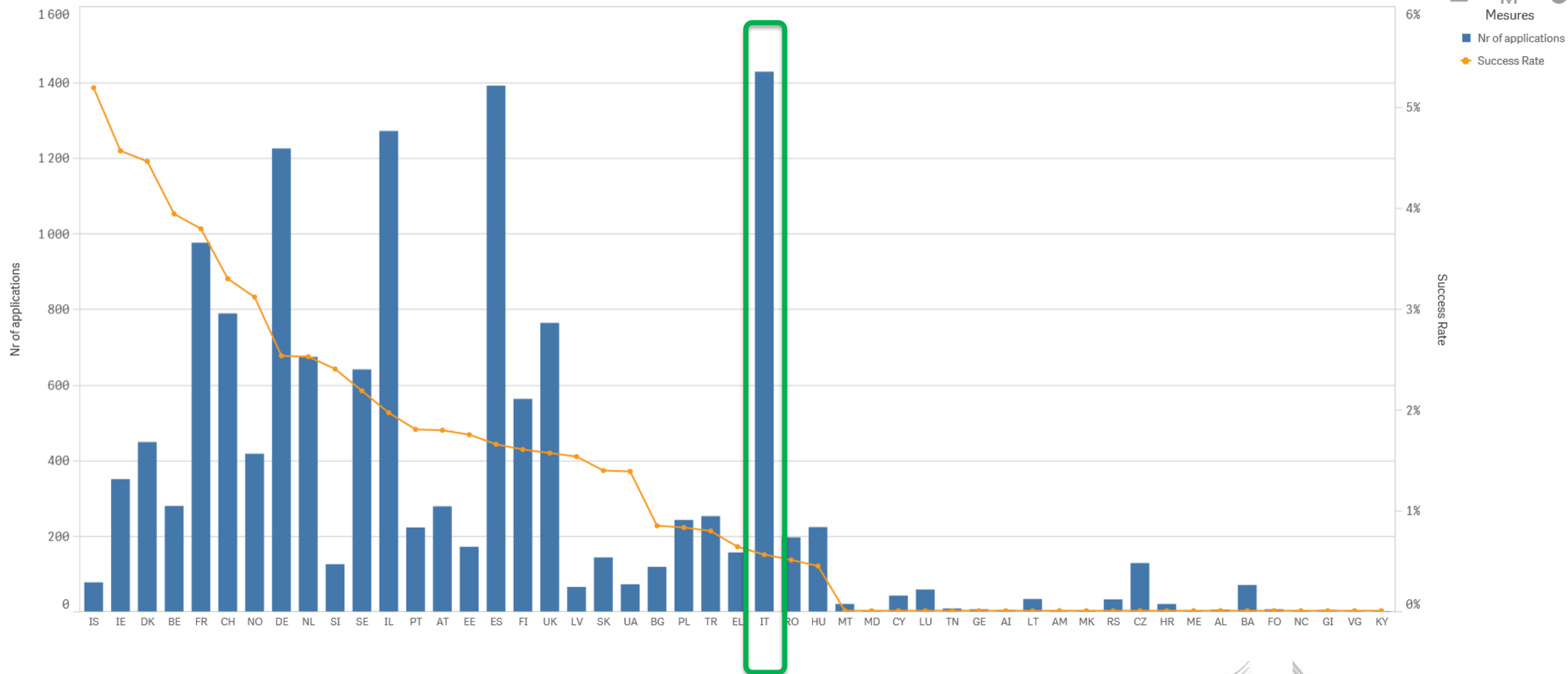
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