EU CAP Network brokerage event ‘Partnering for innovation with impact in agriculture and rural areas’

Prague, Czech Republic
29-30 April 2025

Funding opportunities for the Food and Agritech sector in the EIC Work Programme 2025

Ivan Stefanic
European Innovation Council

EU CAP Network brokerage event ‘Partnering for innovation with impact in agriculture and rural areas’ | Prague, Czech Republic | 29-30 April 2025

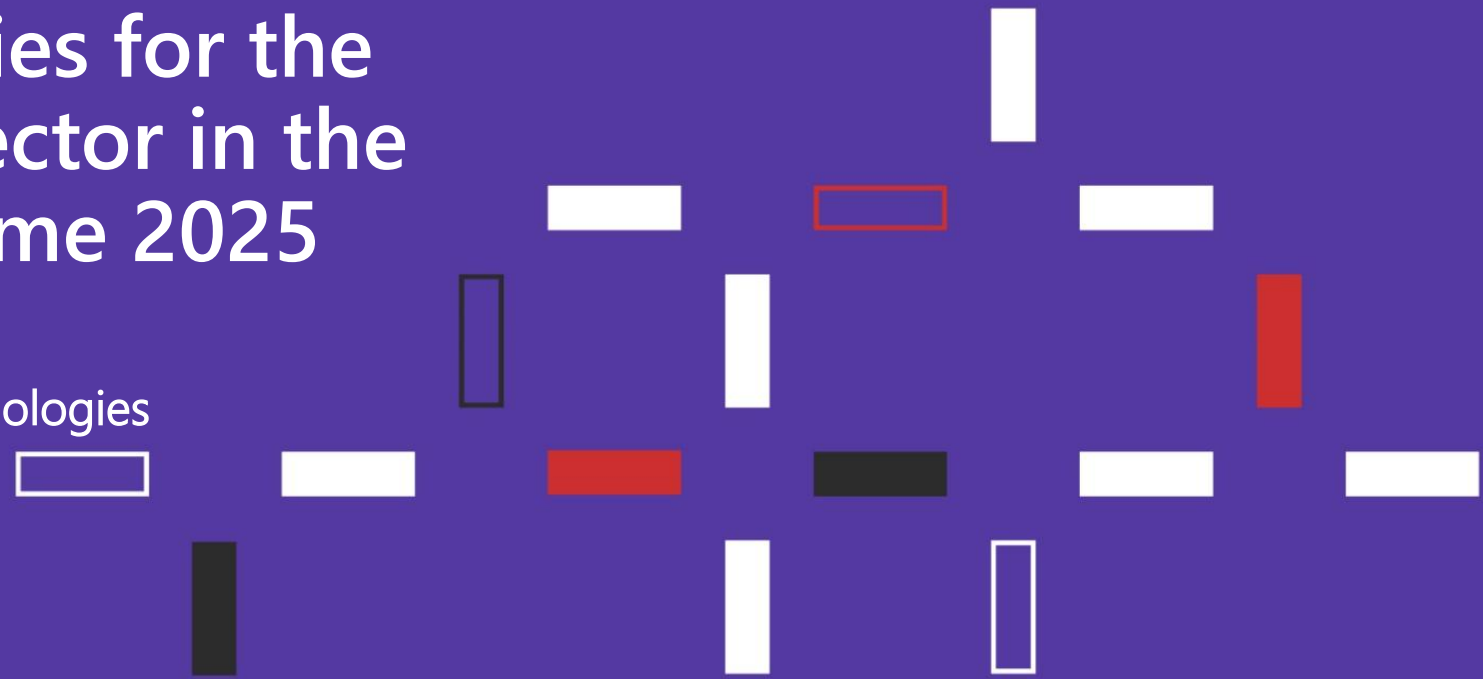
EuU CAP Network
Prague, 29-30 Apr. 2025

European Innovation Council

Backing visionary entrepreneurs

Funding opportunities for the Food and Agritech sector in the EIC Work Programme 2025

Ivan Stefanic
EIC Programme Manager for Food Chain Technologies
& Novel and Sustainable Food

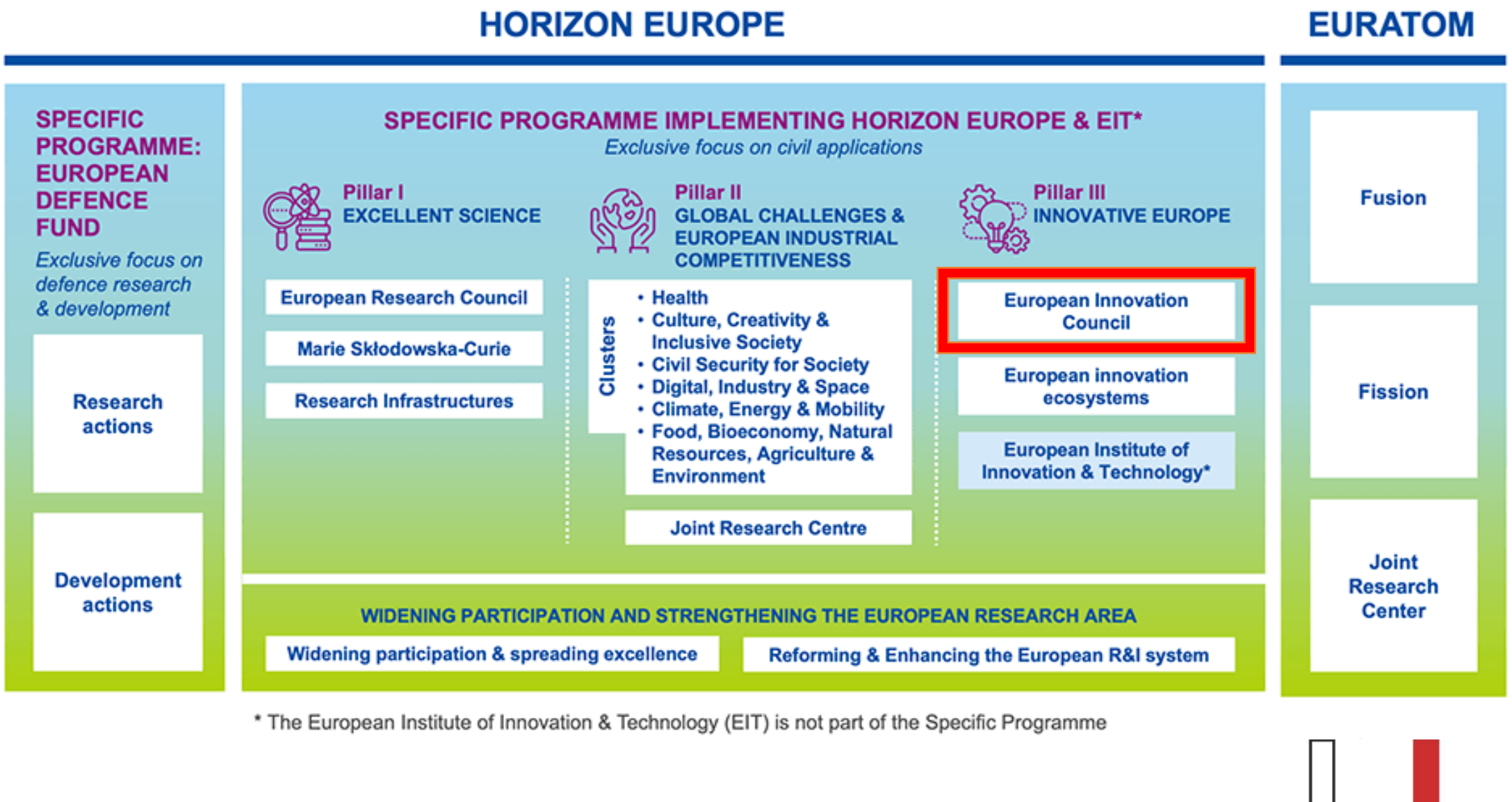


11 things you should know about EIC

European Innovation Council

1. We are a part of the Horizon Europe programme

European Innovation Council



* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

European Innovation Council

2. Strong focus on deeptech with disruptive effect on the market

EIC Programmes

3. Support along the whole innovation development path

European Innovation Council

- Technology maturation from proof of concept to validation (TRL 3-6)
- Grants up to € 2.5 million

BOOSTER GRANTS

PATHFINDER

- Early stage research on breakthrough technologies (TRL 1-4)
- Grants up to € 3 to 4 million

TECH 2 MARKET

TRANSITION

ACCELERATOR

BUSINESS ACCELERATION SERVICES

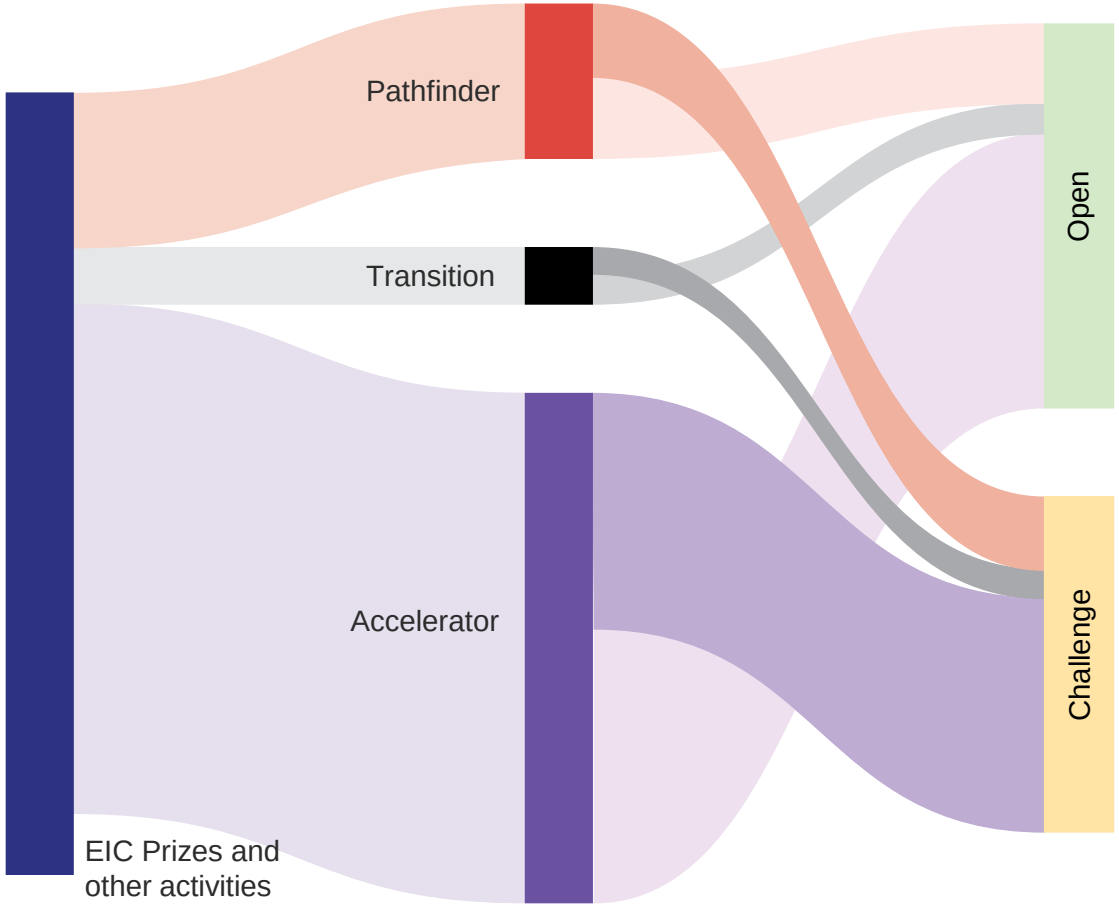
STEP

- Scale-up innovation in Europe's strategic technology sectors (Digital and Deep Tech, Clean Technologies, Biotechnologies)
- Equity investment up to € 30 million

