Backing visionary entrepreneurs

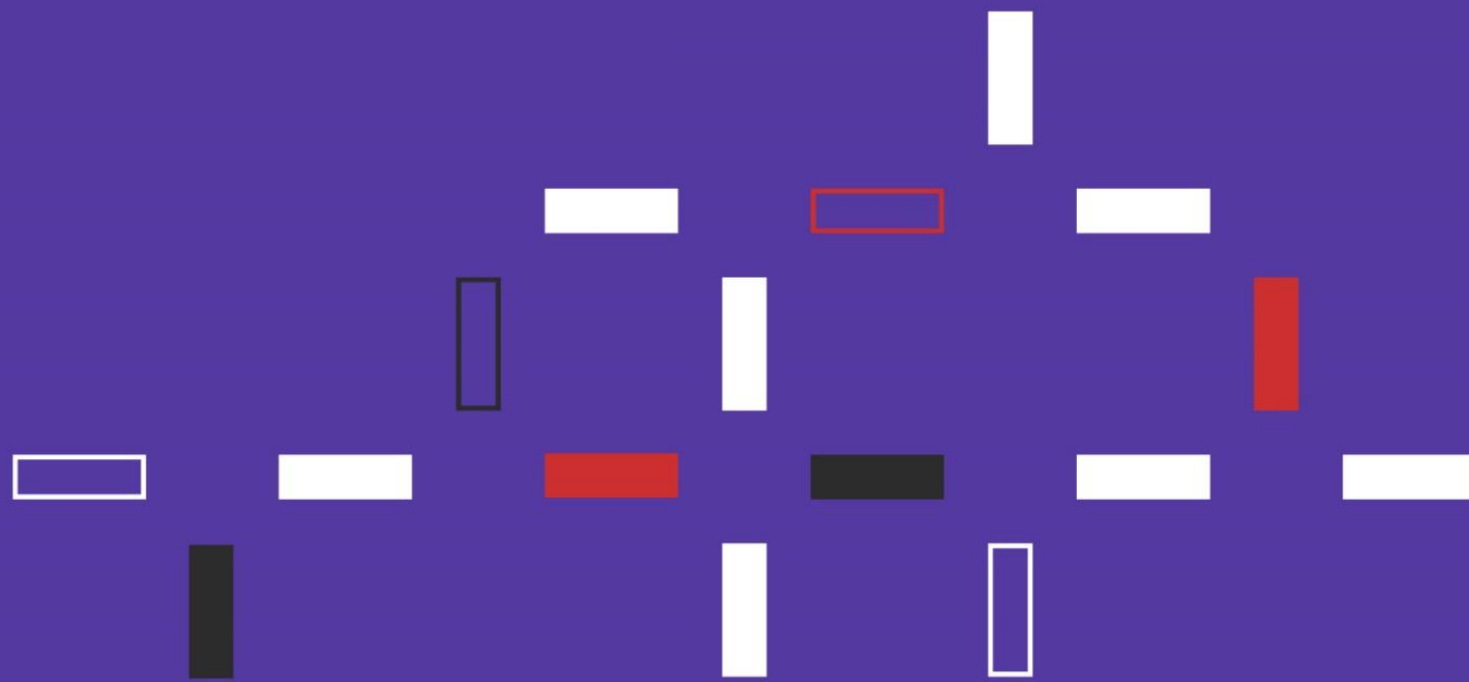**The role of the EIC in nurturing Europe's innovators**

Gerald Cultot

Head of Sector, EIC Pathfinder Open

Presentation to Turkey in Horizon 2020 Phase II event, 15 April 2021

European Innovation Council

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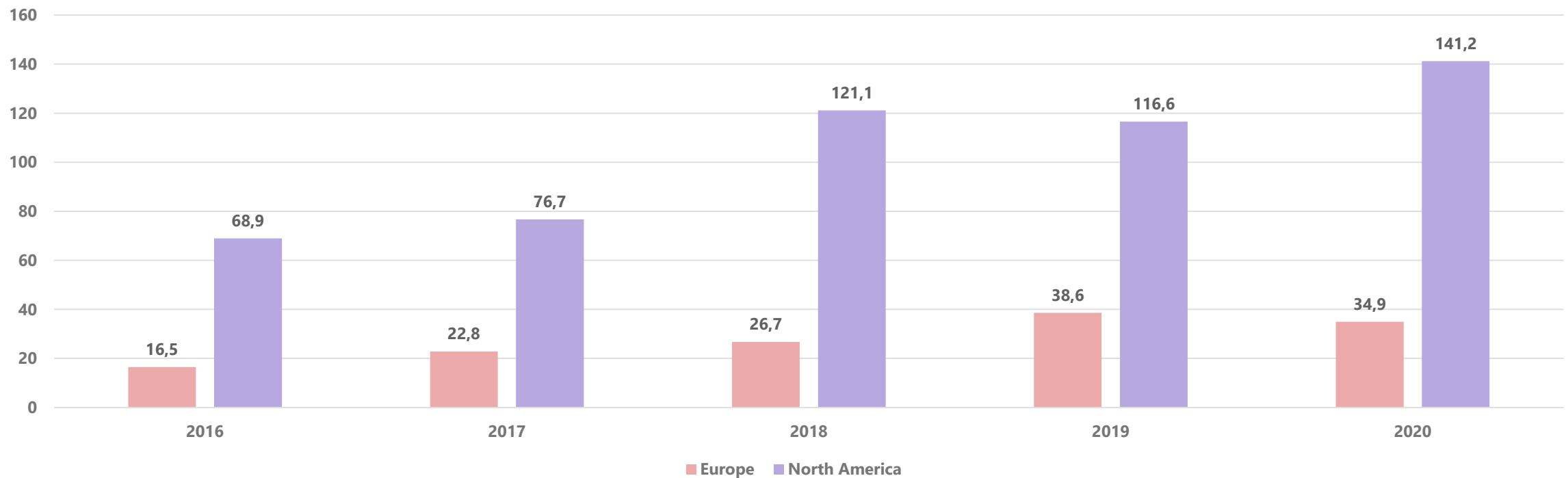- Need to **include all regions and all talent** (especially female)