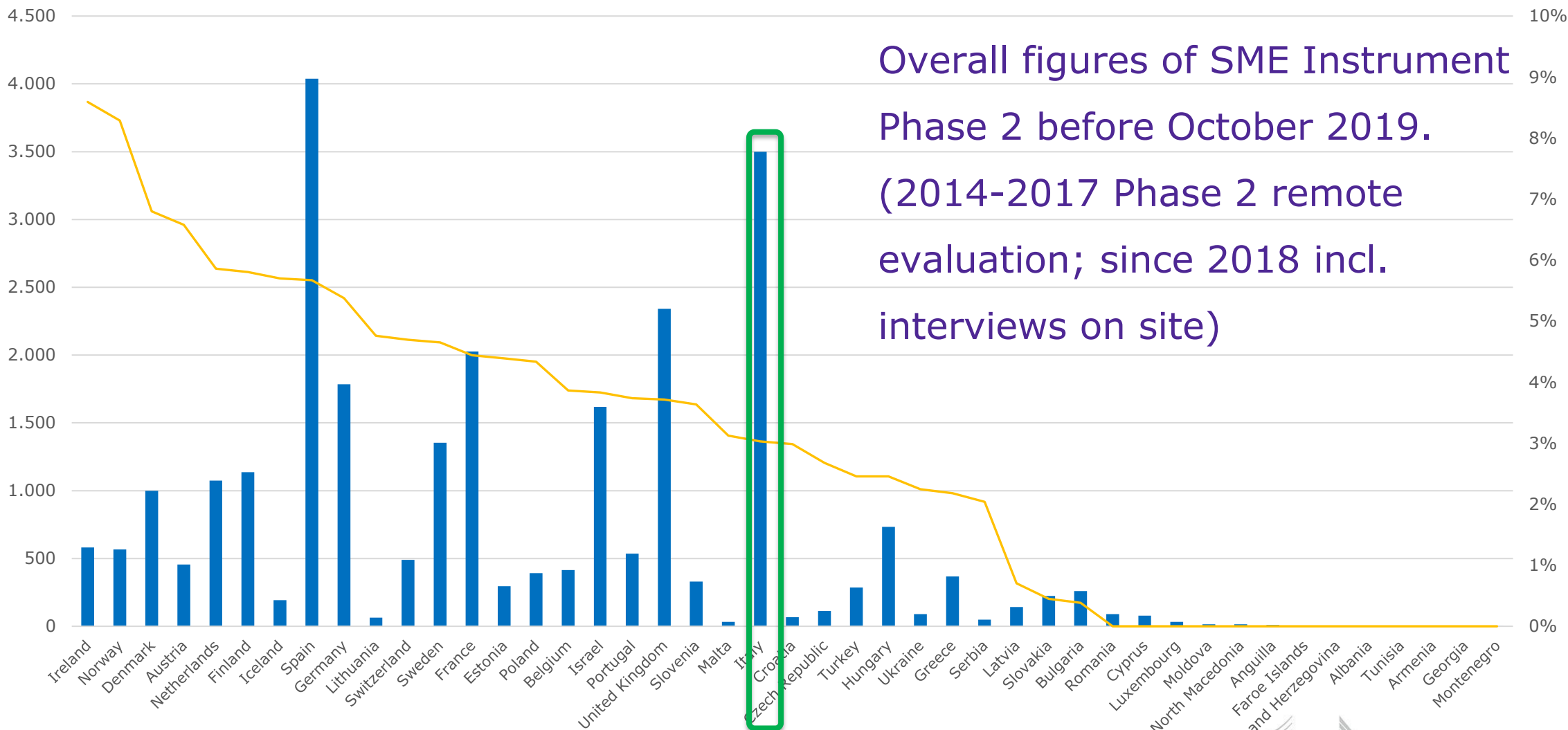
Nr of applications by country