- Development & scale up of deep-tech/disruptive innovations by startups/SMEs (TRL 6-9)
- Blended finance (grants up to € 2.5 million; equity investment up to € 10 million

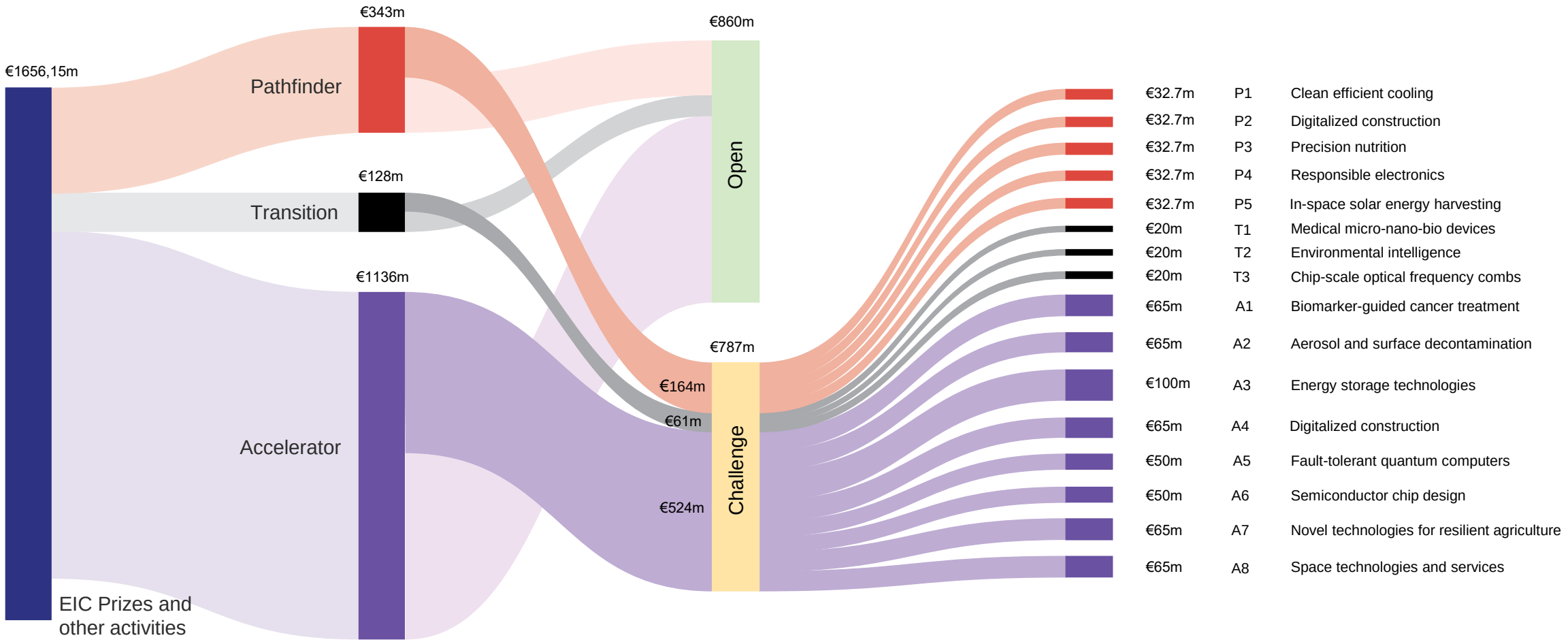
4. Blended financing

EIC Work Programme 2023



European Innovation Council

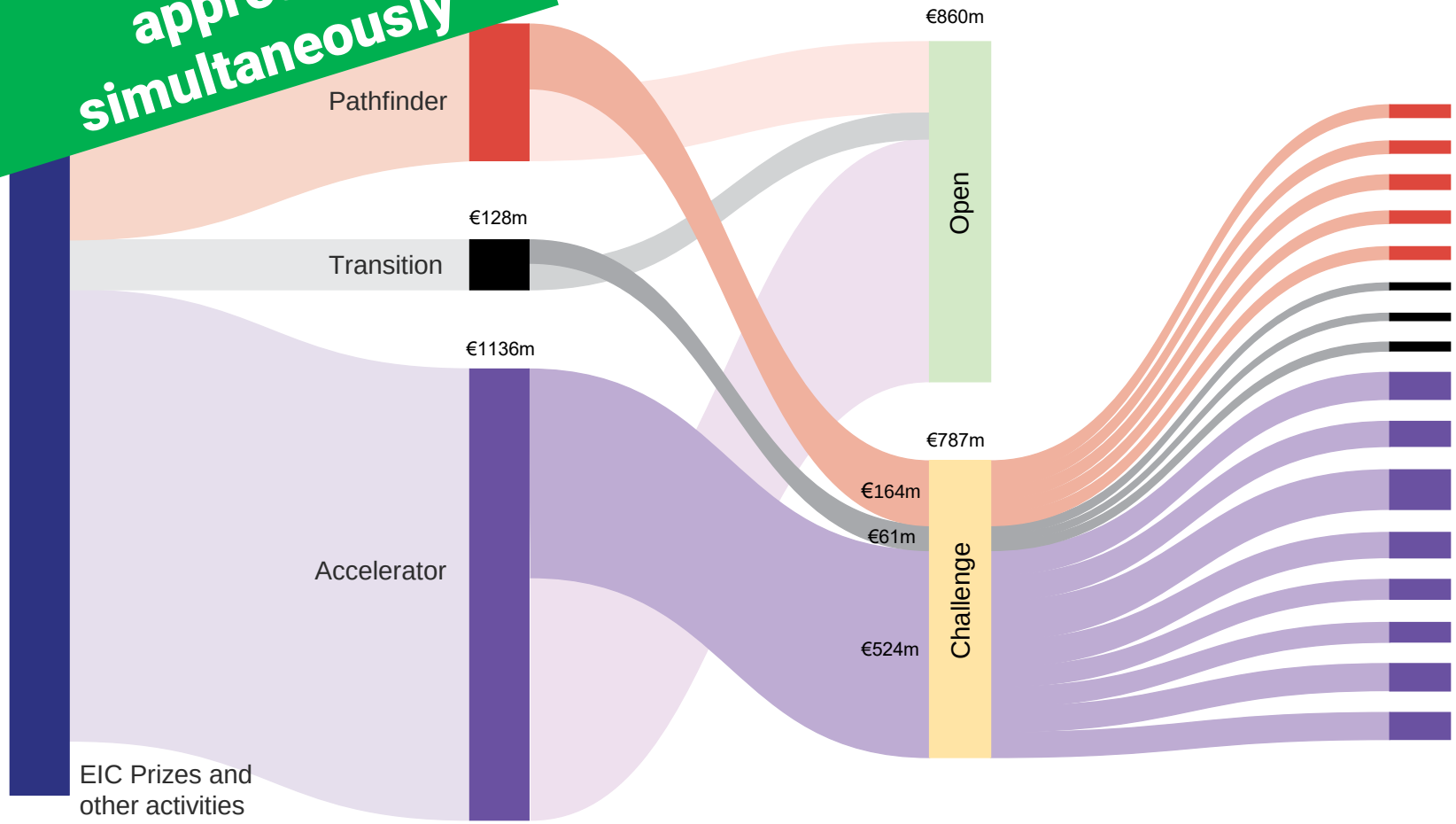
EIC Work Programme 2023



European Innovation Council

EIC Work Programme 2023

5. Applyng top-down and bottom-up approach simultaneously

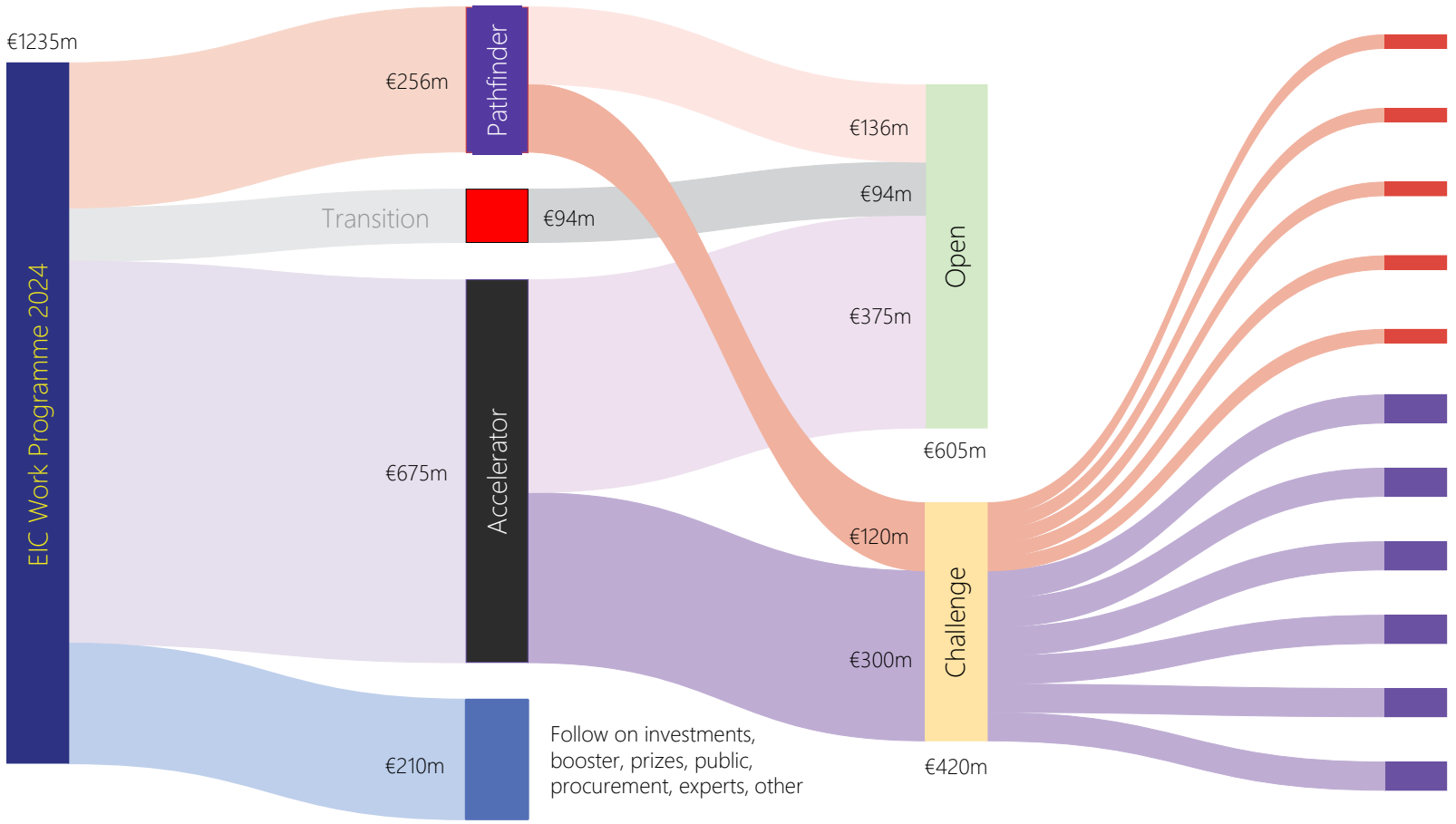


€32.7m	P1	Clean efficient cooling
€32.7m	P2	Digitalized construction
€32.7m	**P3**	**Precision nutrition**
€32.7m	P4	Responsible electronics
€32.7m	P5	In-space solar energy harvesting
€20m	T1	Medical micro-nano-bio devices
€20m	T2	Environmental intelligence
€20m	T3	Chip-scale optical frequency combs
€65m	A1	Biomarker-guided cancer treatment
€65m	A2	Aerosol and surface decontamination
€100m	A3	Energy storage technologies
€65m	A4	Digitalized construction
€50m	A5	Fault-tolerant quantum computers
€50m	A6	Semiconductor chip design
€65m	**A7**	**Novel technologies for resilient agriculture**
€65m	A8	Space technologies and services