Funding gap for scaling up highly innovative startups and SMEs

US venture capital investments are 4-5 times higher than EU
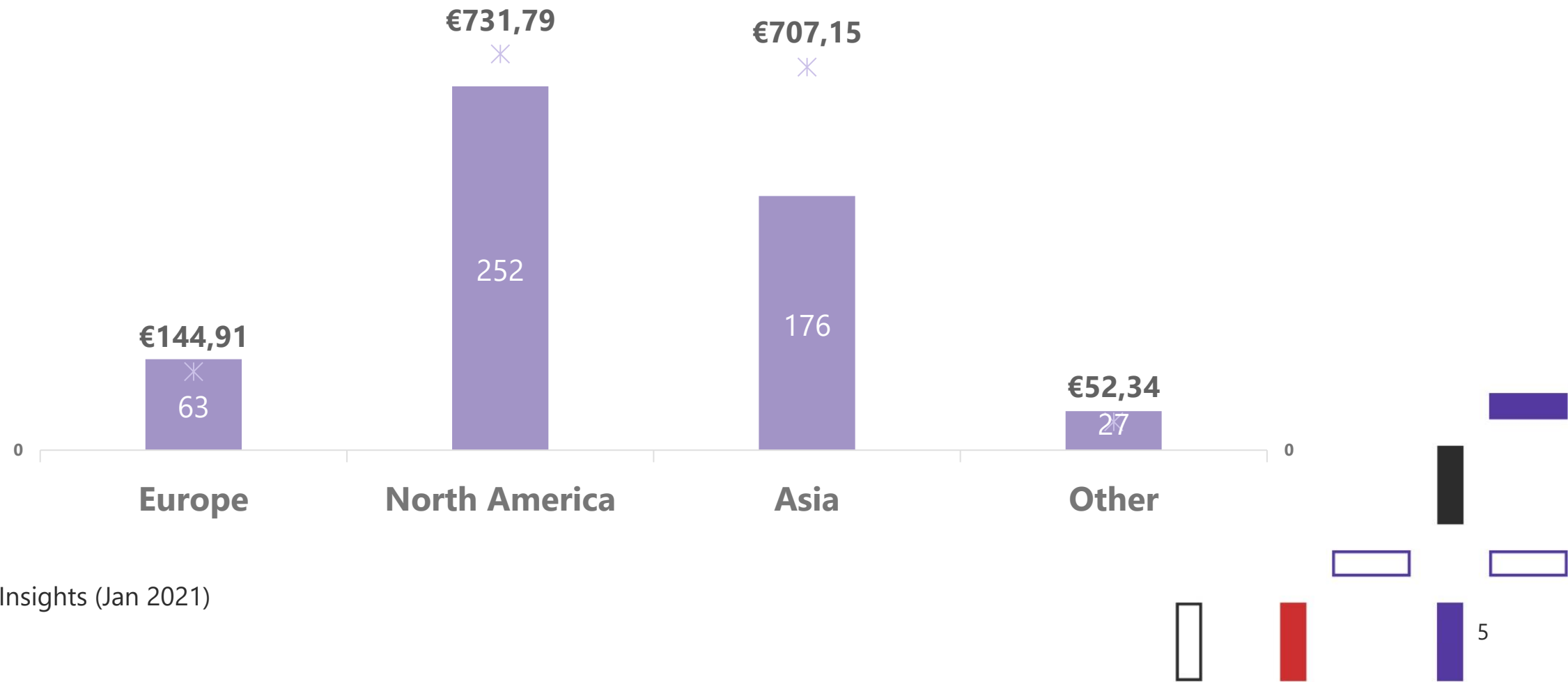
Capital invested by year (B$)