Total number of proposals



Success rate per country





Italy's relative performance 2019-20

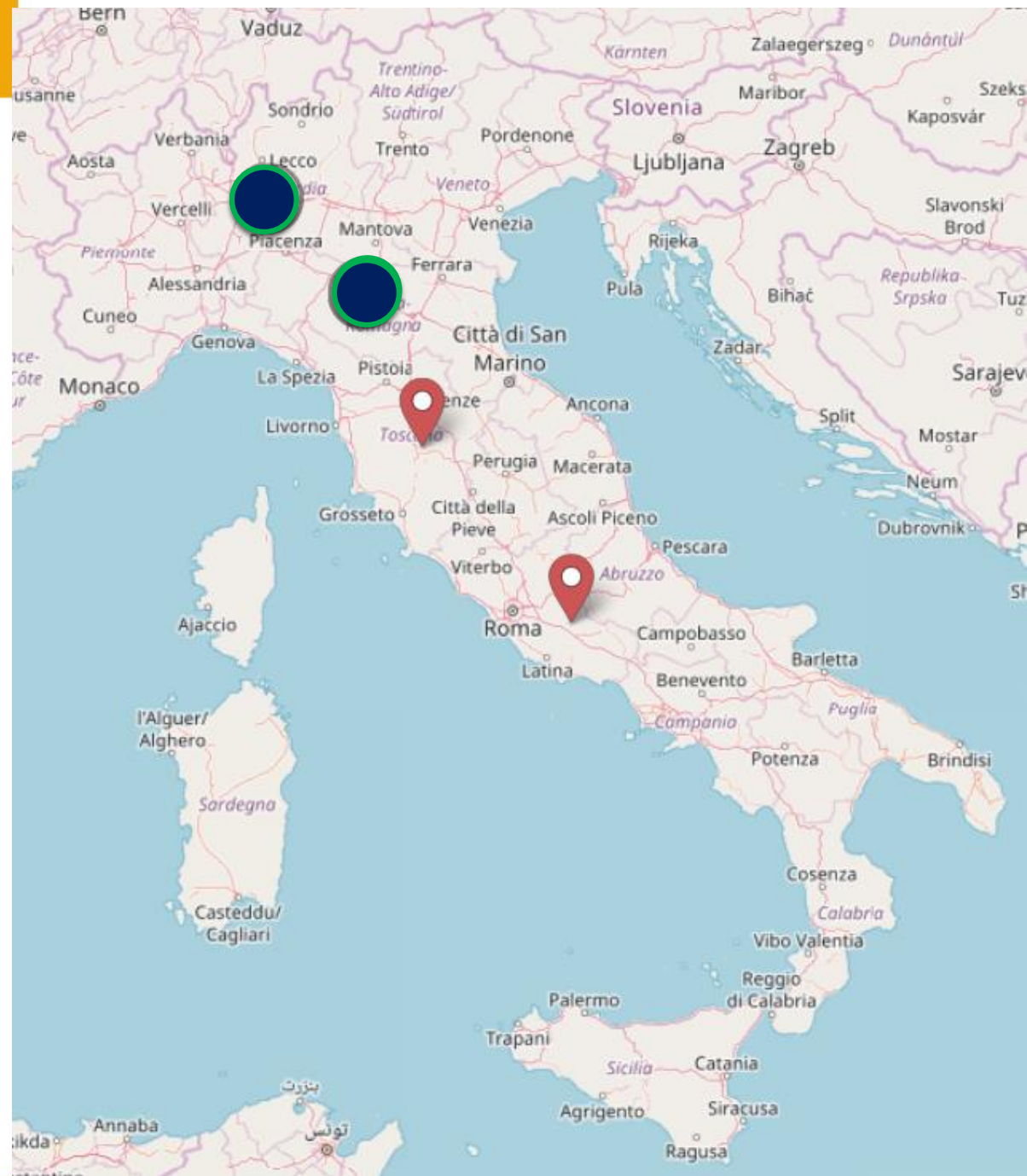
TOP 10 Applications per country

Country	Submitted	Blended	SoE	Invited to interview	Funded	Success Rate
Totaux	13994	4749	3828	821	293	2,09%
IT	1427	312	280	43	8	0,56%
ES	1390	655	467	78	23	1,65%
IL	1270	650	382	71	25	1,97%
DE	1224	376	383	93	31	2,53%
FR	975	431	280	83	37	3,79%
CH	788	279	329	74	26	3,30%
UK	763	52	153	27	12	1,57%
NL	673	212	251	46	17	2,53%
SE	640	171	202	38	14	2,19%
Others	4844	1611	1101	268	100	2,06%

Italian beneficiaries

- Lombardy: 3
- Emilia-Romagna: 3
- Tuscany: 1
- Lazio: 1

ICT, Engineering and technology, Earth and related environmental sciences, Food and beverages



Italy's relative performance: explanations?