European Innovation Council

EIC Work Programme 2024

6. New year - new challenges



"Solar-to-X" devices for the decentralized prosumption of renewable fuels, chemicals and materials as climate change mitigation pathway

Towards cement and concrete as a carbon sink

Nature inspired alternatives for food packaging and films for agriculture

Nanoelectronics for energy-efficient smart edge devices

Strengthening the sustainability and resilience of EU space infrastructure

Human Centric Generative AI made in Europe

Enabling virtual worlds and augmented inter-action in high-impact applications to supportthe realisation of Industry 5.0

Enabling the smart edge and quantum technology components

Food from precision fermentation and algae

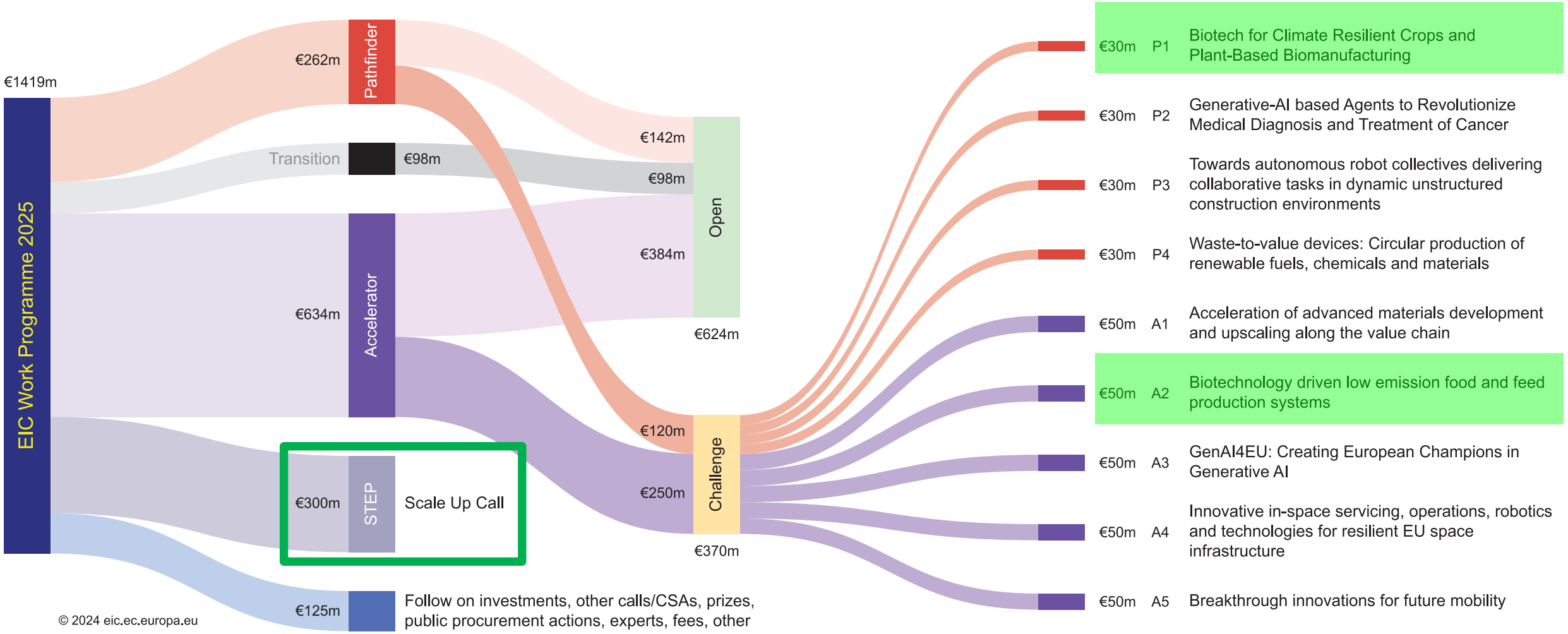
Monoclonal antibody-based therapeutics for new variants of emerging viruses

Renewable energy sources and their whole value chain including materials development and recycling of components

European Innovation Council

EIC Work Programme 2025

7. Continous improvement - new instruments when appropriate



Changing Food Supply Chain - One EIC Challenge at the Time
45 challenges so far

8. Consistency beats intensity and compound effect is one of the secrets to success

2022	
P1	Carbon dioxide and nitrogen management and valorisation
P2	Mid to long term and systems integrated energy storage
P3	Cardiogenomics
P4	Towards the Healthcare Continuum: technologies to support a radical shift from episodic to continuous healthcare
P5	DNA-based digital data storage
P6	Alternative approaches to Quantum Information Processing, Communication, and Sensing
T1	Green digital devices for the future
T2	Process and system integration of clean energy technologies
T3	RNA-based therapies and diagnostics for complex or rare genetic diseases
A1	Technologies for Open Strategic Autonomy
A2	Technologies for 'Fit for 55'

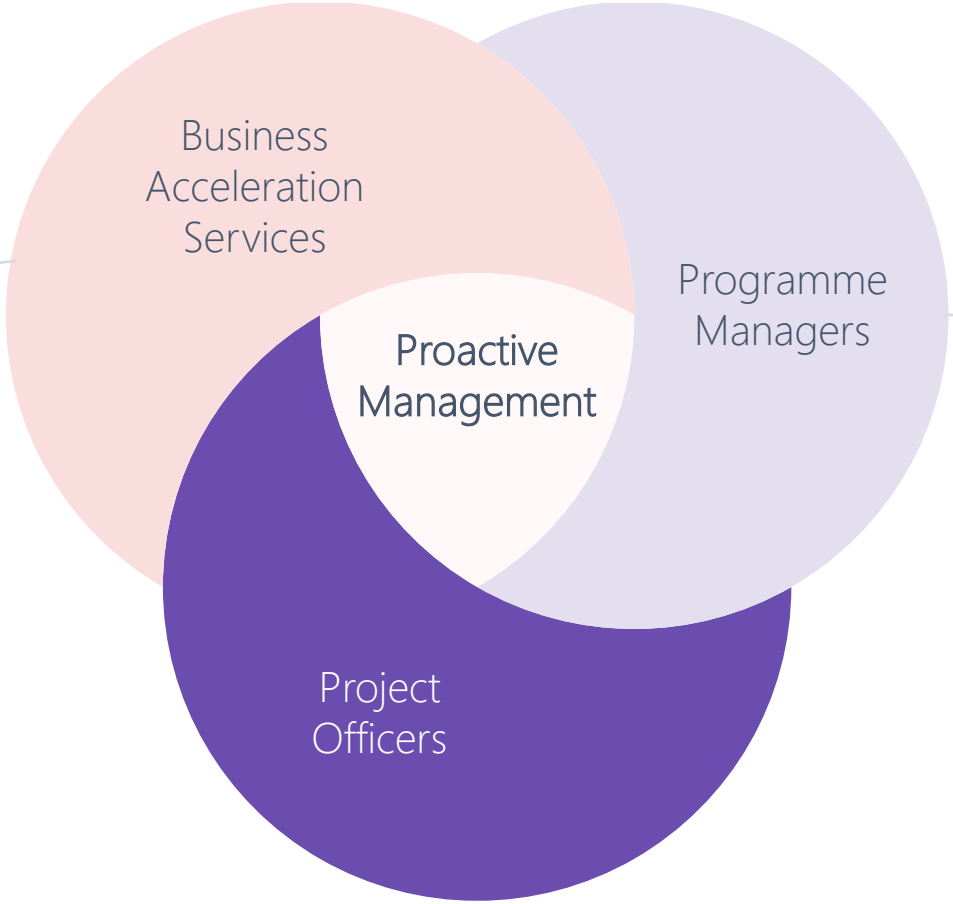
2023	
P1	Clean and efficient cooling
P2	Architecture, Engineering and Construction digitalisation for a novel triad of design, fabrication, and materials
P3	Precision nutrition
P4	Responsible electronics
P5	In-space solar energy harvesting for innovative space applications
T1	Full scale Micro-Nano-Bio devices for medical and medical research applications
T2	Environmental intelligence
T3	Chip-scale optical frequency combs
A1	Novel biomarker-based assays to guide personalised cancer treatment
A2	Aerosol and surface decontamination for pandemic management
A3	Energy storage
A4	New European Bauhaus and Architecture, Engineering and Construction digitalisation for decarbonisation
A5	Emerging semiconductor or quantum technology components
A6	Novel technologies for resilient agriculture

2024	
P1	"Solar-to-X" devices for the decentralized p… change mitigation pathway
P2	Towards cement and concrete as a carbo…
P3	Nature inspired alternatives for food pa…
P4	Nanoelectronics for energy-efficient sm…
P5	Strengthening the sustainability and resilience o…
A1	Human Centric Generative AI made in Europe
A2	Enabling virtual worlds and augmented inter-action in high-impact appli… …on of Industry 5.0
A3	Enabling the smart edge and quantum technology components
A4	Food from precision fermentation and algae
A5	Monoclonal antibody-based therapeutics for new variants of emerging viruses
A6	Renewable energy sources and their whole value chain including materials development and recycling of components

2025	
P1	Biotech for Climate Resilient Crops and Plant-Based Biomanufacturing
P2	Generative-AI based Agents to Revolutionize Medical Diagnosis and Treatment of Cancer
P3	Towards autonomous robot collectives delivering collaborative tasks in dynamic unstructured construction environments
P4	4 Waste-to-value devices: Circular production of renewable fuels, chemicals and materials
A1	Acceleration of advanced materials development and upscaling along the value chain
A2	Biotechnology driven low emission food and feed production systems
A3	GenAI4EU: Creating European Champions in Generative AI
A4	Innovative in-space servicing, operations, space-based robotics and technologies for resilient EU space infrastructure
A5	Breakthrough innovations for future mobility

With proactive management the EIC aims to maximize its support to success of the entrepreneurial journey

- Access to entrepreneurs
- Access to mentoring
- Access to ecosystems
- Access to partners, peers
- Access to trainings
- Access to workshops
- Access to expert advice
- Access to recruitment
- Access to industry



- Health, Biotech
- MedTech
- SpaceTech
- Quantum, electronics
- Greentech materials
- Greentech
- AEC
- Agri-food
- Responsible electronics
- Bio-fuels, E-fuels

Challenges
Portfolios

9. Proactive portfolio management

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Orsolya Symmons
Health and Biotechnology