Legend: ■ Europe ■ North America

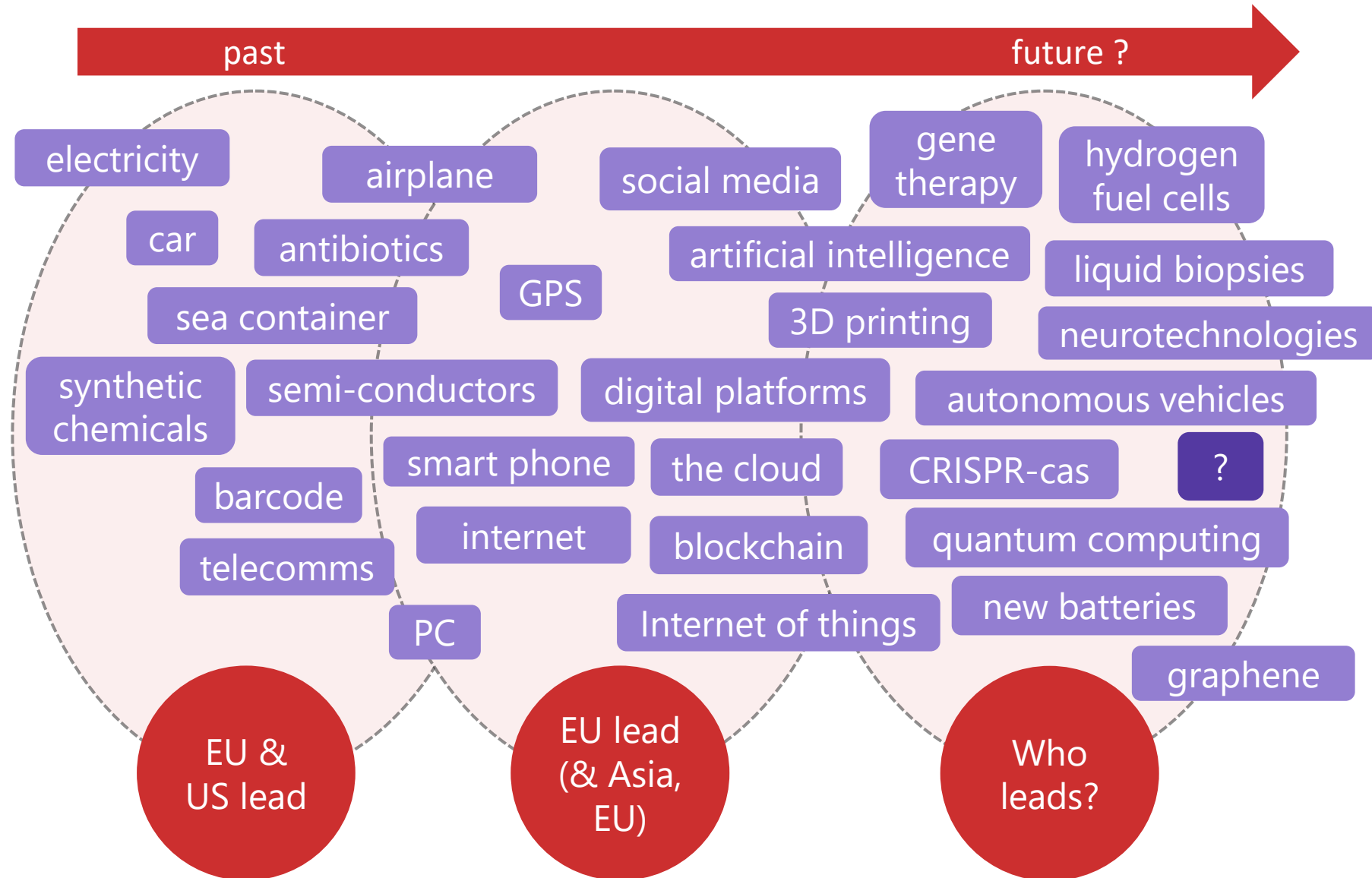| Year	Europe	North America
2016	16,5	68,9
2017	22,8	76,7
2018	26,7	121,1
2019	38,6	116,6
2020	34,9	141,2

Source: [Invest Europe, Pitchbook]

What is at stake: will Europe be home to future « unicorns »?

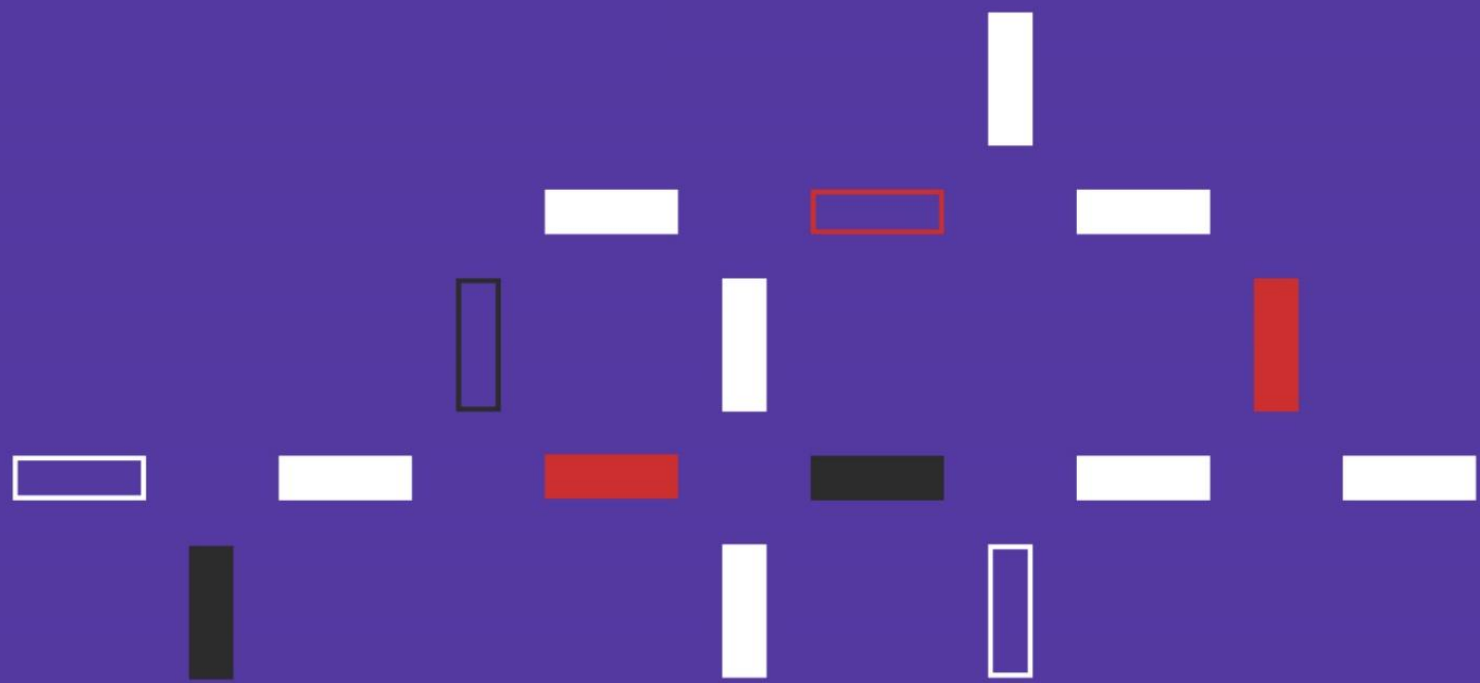Number and market value of "unicorn" companies (valued at over €1 billion) by regions

€731,79

€707,15

€144,91

€52,34

Europe	North America	Asia	Other
63	252	176	27

Source: CB Insights (Jan 2021)

What is at stake: who will lead on the next wave of strategically important technologies?