- Overall R&I performance (e.g.: European Innovation Scoreboard)?
- Framework conditions less favorable for business innovation?
- Fewer breakthrough/radical innovators?
- Average quality of the proposals?
- Availability of risk capital? Less developed capital market?

Examples of selected applications 1

DACOTA – Norway – Blended finance

The green innovation, AORTA, increases the utilisation ratio of seaweeds from approximately 15 and up to 100% without using formaldehyde and other harmful chemicals. The harvesting method, Hypomar, interferes minimally with the seabed and surrounding marine life during harvesting

QualE-fly– Sweden – Blended finance

A high-efficiency electric drivetrain (named QualE-fly) to power an all-electric nineteen-seater airliner with a range of 400 km, set to enter service in 2025.

AR Green Cam – Spain – Blended finance

The world’s lowest power consumption dual-purpose Mini Camera (for depth and high-resolution images) that globally will save energy consumption of 126.964 MWh and emissions of 83.102 tons of carbon dioxide per year.

Orion Project – France – Female CEO – Blended finance

A range of 28V lithium batteries, for the largest aeronautic battery market, replacing toxic batteries, and generating savings of 1M tons of Co2 within the next 8 years. The innovation can potentially revolutionise the aviation sector.

Examples of selected applications 2

UVERA – Poland – Female CEO – Grant

A natural UV filter safe for health of end-users (skin) and the environment, as it is safe for all eco-systems, marine and land.

MIMBOX – Sweden – Female CEO – Grant

Mimbox captures the micro plastics released by washing machines, cuts up to 70% of water consumption by cleaning and recycling the greywater and reduces by 30% the energy consumed in water heating.

EGREMLARE – Netherlands – Female CEO – Grant

The first eco-friendly technology for greasy mixed plastic recycling. The company aims to improve the amount and quality of recycled plastic, by bringing academic technology to the plastic recycling industry.

T-Sense Cold – Slovenia – Female CEO – Grant

T-Sense Cold represent the series of irreversible temperature-sensitive color-changing labels for package in cold supply chains. The SME realizes the irreversible (permanent) color change by re-combination of similar substances using advanced chemical engineering.

Examples of selected applications 3

DATANA – Slovenia – Female led – Grant only

BioSistemika is developing a DNA data writing technology, which is addressing the growing global problem of insufficient storage supply of the escalating world's production of digital data. Today, digital data is predominantly stored in large datacentres that are a major contributor of CO2 emissions and a growing environmental concern. DATANA is a patented innovation that enables this shift by utilizing DNA as an abundant, sustainable, and stable solution for the storage of data.

KMIT-ACC – Hungary – Male led – Blended finance

Cardiovascular disorders are the number one health problem in the high-income societies. X-ray imaging of blood vessels is widely used in diagnosis and treatment of cardiovascular. The team has developed Digital Variance Angiography imaging and implemented it in a software, the Kinepict Medical Imaging Tool (KMIT) in order to improve image quality and to provide a dose management solution to reduce X-ray and ICM dose at least by 75% and 50%, respectively.

Glassomer – Germany – Female led – Blended finance

Glass is a material with unique properties: unmatched optical transparency, heat, pressure, and chemical resistance, outstanding biocompatibility to name but a few. This makes glass the best material for a vast range of key applications. However, glass processing techniques are centuries old, and prevent the production of complex structures required in key applications. Glassomer GmbH has developed the disruptive Glassomer® Technology, which revolutionizes the use of glass by allowing an almost limitless freedom of design.