Hedi Karray
Artificial Intelligence

Federica Zanca
Medical imaging and AI in healthcare

Isabel Obieta
Sustainable Semiconductors

Stella Tkatchova
Space systems & technologies

Samira Nik
Quantum tech & electronics

Franc Mouwen
Architecture engineering construction technologies

Ivan Stefanic
Food chain technologies, novel & sustainable food

Paolo Bondavalli
Advanced materials for energy

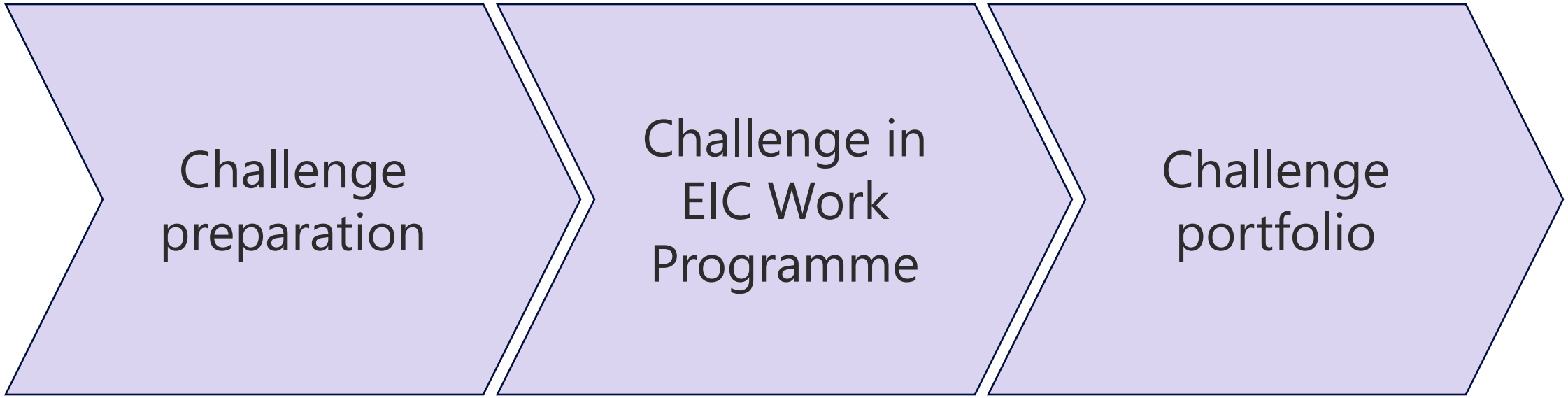
Carina Faber
Renewable energy conversion & alternative resource exploitation

EIC PROGRAMME MANAGERS

European Innovation Council

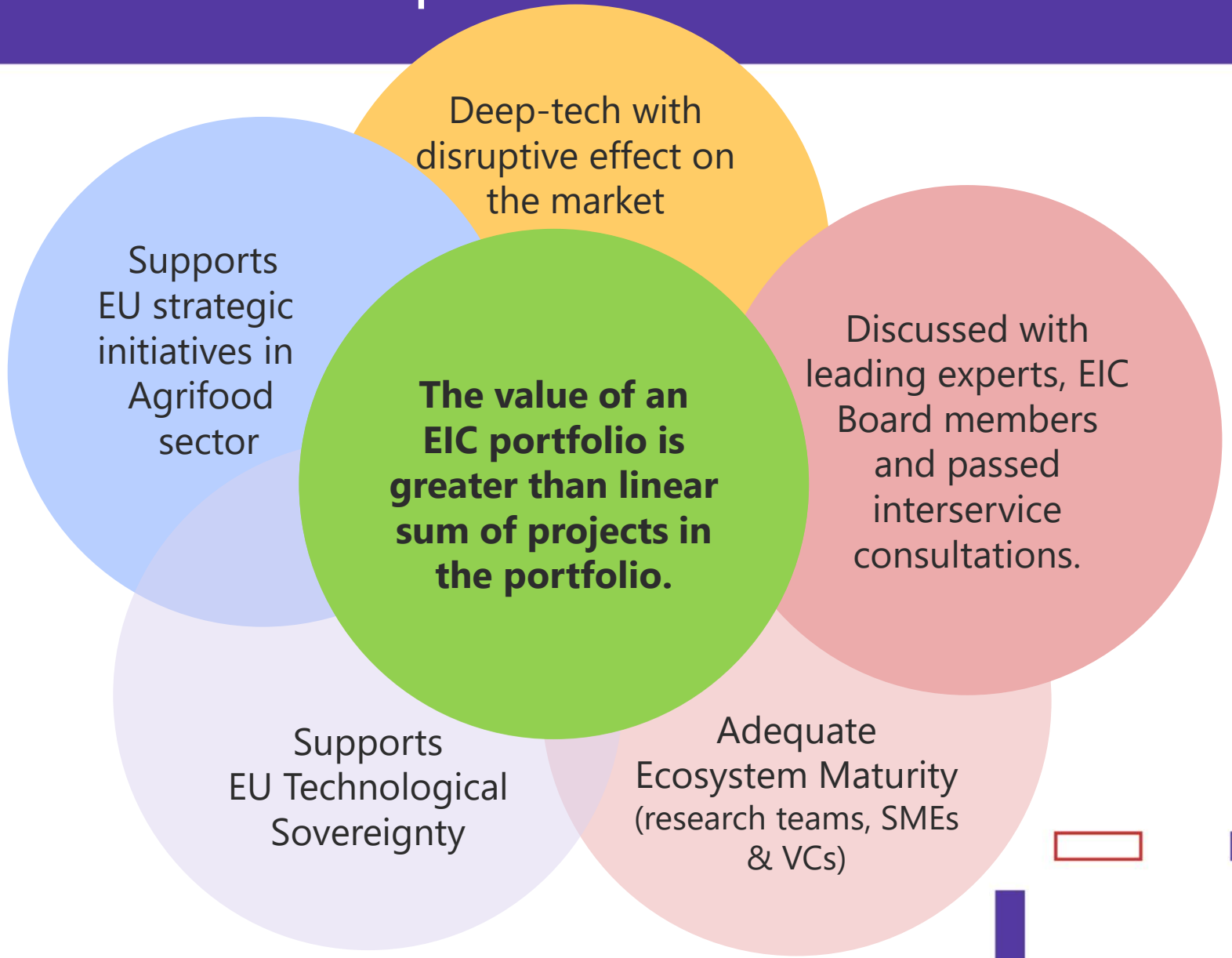
European Innovation Council

Lifecycle of an EIC Challenge

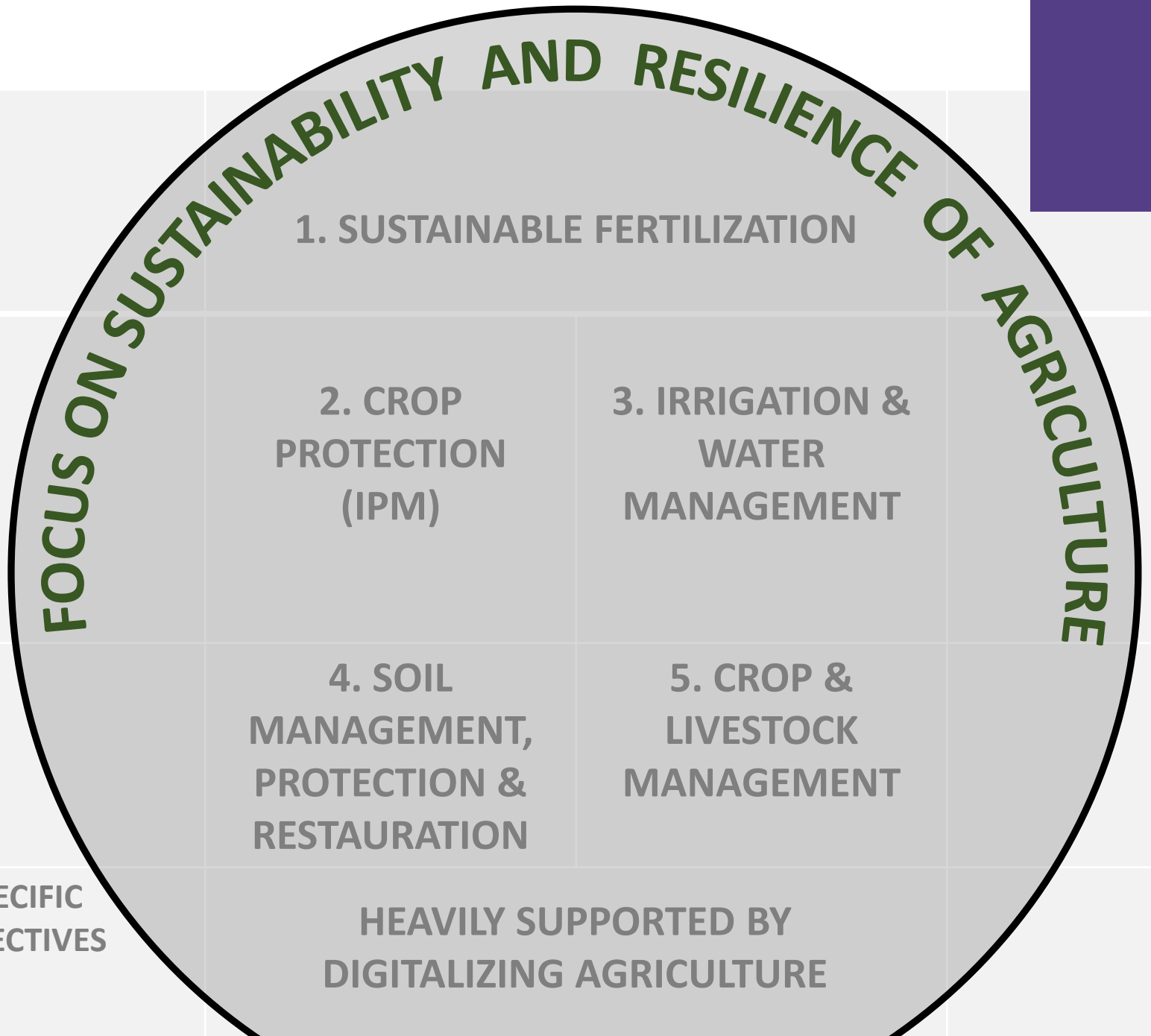


EIC Pathfinder challenge 2025
Biotech for Climate Resilient Crops and Plant-based Biomanufacturing

European Innovation Council



Accelerator 2023: Novel Technologies for Resilient Agriculture



Relevant proposal objectives

Novel processes, materials, equipment, management practices, microorganisms adapted to harsh environments, climate adaptation needs and resource scarcity, diversification of crops, mixed farming systems, interseasonal cropping and technologies to increase crops adaptation to climate changes.