European Innovation Council

past → future ?

electricity

airplane

social media

gene therapy

hydrogen fuel cells

car

antibiotics

artificial intelligence

liquid biopsies

GPS

sea container

3D printing

neurotechnologies

synthetic chemicals

semi-conductors

digital platforms

autonomous vehicles

smart phone

the cloud

CRISPR-cas

?

barcode

internet

blockchain

quantum computing

telecomms

Internet of things

new batteries

PC

graphene

EU & US lead

EU lead (& Asia, EU)

Who leads?

Examples taken from WIPO, MIT, WEF, OECD, etc.

Experience from the EIC pilot phase (2018-2020)

European
Innovation
Council

EIC pilot phase (2018-20) under Horizon 2020 programme

- **Budget of €3.5 billion (2018-20**), €1.55 billion in 2020

- Introduction of **EIC pilot blended finance** (2019), **and set up of EIC Fund** (2020)

- **Very high demand:** ~ 14000 applications from SMEs/ startups in 2020 with request for over €40 billion support;

- **Special support for:**

  - **COVID relevant innovations:** 36 Startups/SMEs awarded funding of over €160m in May;

  - **'Green Deal' innovations**: 64 startups/ SMEs awarded funding of over €300m in July;

  - **for women innovators:** at least 25% of start-ups/ SMEs invited to interview to have female CEO

- **First EIC programme managers** recruited

Impacts of EIC pilot Accelerator (including SME instrument)

Growing support to Startups & SMEs

- **5700** supported since 2014
- **293** supported in enhanced pilot (Oct 2019- Oct 2020)
- **159** awarded blended finance with ~€700 million equity
- Increase in startups with female CEOs

Crowding in other investors:

- **€5.3 billion** follow up investments to EIC supported companies
- EIC Fund investment decisions in over 50 companies
- **1 unicorn** - Cellink; value €1billion+
- **43 centaurs** - value €100million+

90% addressing Sustainable Development Goals

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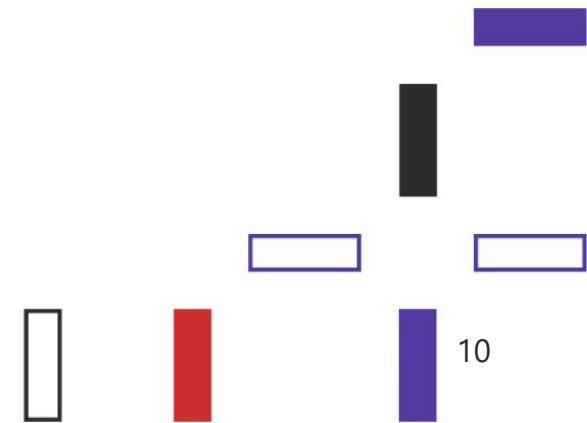- 30% in **Digital**
- 30% in **Health** (including COVID solutions)

EIC pilot Pathfinder Portfolio (including FET Open & Proactive)

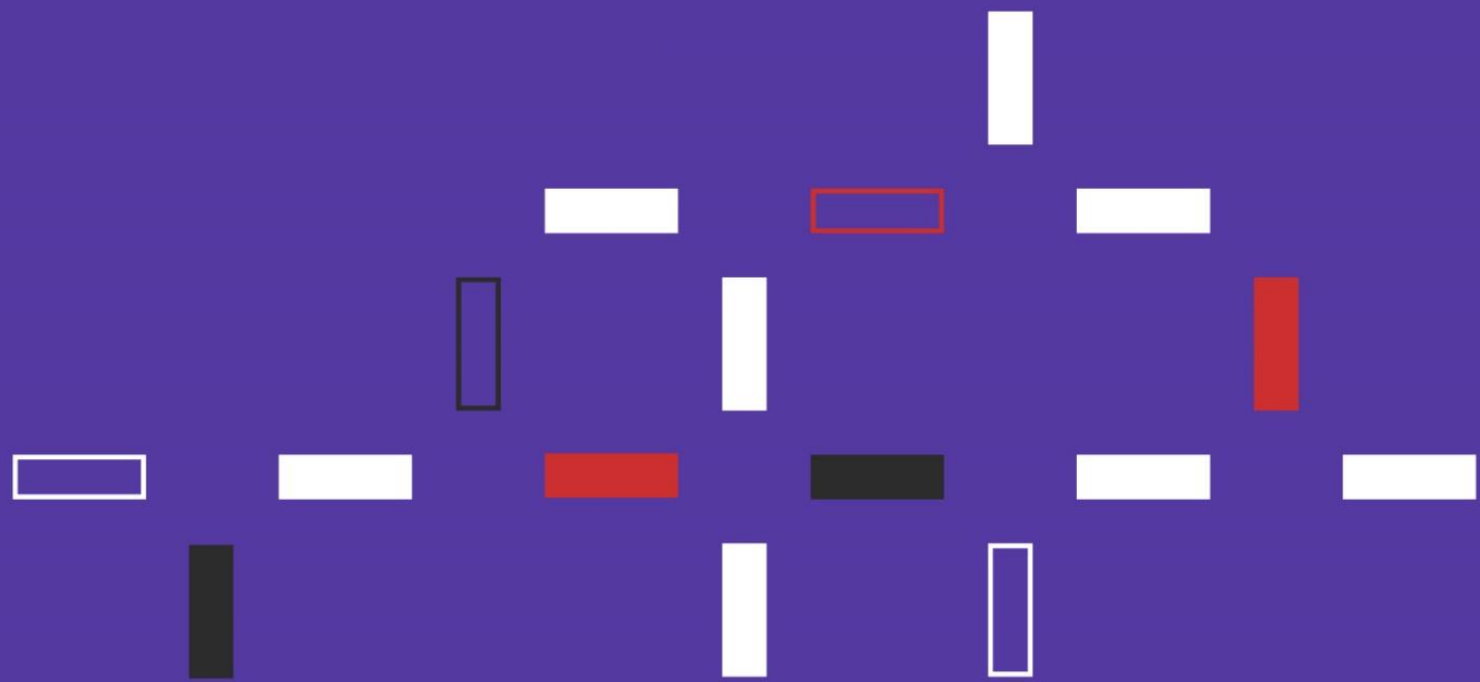|		Applications					
		Health	Digital	Energy & Environment	Food & Agriculture	Manufacturing /Infrastructure	Sum
Technologies	Biotech & bioengineering	95	3	3	5	4	110
	Engineering	0	6	3	0	11	20
	Data	7	23	2	0	1	33
	Materials	23	69	41	2	38	173
	Sum	125	101	49	7	54	336