X1 ACCELERATOR – Spain – Male led – Blended finance

X1 Wind is developing a disruptive floating system to change the paradigm of the wind energy industry. Nowadays, power producers are looking for floating solutions to exploit their sites located in deep waters, but current technology is not competitive in price. In this sense, X1 Wind has been designed for offshore but taking into account that in order to be competitive, renewable solutions need to be low cost.

Examples of selected applications 4

FarMind – Estonia – Female led – Grant only

At Laava Tech, we are determined to make vertical farming a profitable and sustainable business to feed the increasing population in growing urban areas. It is crucial for vertical farmers to save energy and cut down on lighting costs, since the vast majority of their revenues are used to pay the electricity bill. Our solution, FarMind is an entirely new LED Grow Light System based on AI, capable of adjusting the light emitted by each LED light of a farm to match the exact needs of the plant lit underneath.

WOODOO – France – Male led – Blended finance

Woodoo transforms natural wood into an augmented material that is strong, light, durable and stunningly translucent. It uses a patented process to replace wood's lignin with a unique bio-polymer. The result is a material as strong as concrete and steel, and as luminous as amber. It can be used to create: (A) Unique auto interiors; (B) Wooden touchscreens; (C) Light wooden car bodies; (D) Sustainable wooden buildings reaching 48 storeys.

YANGI – Sweden – Female led – Grant only

Plastic is widely known as one of the most significant and rapidly growing sources of industrial waste. Packaging is the main use of plastic, accounting for 60 % of the total plastic waste in the EU. Cellulose (fibre-based) materials are a promising alternative that can replace plastics in most of rigid packaging products without compromising quality but the high costs of their current production processes have prevented packaging producers and brands from substituting plastics with fibre-based materials at a commercial scale. The Loop Factory has developed Yangi, the world's first manufacturing machine to unlock a true substitute to plastic in rigid packaging

WOODRY – Finland – Male led – Blended finance

The ceramics industry is among the most polluting industries globally, responsible for more than 500 million metric tons of CO2 emissions. Given the pursuit for a carbon neutral world, sustainable alternatives to ceramics are needed but current measures target only incremental process improvements to reduce CO2 emissions in the industry. Woodio is the world's first 100% waterproof solid wood composite material that is mass producible and has the potential to replace ceramic products on the global scale, have significantly lower carbon footprint than ceramics and serve as a carbon storage during product lifetime.

How will the EIC look like in Horizon Europe?

Europe's most ambitious innovation initiative

- **Budget of €10.1 billion (2021-27)**
- Mission to **identify, develop and scale-up high risk innovations**, with particular focus on disruptive, deep-tech and market creating
- **Independent Board of innovators and President** to set strategy, oversee implementation
- **“One stop shop” for implementation (agency + EIC Fund)**
- **More agile, flexible funding**

Europe's most ambitious innovation initiative

- **EIC “Programme Managers”** to develop visions for breakthroughs and steer portfolios
- **Fast track access** for Horizon grant holders (ERC, EIT, etc.) and certified national schemes
- **EIC Forum** with innovation ecosystem actors
- Complemented by **European Institute of Innovation & Technology** (EIT) and Innovation Ecosystems actions in “Innovative Europe” pillar of Horizon Europe

EIC Advisory Board



Chair
Mark Ferguson



Vice-Chair
Hermann Hauser



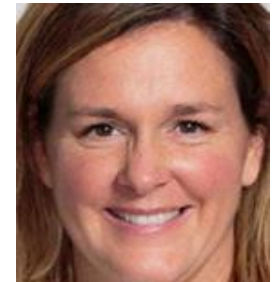
Kerstin Bock



Jo Bury



Dermot Diamond



Laura Gonzalez-
Estefani



Jim Hagemann
Snabe



Ingmar Hoerr



Fredrik Hörstedt



Heidi Kakko



Bindi Karia



Anita Krohn
Traaseth



Jerzy Langer



Ana Maiques



Marja Makarow



Carlos Oliveira



Valeria
Nicolosi



Bruno
Sportisse



Kinga
Stanisławska



Roberto Verganti



Martin Villig



Yousef Yousef

The European Innovation Council

One stop shop for breakthrough, deep-tech, market-creating innovators

Open to all innovators, in any field, at any time

Complemented by **targeted funding** on **strategic technologies** and innovations