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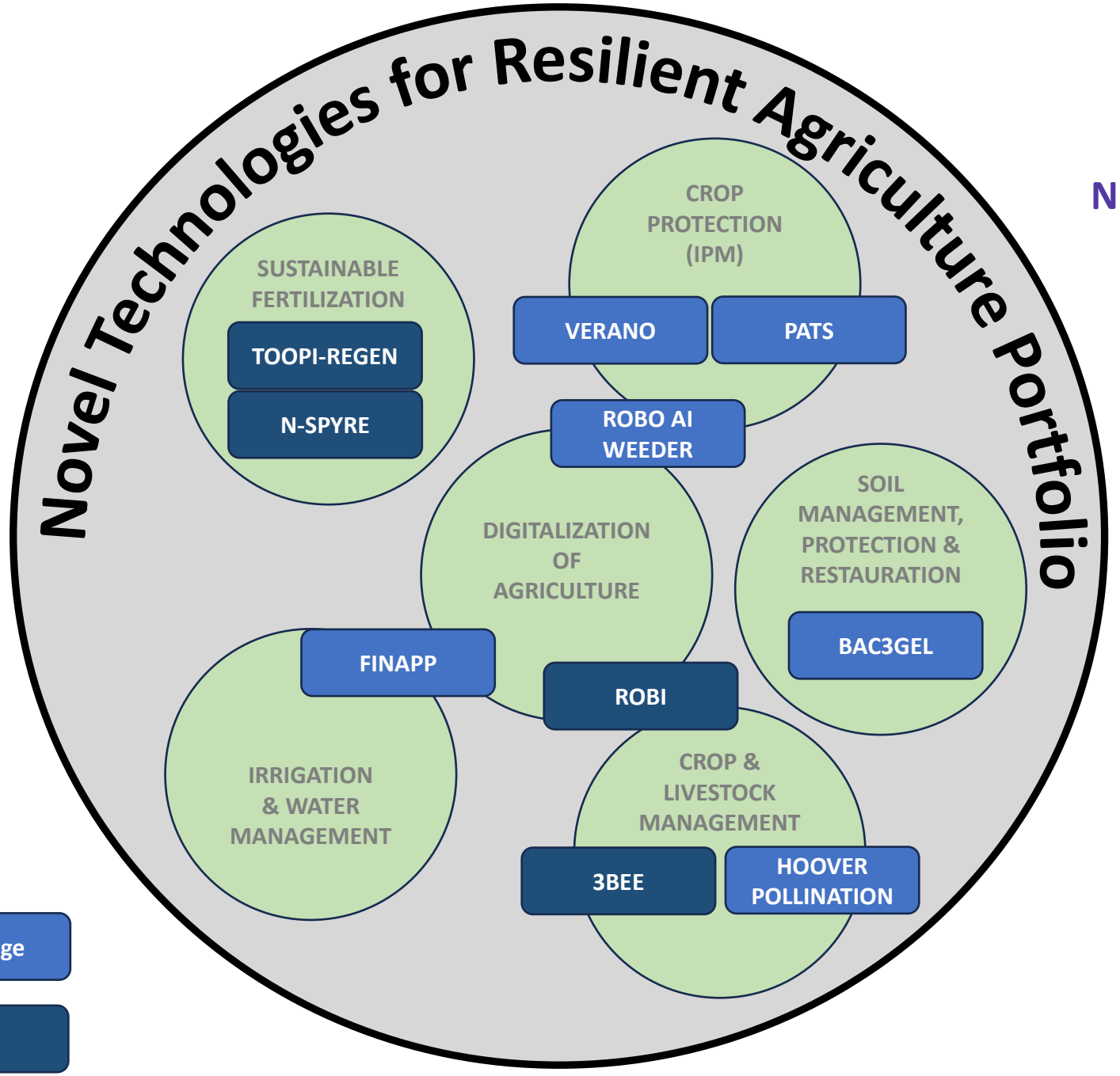

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Accelerator challenge 2023: Novel Technologies for Resilient Agriculture

Novel processes, materials, equipment, management practices, microorganisms adapted to harsh environments, climate adaptation needs and resource scarcity, diversification of crops, mixed farming systems, interseasonal cropping and technologies to increase crops adaptation to climate changes.

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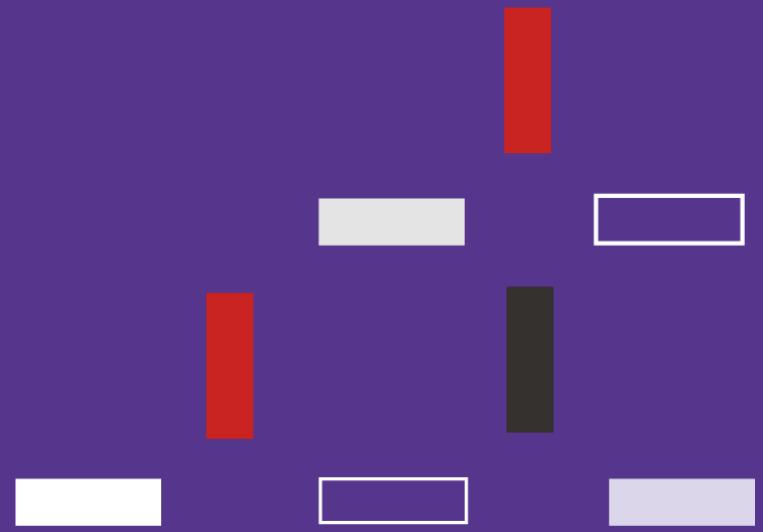
Biotech for Climate Resilient Crops and Plant-based Biomanufacturing

EIC Pathfinder challenge 2025

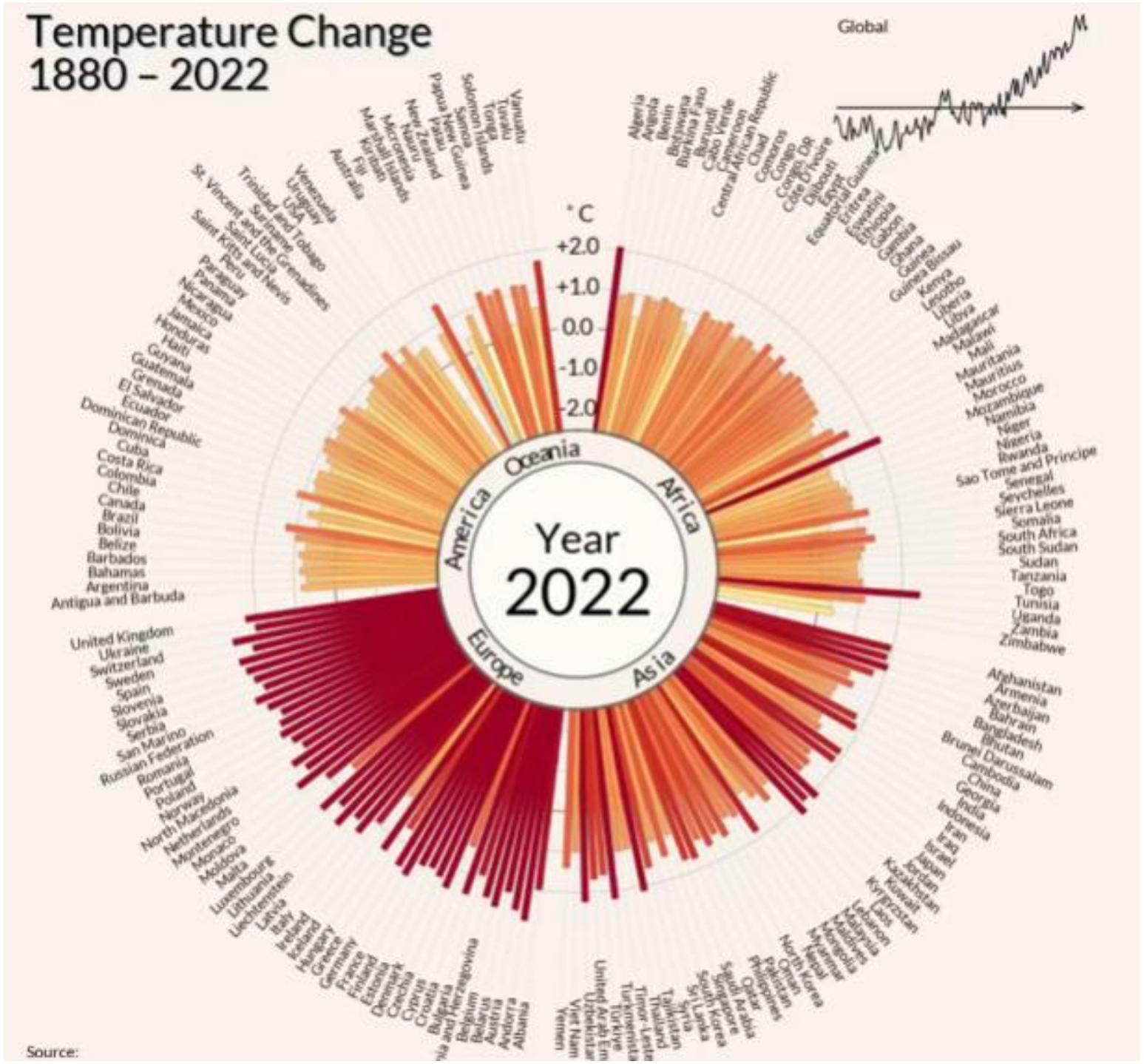


Overview

European Innovation Council

- *What is the specific problem to be addressed through this Challenge?*
- **Proposed challenge represent a novel solution to produce proteins and other high-value ingredients under unfavourable environmental conditions.**
- *Specific objectives of the Challenge:*

1. **Increasing plant growth, yields and resistance to stress.**
2. **Increasing the nutritional value in crops through plant native and non-native ingredients in crops.**



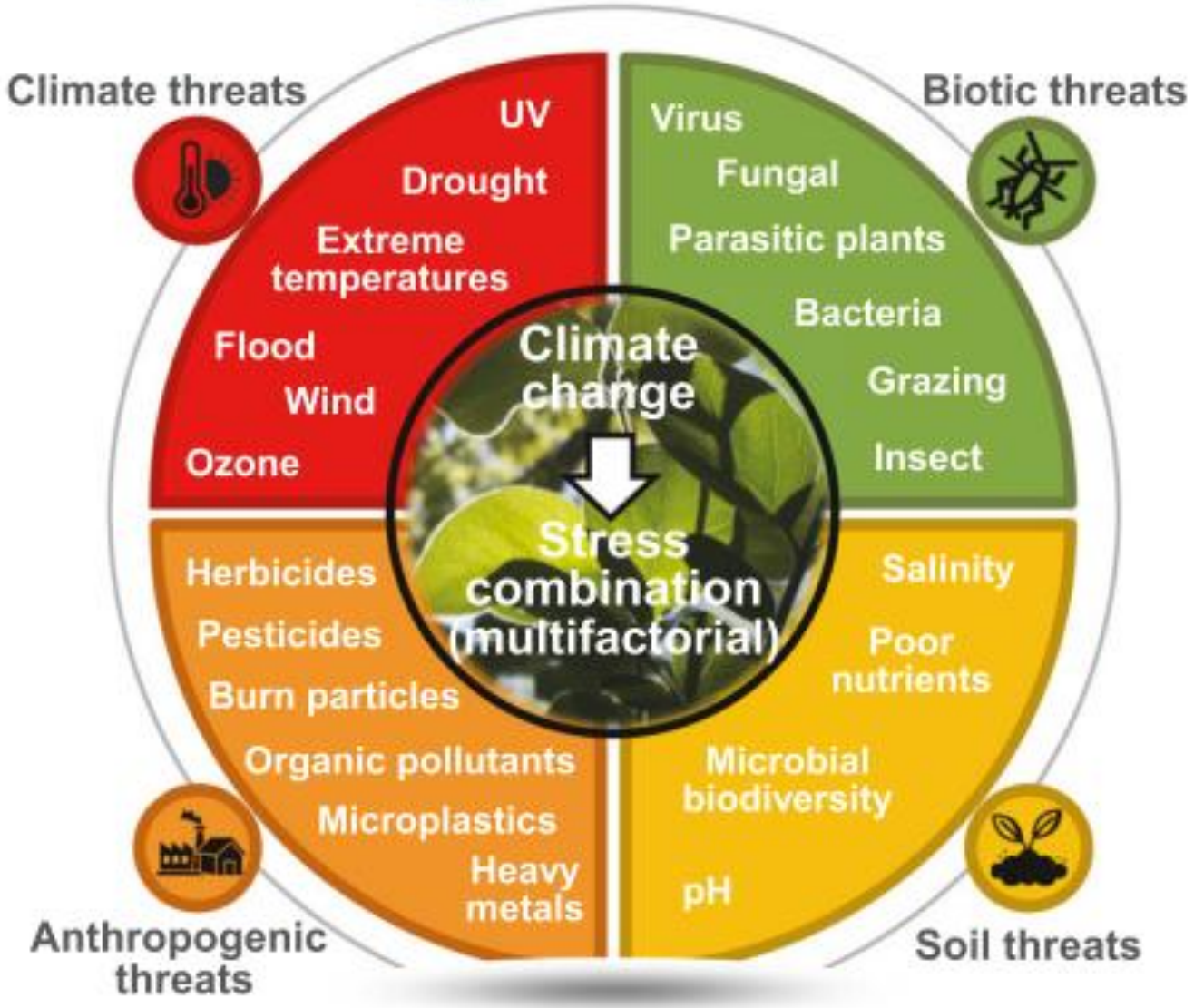
Plants most likely don’t know or care about humans, their economy, and the rootcause of global warming.