Proven impacts

- **590 innovations,** 451 addressing new and emerging markets
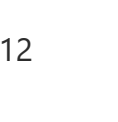- **2662 Peer-Reviewed Scientific Publications**, 72% in high profile journals

The new European Innovation Council

Europe's most ambitious innovation initiative

- **€10 billion** programme to identify, develop and scale up breakthrough technologies and disruptive innovations in Europe
- **Unique** in the world to combine research on emerging technologies with Accelerator for startups, SMEs and scaleups
- **EIC Fund** largest VC deep-tech investor in Europe (over €3 billion)
- **Innovator-centric** steered by Board of leading innovators
- **Pro-active approach** with flexible funding
- Enhances the **European innovation ecosystem**

Part of the Innovative Europe pillar of Horizon Europe

European Innovation Council

- Support to innovations with breakthrough and market creating potential

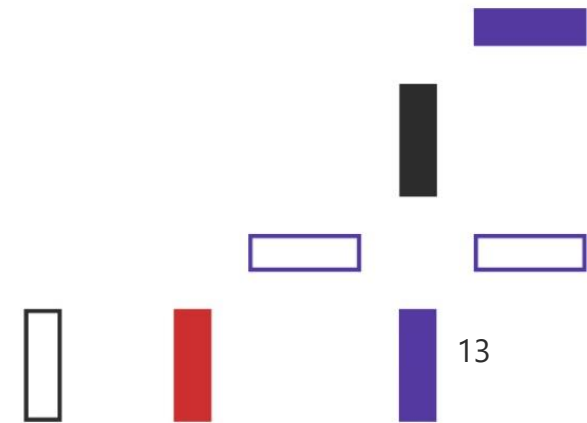**€10.1 billion**

European innovation ecosystems

- Connecting with regional and national innovation actors

€520 million

European Institute of Innovation and Technology (EIT)

- Bringing key actors (research, education and business) together around a common goal for nurturing innovation

€2.9 billion

What is the EIC?

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 challenges
- Highly competitive for Europe's high potential innovators

Agile funding from idea to investment

- Pathfinder for advanced research on emerging technologies
- Transition from lab to commercial setting
- Accelerator & EIC Fund to scale up innovations by start-ups & SMEs

Building ecosystems and comunities

- Access to Business Acceleration Services (coaches, mentors, corporates, investors & knowledge partners)
- EIC Programme Managers to develop visions for breakthroughs, manage portfolios, and connect to ecosystems
- Crowding in other investors (VC, corporates, etc.)

EIC Governance

- **EIC Board & President** to set strategy, advise on work programme & implementation

- **EIC and SME Executive Agency** (from 1 April) to manage EIC activities

- **EIC Fund** to manage equity investments in EIC supported companies

- **European Commission** to appoint Board, adopt Work Programme, monitor implementation

EIC main instruments and characteristics

Pathfinder
- **Early stage research** on breakthrough technologies
- Grants up to €3/4 million
- Successor of FET (Open & Proactive)

Transition
- **Technology maturation** from proof of concept to validation
- **Business & market readiness**
- Grants up to €2.5 million

Accelerator
- **Development & scale up** of deep-tech/ disruptive innovations by startups/ SMEs
- Blended finance (grants up to €2.5 million; equity investment up to €15 million)
- Successor of SME instrument

- Mission to **identify, develop and deploy high risk innovations** of all kinds

- Focus on **breakthrough, market-creating, deep-tech**

- Steered by **EIC Board** of leading innovators (entrepreneurs, investors, researchers, ecosystem)

- **Business Acceleration Services** (coaches/ mentors, corporates, investors, ecosystem)

- **Pro-active management** (roadmaps, reviews, re-orientations, etc) with EIC Programme Managers

- **Follow up funding for results from Horizon** (ERC, EIT, collaborative) & national programmes

Proactive management

- **Project reviews** against milestones, with flexibility:
  - Milestones to be proposed in applications
  - Reviews to decide on whether to continue, reorient, suspend, stop
  - Reviews may also lead to amendments to future milestones

- Projects **allocated to Portfolios:**
  - Especially (but not only) for projects selected following Pathfinder Challenge calls
  - Overseen by EIC Programme Managers
  - Portfolio objectives and roadmap prepared by Programme Manager in consultation with projects/ beneficiaries
  - Portfolio activities supported (events, data sharing, etc) to strengthen overall portfolio and prepare transition to innovation
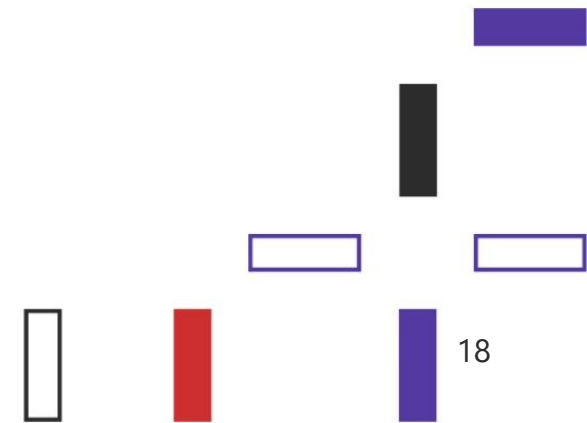
Portfolio approach

Challenge portfolio approach:

- a coherent set of projects exploring different perspectives, competing approaches or complementary aspects of the Challenge;