Highest potential innovators selected on basis of high-risk/high-impact idea, scale-up potential, and team

Agile funding from idea to investment

Pathfinder for advanced research on emerging technologies

Transition from lab to commercial setting

Accelerator to scale up innovations by start-ups & SMEs (<€2.5 million grant, <€15 million equity)

Building ecosystems and communities

Access to **Business Acceleration Services** (coaches, mentors); to corporates & investors; to knowledge partners

EIC Programme Managers to develop visions for breakthroughs, manage portfolios, and connect to ecosystems

Crowding in other investors (VC, corporate VC, etc.)

EIC Work Programme for 2021 – Key novelties

EIC Pathfinder

- Mainly open (“bottom-up”) + targeted call on health, energy and digital technologies
- Programme Managers to steer portfolios of projects
- Additional 50.000 € follow up grants to test feasibility and interact across portfolios

EIC Transition

- New funding scheme to bridge gap between research phase (proof of concept) and pre-commercial
- In first phase, for follow up to results from EIC Pathfinder and ERC Proof of Concept

EIC Work Programme for 2021 – Key novelties

EIC Accelerator - funding options

- Mainly open (“bottom-up”)
- Additional funding for green, digital and health technologies from Next Generation EU budget
- Mainly blended finance (grant + investment), but options for “grant only” and “grant first” (with investment follow up)

EIC Work Programme for 2021 – Key novelties

Innovator friendly application process

- Apply at any time with short (5 page) form, video pitch and slide-deck => feedback within 4 weeks
- If successful, support from AI platform and coaching services to prepare full application/ business plan
- Second chance to apply if unsuccessful at first

EIC Fund

- Faster due diligence and decision making
- Platform to crowd in other investors

How will the Accelerator look like in Horizon Europe?

EIC Accelerator - Who can apply

Mono-beneficiary scheme

- SMEs (Racc. 2003/361/CE)
- Physical person(s) willing to set up SME(s)
- Exceptions for small mid-caps (up to 500 employees)
- TRL5 or above

EIC Accelerator – How

Innovator friendly application process

- Apply at any time with short (5 page) form, video pitch and slide-deck => feedback within 4 weeks
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Not only funding