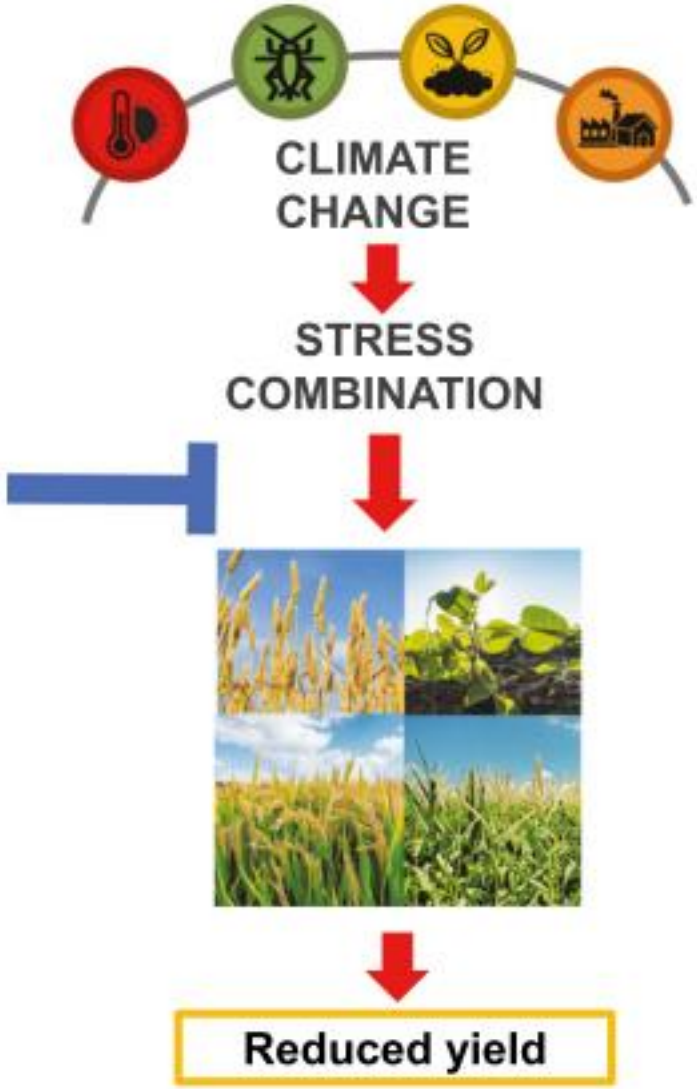
They simply have to adapt.

Temperature Circle 1880-2022
Temperature Circle 1880-2022. Temperature change by country.
Base period 1951-1980.
By Antti Lipponen - Based on NASA GISS GISTEMP data.

Background – Stress Factors in Modern Agriculture

European Innovation Council





Background – How it works

European Innovation Council

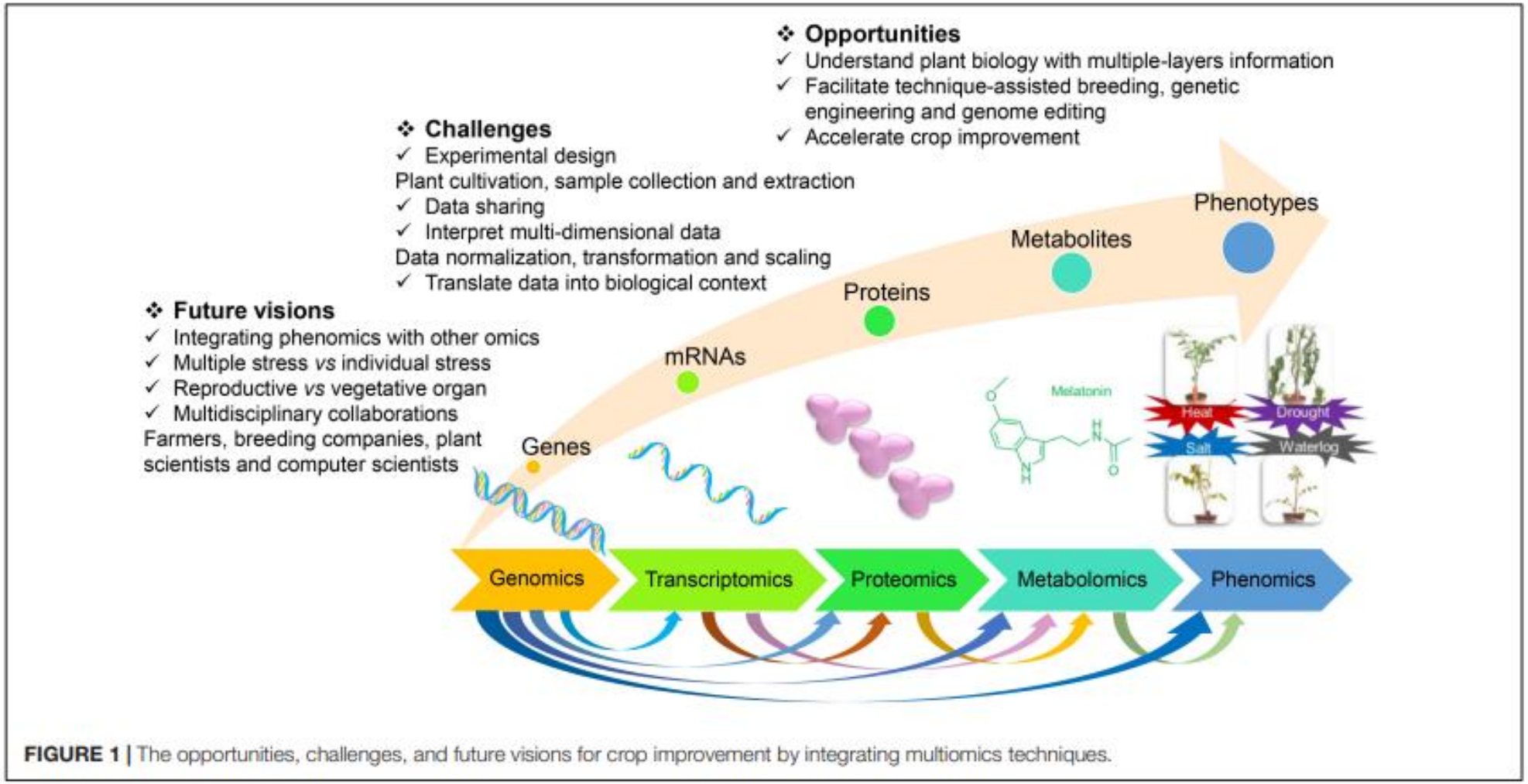


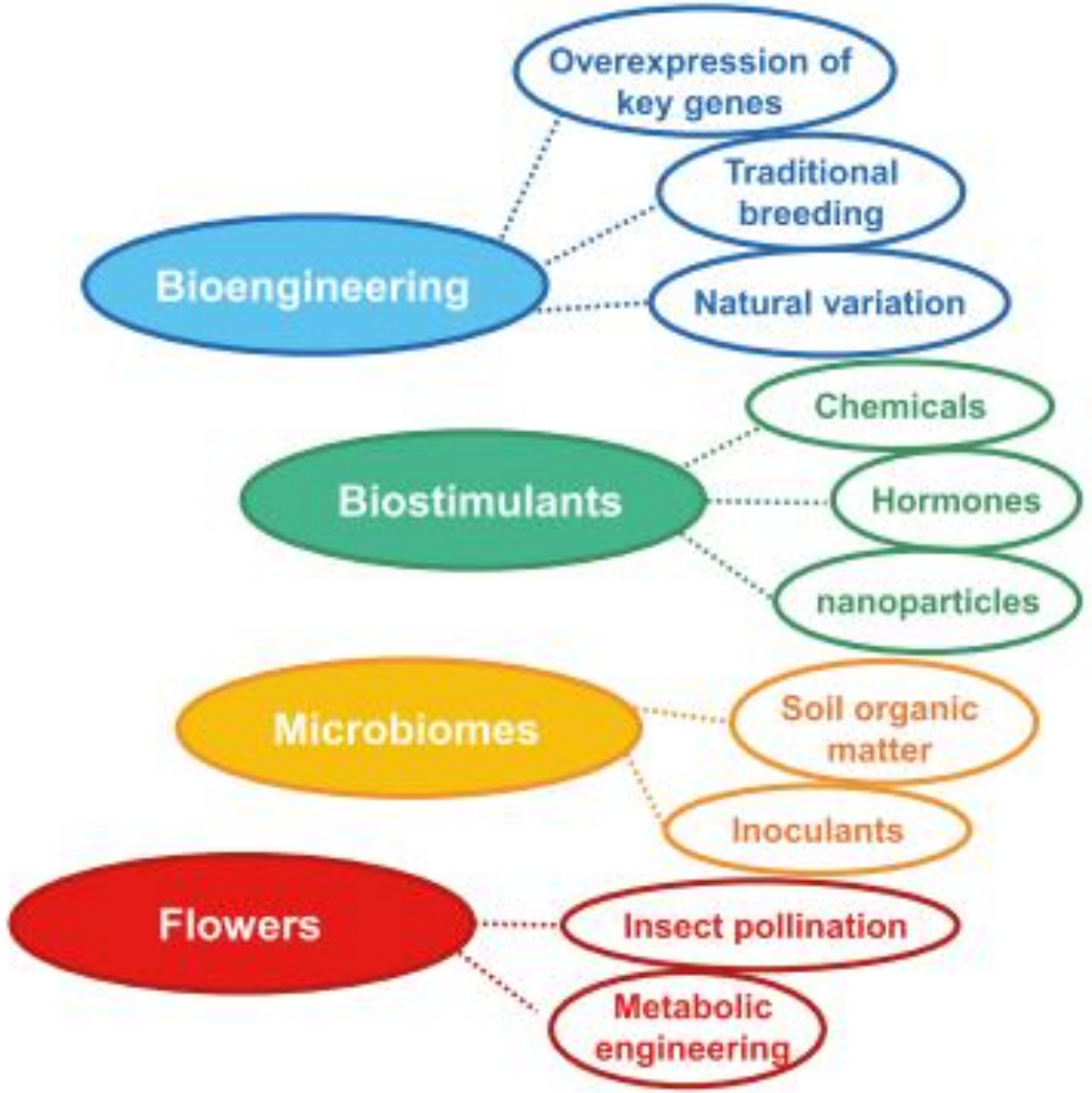
FIGURE 1 | The opportunities, challenges, and future visions for crop improvement by integrating multiomics techniques.