- multidisciplinary interactions and exchanges for synergies and serendipity;

- contributing to an overarching medium to long-term business goal and technology-based strategic plan, under the supervision of an **EIC Programme Manager.**
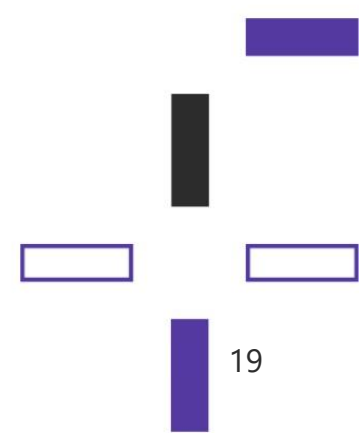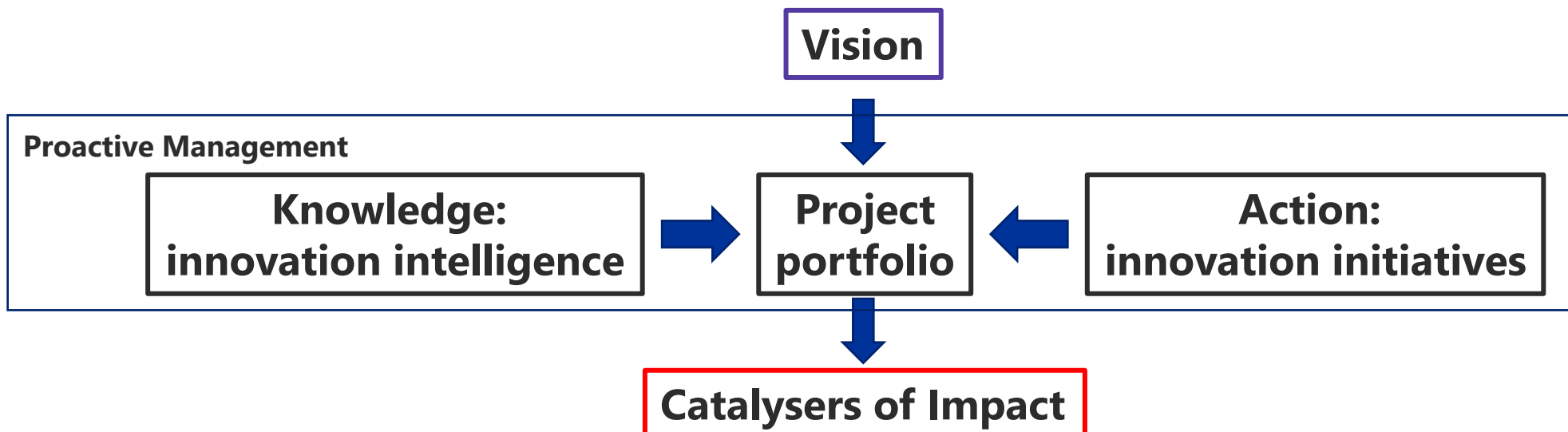
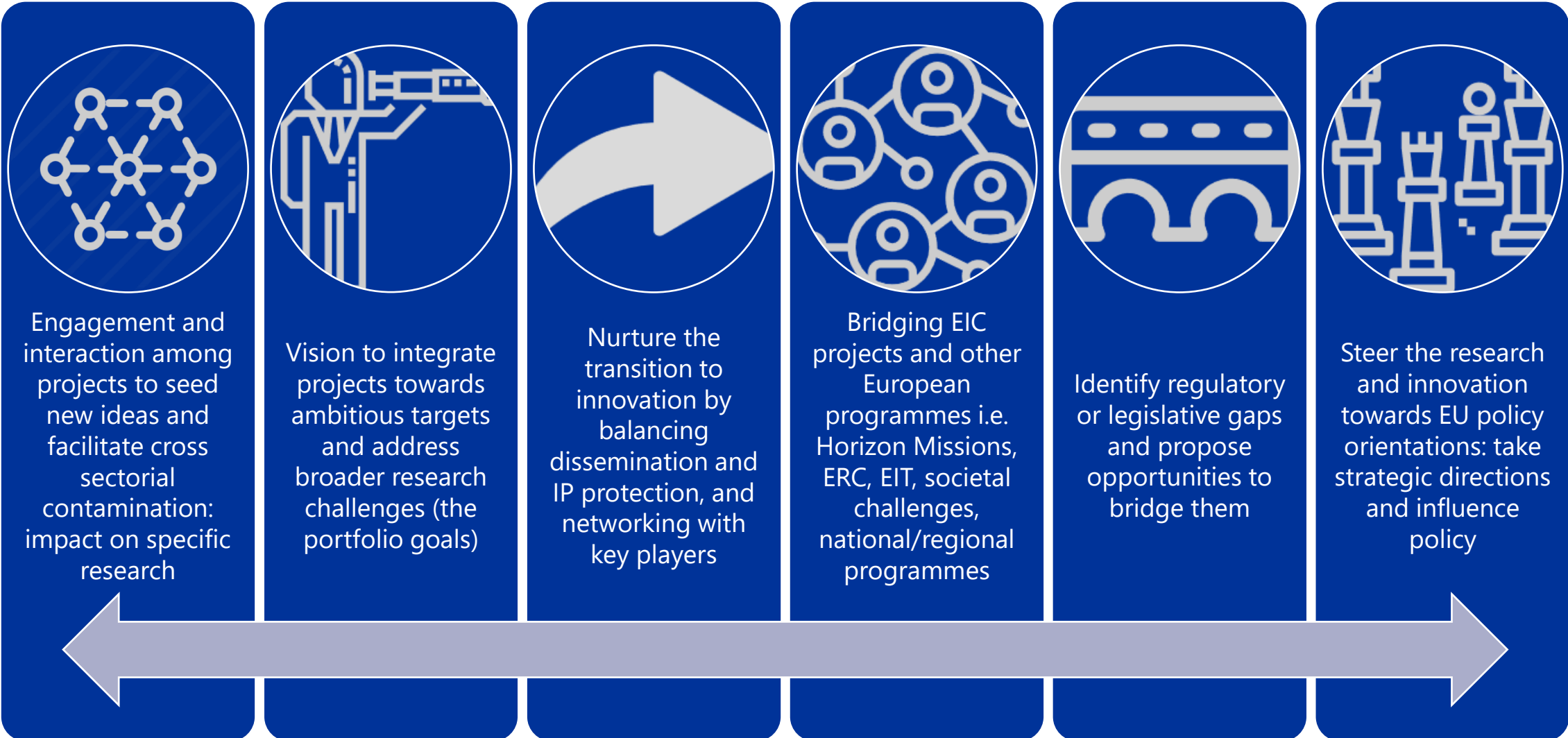Projects will participate in relevant portfolio activities.