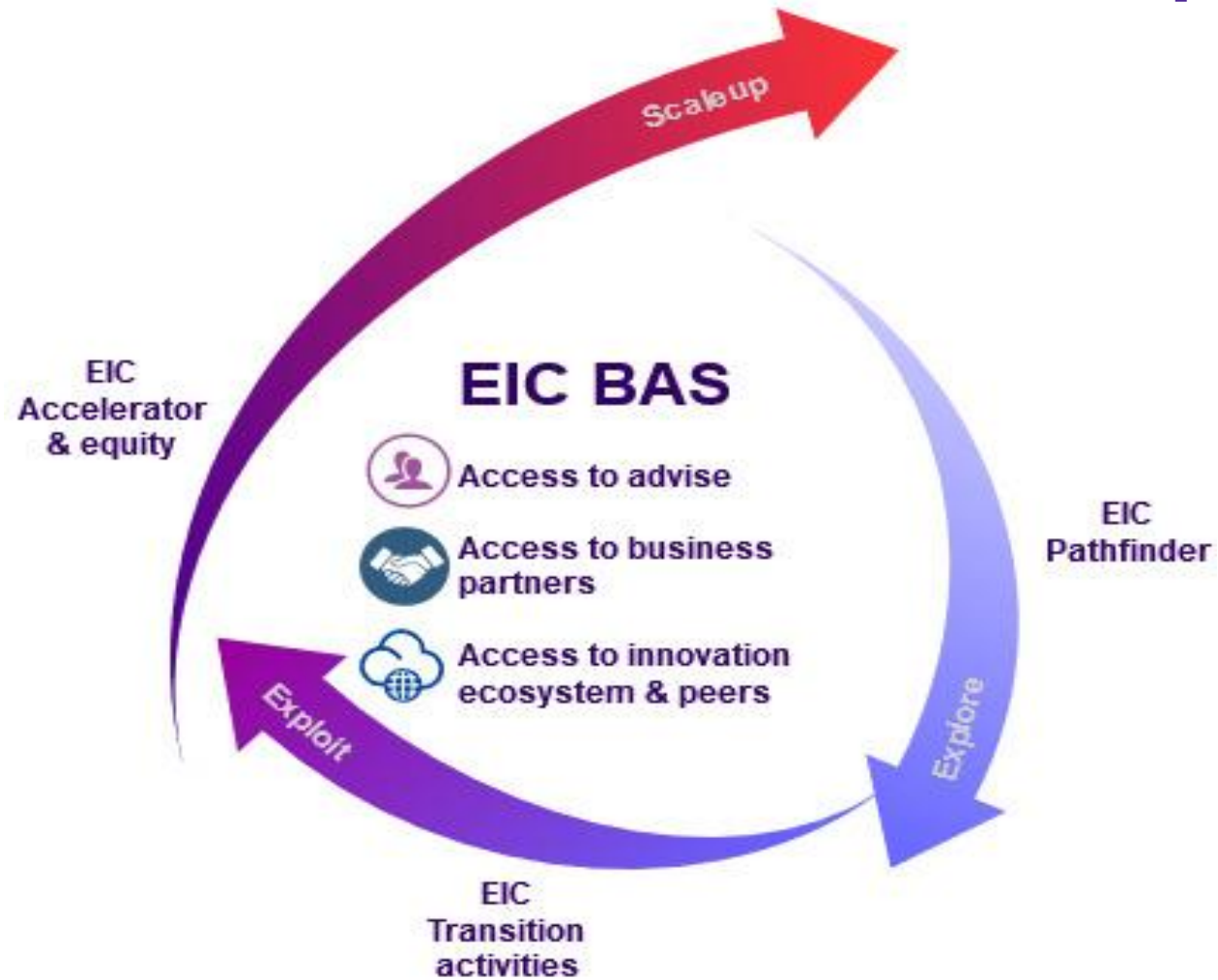
Funding (grants and investment)