Scope of the Challenge

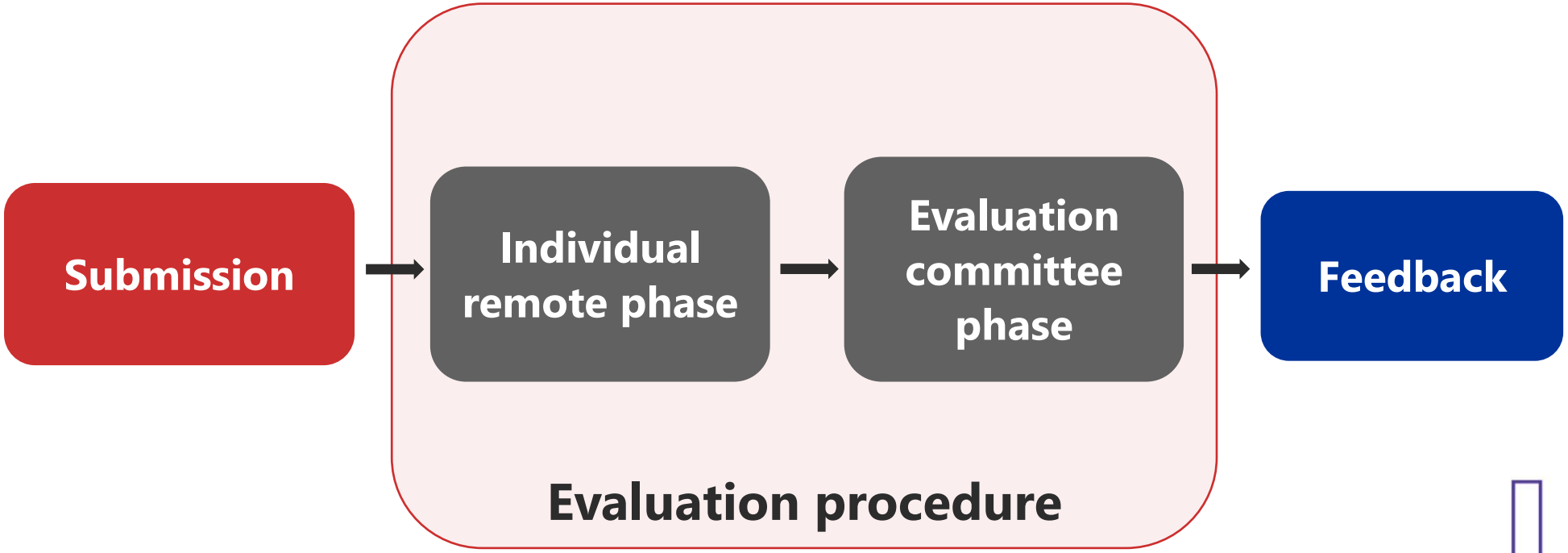
European Innovation Council

Production of high value plant native and non-native ingredients in existing and novel crops on an industrial scale in a cost-effective and environmentally friendly and climate-smart manner.

Possible strategies to develop climate-resilient crops



Information relevant to Step 2 evaluation



Portfolio categories

European Innovation Council

i. Crops such as but not limited to potatoes, wheat.

ii. Stress factors combinations such as but not limited to combinations of heat, drought, salinity, flooding, high CO2 levels, altered composition and behaviour of weeds, insects, pathogens and soil microbiome, human-generated pollutants.

iii. Native or non-native ingredients increasing the nutritional value of the crop such as but not limited to increasing content of potato native protein patatin, introduction of non-native ovoalbumin in potatoes.

iv. Methodological approach used, e.g. conventional breeding technologies and New Genomic Techniques. Leveraging technologies such as, but not limited to genomics, transcriptomics, proteomics, metabolomics and phenomics. nanoparticle technology, chemistry, and advanced artificial intelligence to speed-up the selection process.

Portfolio considerations

European Innovation Council

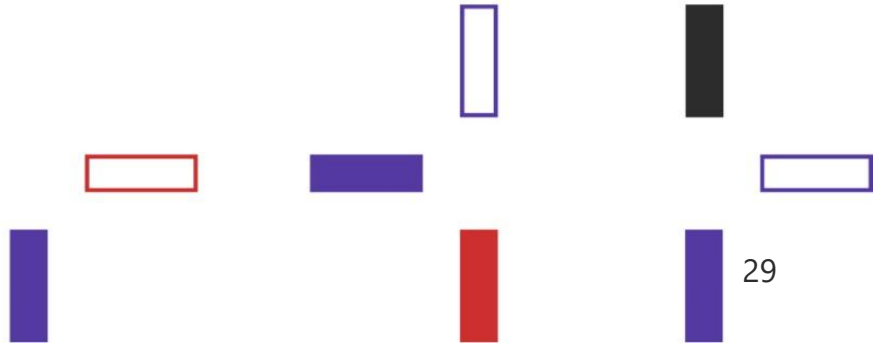
The process of building a balanced and impactful project portfolio will adhere to the following principles:

1. Selected projects for the portfolio should have a diversity in crops as much as possible and should ensure European geographical coverage where these crops are grown, if applicable.
2. At least two main groups in the portfolio will be selected, each one focusing on a specific stress factor combination.
3. A balanced representation of native and non-native ingredients will be sought.
4. In addition, a diversity in core and leveraging technologies will be aimed for.

Portfolio considerations (II)

European Innovation Council

- Projects must develop a complete methodology for assessing the increase of plant growth, yields, and climate resilience to single and multiple stresses, and/or assess changes to the nutritional value of crops.
- Proposals should include multi-omics approaches including genomics, transcriptomics, proteomics, metabolomics and phenomics. These approaches can be further underpinned by leveraging technologies such as, but not limited to nanoparticle technology, chemistry, and advanced artificial intelligence to develop and introduce novel defense and acclimation strategies, currently not present in crops to achieve greater tolerance to harsh environmental conditions and/or biomanufacturing of non-native ingredients, to enable the time required for that development to be significantly shortened.
- Proposals should also look to address the narrow genetic diversity of novel crops and are also expected to consider regulatory aspects and to build on the work carried out so far by the European Food and Safety Authority (EFSA), where appropriate

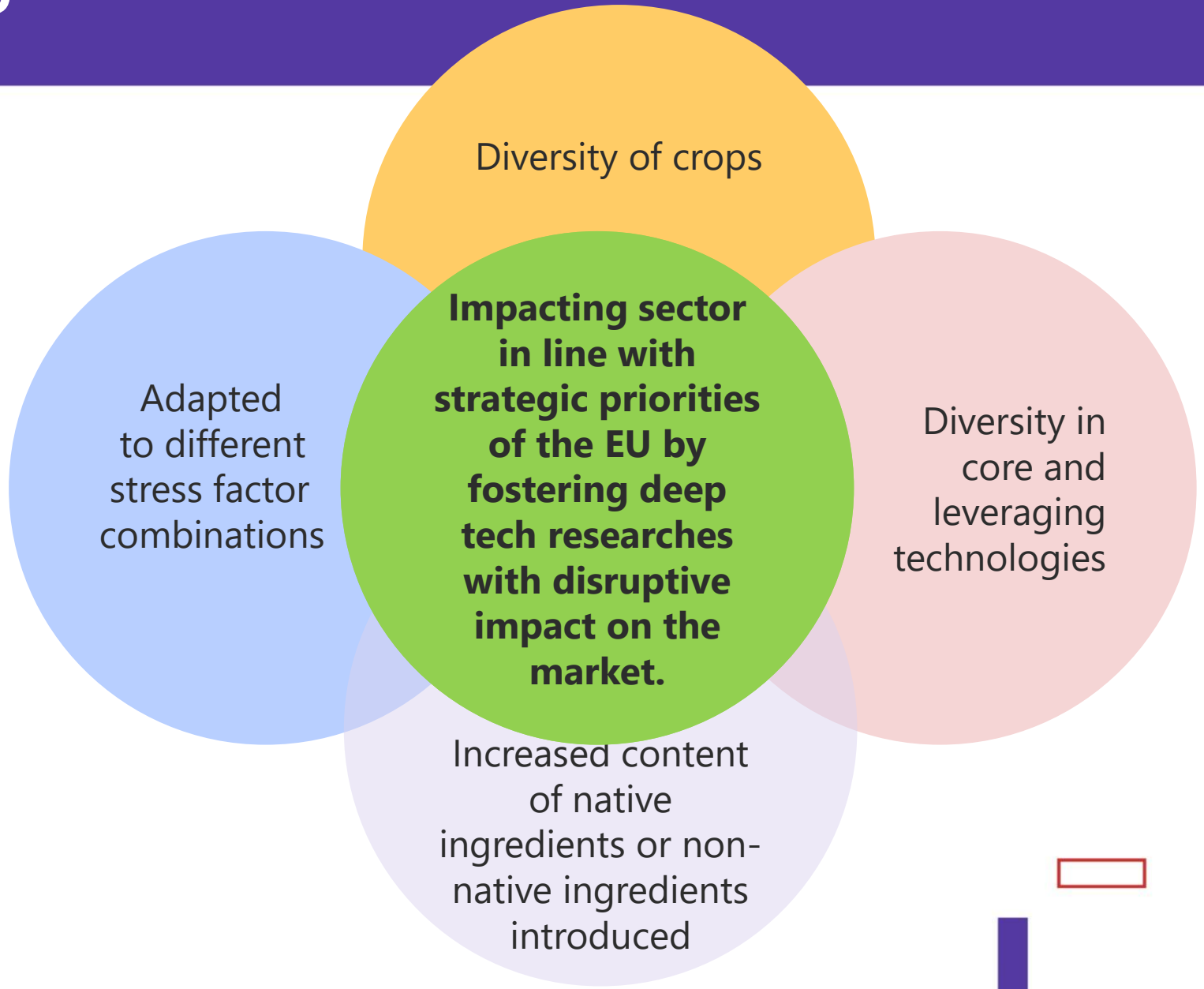


Budget and application deadline

European Innovation Council

- Indicative budget: €30 million
- Grant size: up to €4 million
- The funding rate of this grant is 100% of the eligible costs.
- Work Package on portfolio activities: 10 person-months
- Application deadline: 29 October 2025 at 17:00 Brussels local time via the EU Funding and Tenders portal!