European Innovation Council

EIC Programme Managers

bringing together cutting-edge expertise and visionary drive to turn new technological breakthroughs into relevant and responsible innovations for Europe and for the world: ready to work with others, to accelerate where possible, to be patient where needed, to learn from mistakes and, ultimately, to share the success
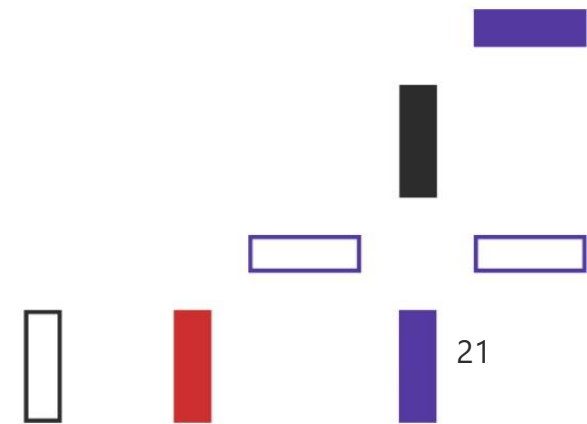
Vision

Proactive Management

| **Knowledge: innovation intelligence** | ➡ | **Project portfolio** | ⬅ | **Action: innovation initiatives** |

Catalysers of Impact

* Webinar organised jointly by FETFX and Access2EIC
http://www.fetfx.eu/event/eic-programme-managers-visions-paths-european-innovation-council/

Proactive Management: Impacts

Engagement and interaction among projects to seed new ideas and facilitate cross sectorial contamination: impact on specific research

Vision to integrate projects towards ambitious targets and address broader research challenges (the portfolio goals)

Nurture the transition to innovation by balancing dissemination and IP protection, and networking with key players

Bridging EIC projects and other European programmes i.e. Horizon Missions, ERC, EIT, societal challenges, national/regional programmes

Identify regulatory or legislative gaps and propose opportunities to bridge them

Steer the research and innovation towards EU policy orientations: take strategic directions and influence policy
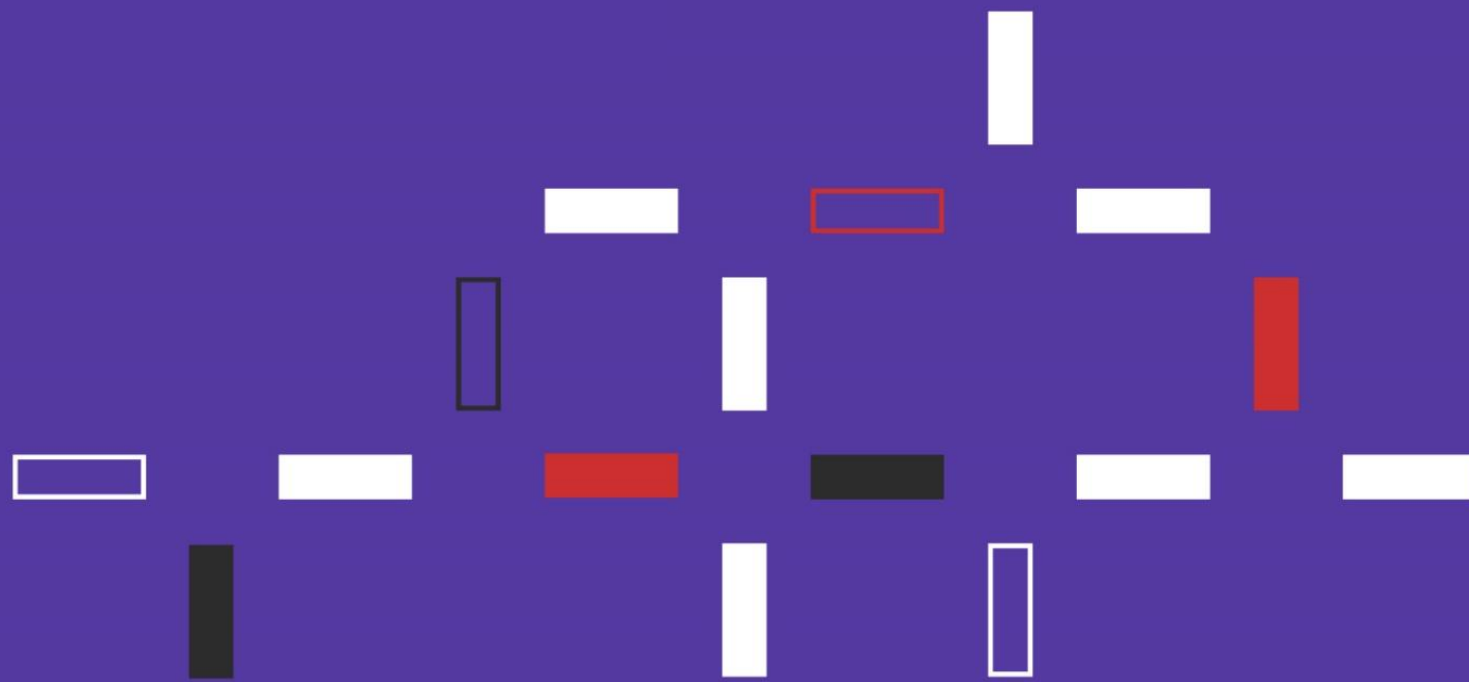
Other EIC activities