Business Acceleration Services



Business Acceleration Services in Horizon Europe



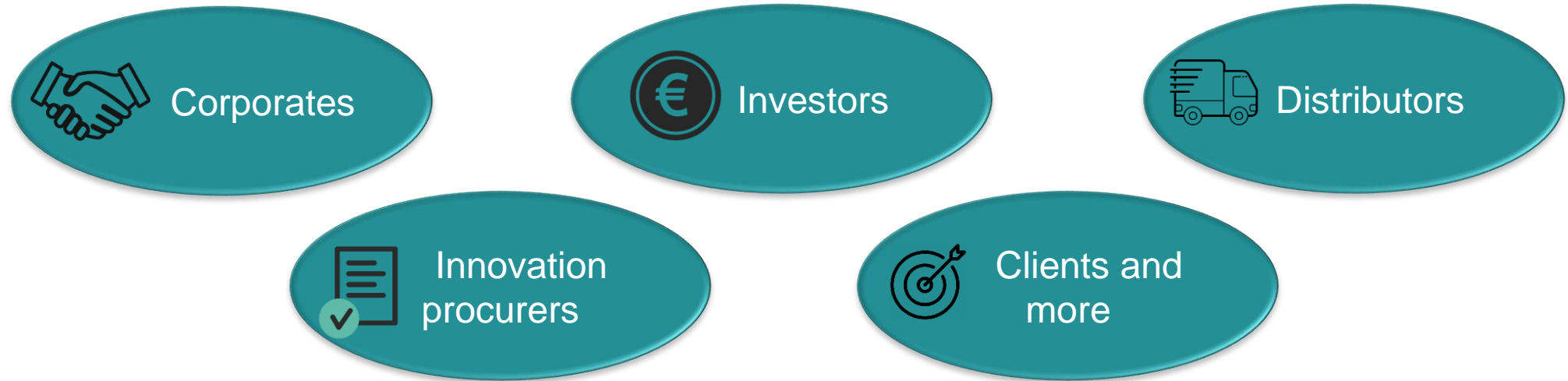
Access to advisors



→ Specific support for

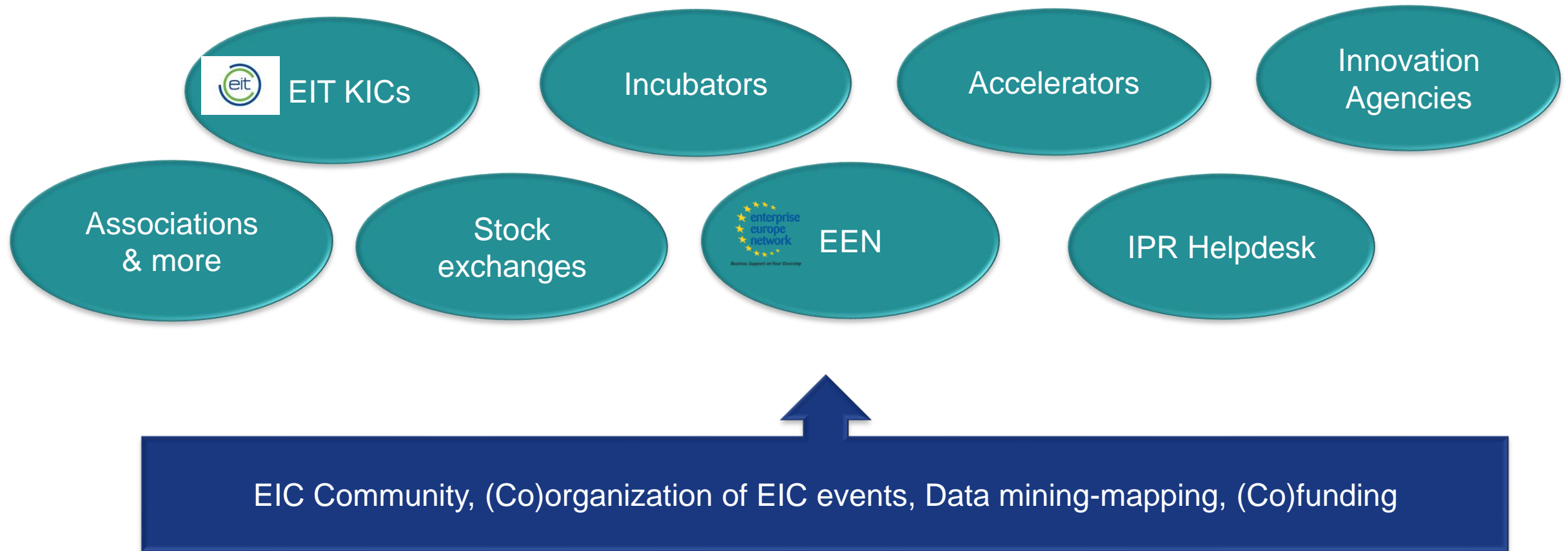


Access to business partners



Matching, Co-creation, Venture client, EIC Scalator, Overseas Trade Fairs, Innovation Hub visits

Access to innovation ecosystem and peers



Next steps

January – March 2021

- Formal adoption process of EIC Work Programme (by Commission following opinion of Programme Committee)
- Launch of EIC and launch of calls (date to be confirmed)

April – December 2021

- Deadlines/cutoffs for applications (from June)
- Evaluations, interviews, grants, due diligence for equity
- Autumn: launch of 2022 EIC Work Programme

Grazie!

www.ec.europa.eu/research/eic

<https://ec.europa.eu/easme/en/news/deep-tech-europe-report-key-numbers-eic-performance>

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