- **EIC Prizes:** Women Innovators; Capital of Innovation; Innovation Procurement; Social Innovation

- Pilot on **co-creating solutions with procurers**

- **Partnerships** with ERC & EIT (Fast track scheme), Member State programmes (Plug In pilot), Enterprise Europe Network, Startup Europe

European
Innovation
Council

Some statistics in H2020 - EIC Pathfinder pilot

Some statistics under the EIC Pathfinder Pilot

Submitted proposals

- Applicants from Turkey in 144 grant proposals out of 6882 submissions: **Presence rate: 2.1%**
- **184 participations** (27 as Coordinator and 157 as Partner)

Funded projects

- Turkey has taken part in 6 grants out of 549 funded: **Quote 1.1%**
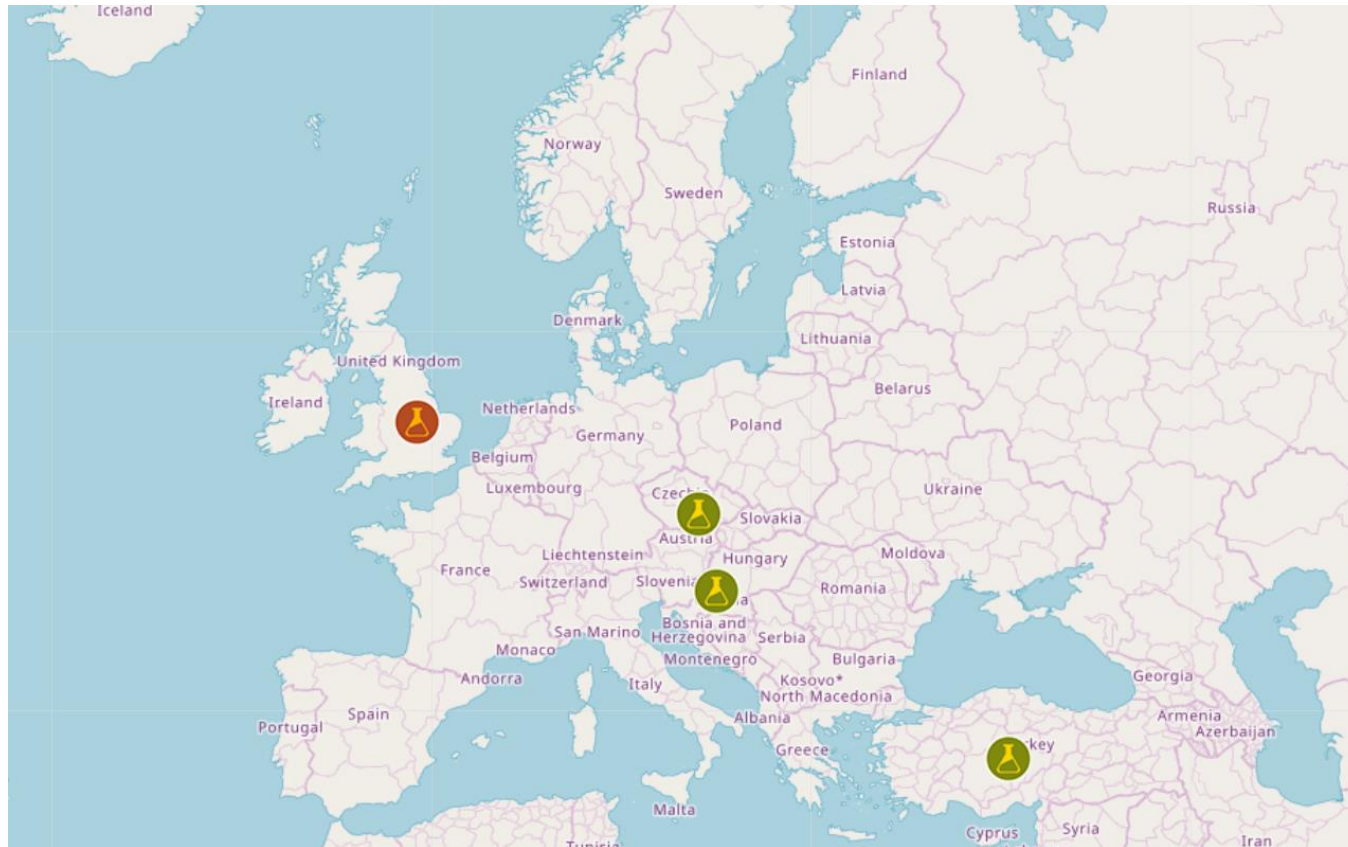- Total budget for Turkey amounts to **2.072 M Euro** out of the total of 1.501 B Euro (0.14%)

6 participations

- TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU (3)
- TAZI BILISIM TEKNOLOJILERI ANONIM SIRKETI (1)
- MIDDLE EAST TECHNICAL UNIVERSITY (1)
- KOC UNIVERSITY (1)

ROBOROYALE (Grant agreement ID: 964492)
ROBOtic Replicants for Optimizing the Yield by Augmenting Living Ecosystems

European Innovation Council

Start date: **01/11/2021**
End date: **31/10/2026**

Coordinated by **UNIVERSITY OF MANCHESTER** (UK)

Overall budget **€3269938**

UNIVERSITAET GRAZ (AT)

MIDDLE EAST TECHNICAL UNIVERSITY (TR)

CESKE VYSOKE UCENI TECHNICKE V PRAZE (CZ)

The core of the project is the development of a micro-robotic system, designed to operate around the honeybee queen.

https://cordis.europa.eu/project/id/964492

24

Thank you!

@EUeic

#Eueic

European Innovation Council