Challenge overview



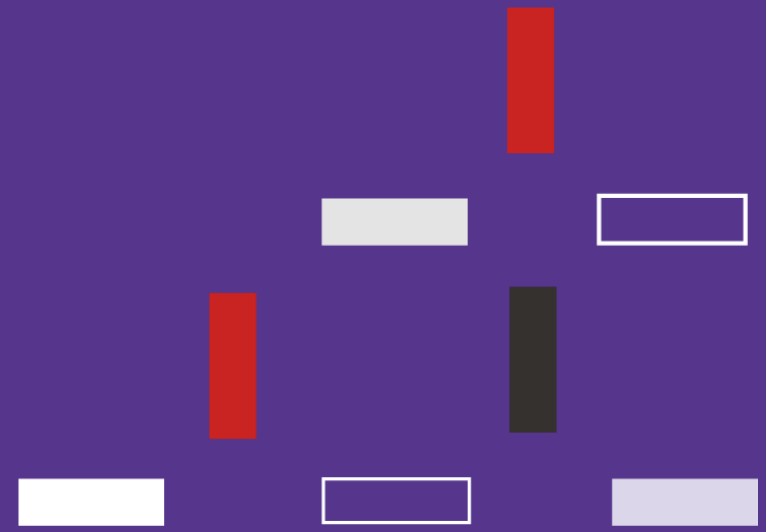
Help us transition EU agriculture towards sustainability in harsh environmental conditions and resource scarcity!

EIC Pathfinder challenge call
'Biotech for Climate Resilient Crops and Plant-based Biomanufacturing'
closes on 29th Oct. 2025

European Innovation Council

Biotechnology driven low emission food and feed production systems

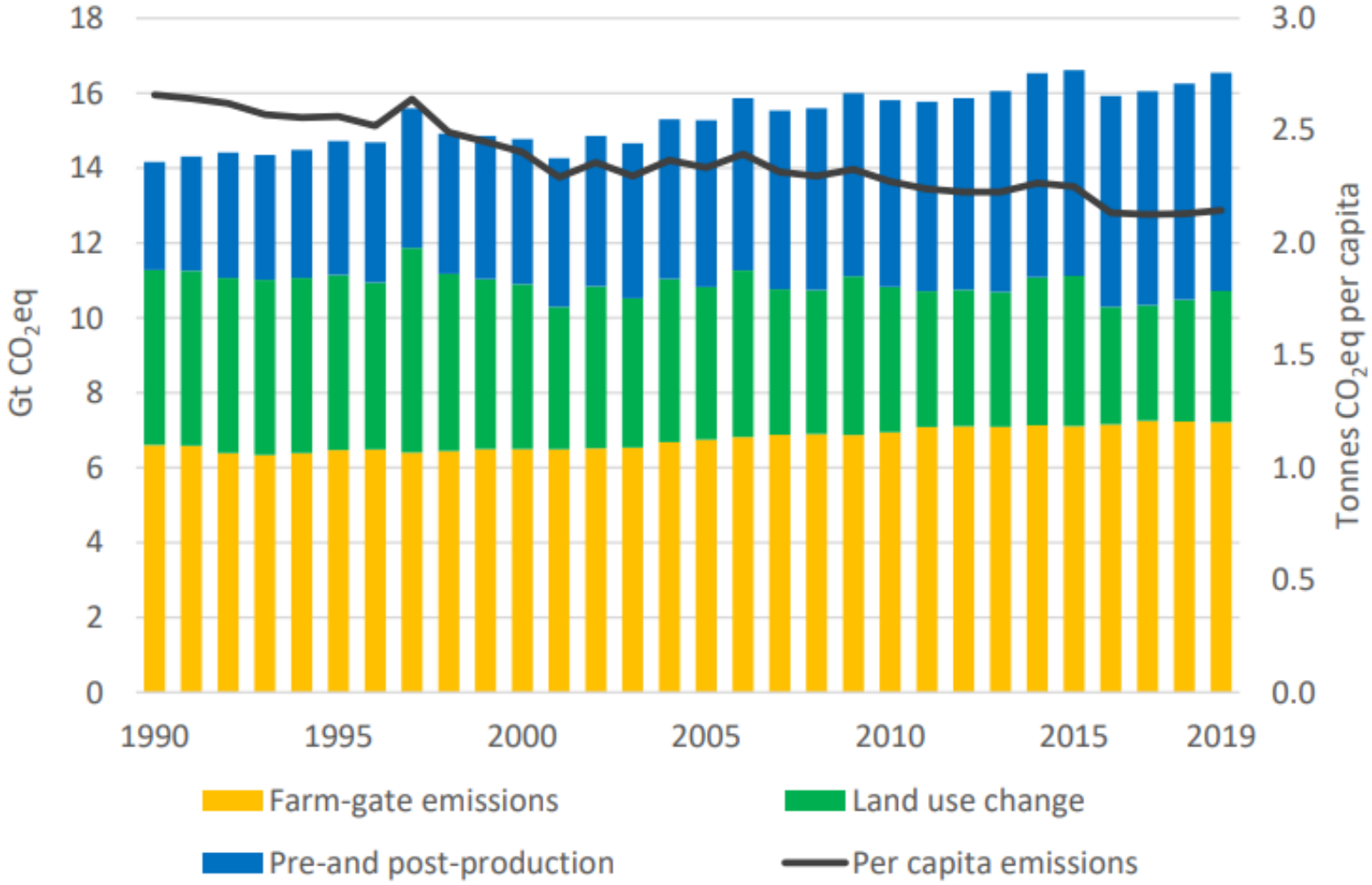
EIC Accelerator challenge 2025



1. Background and scope

European Innovation Council

Global agri-food system GHG emissions by life-cycle stage, and per capita emissions

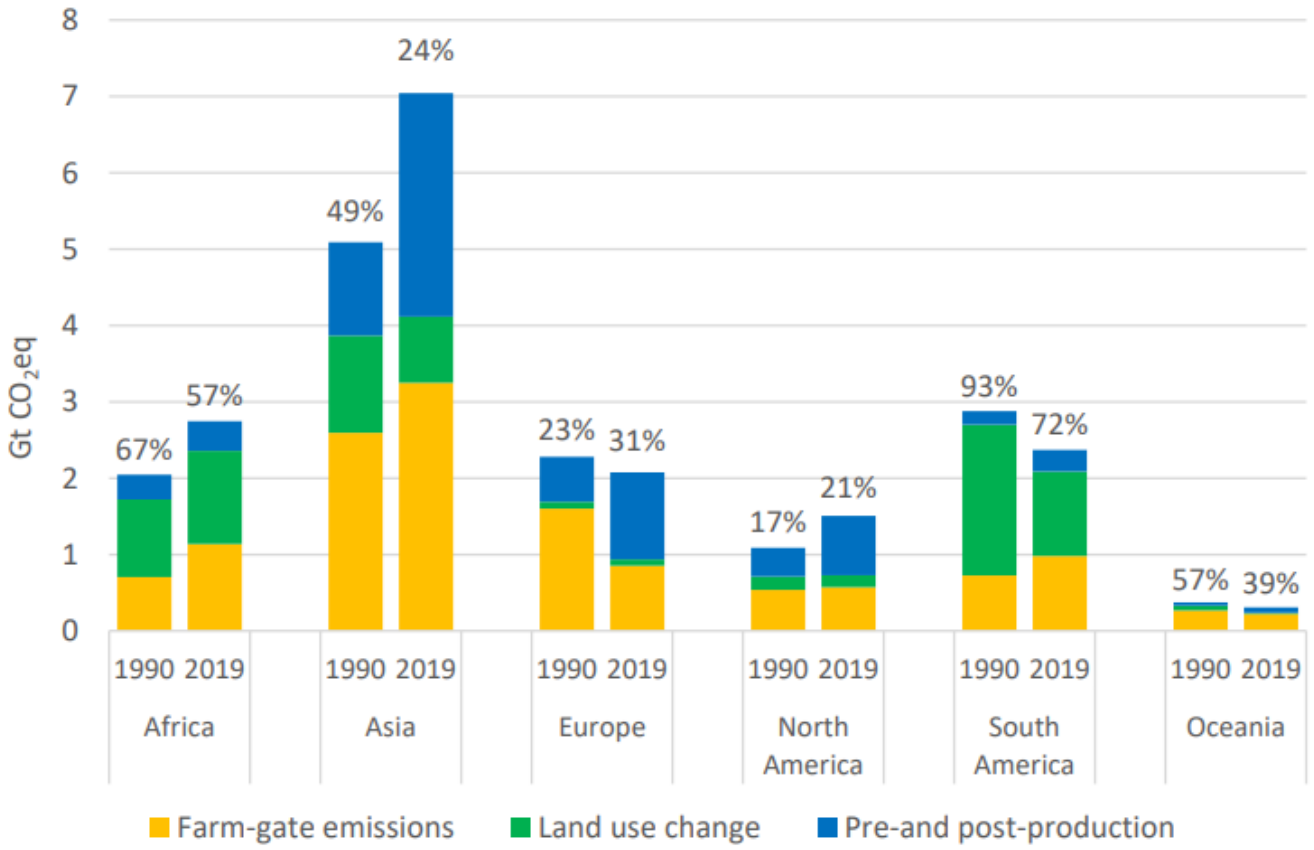


Source: FAOSTAT ANALYTICAL BRIEF 31 The share of agri-food systems in total greenhouse gas emissions Global, regional and country trends 1990–2019

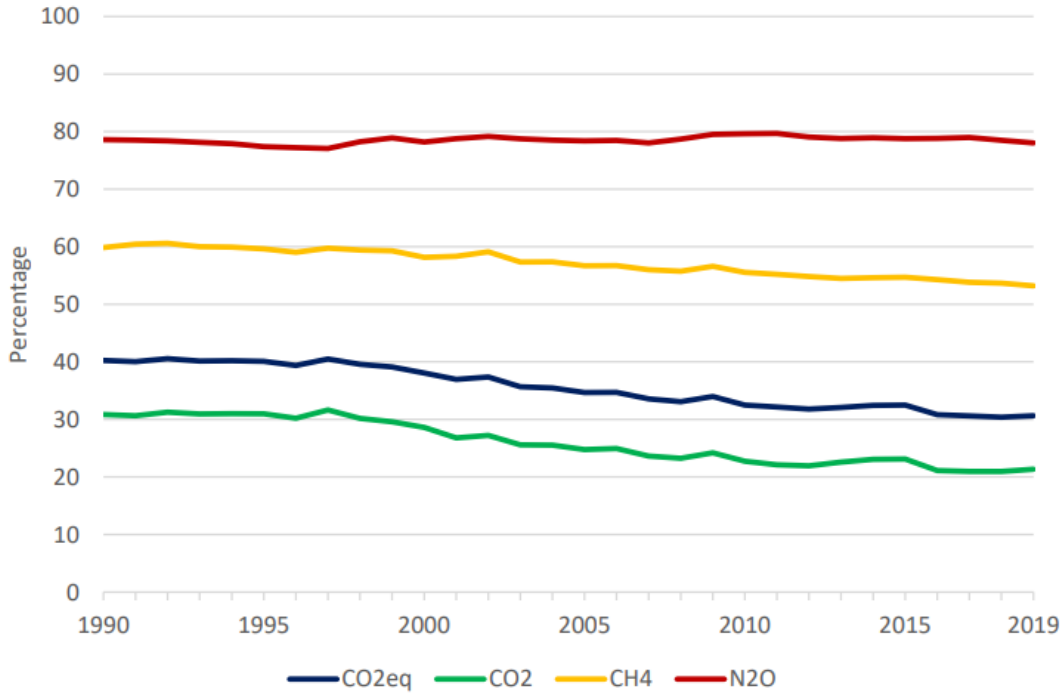
2. Background and scope

European Innovation Council

Agri-food systems emissions by region and life-cycle



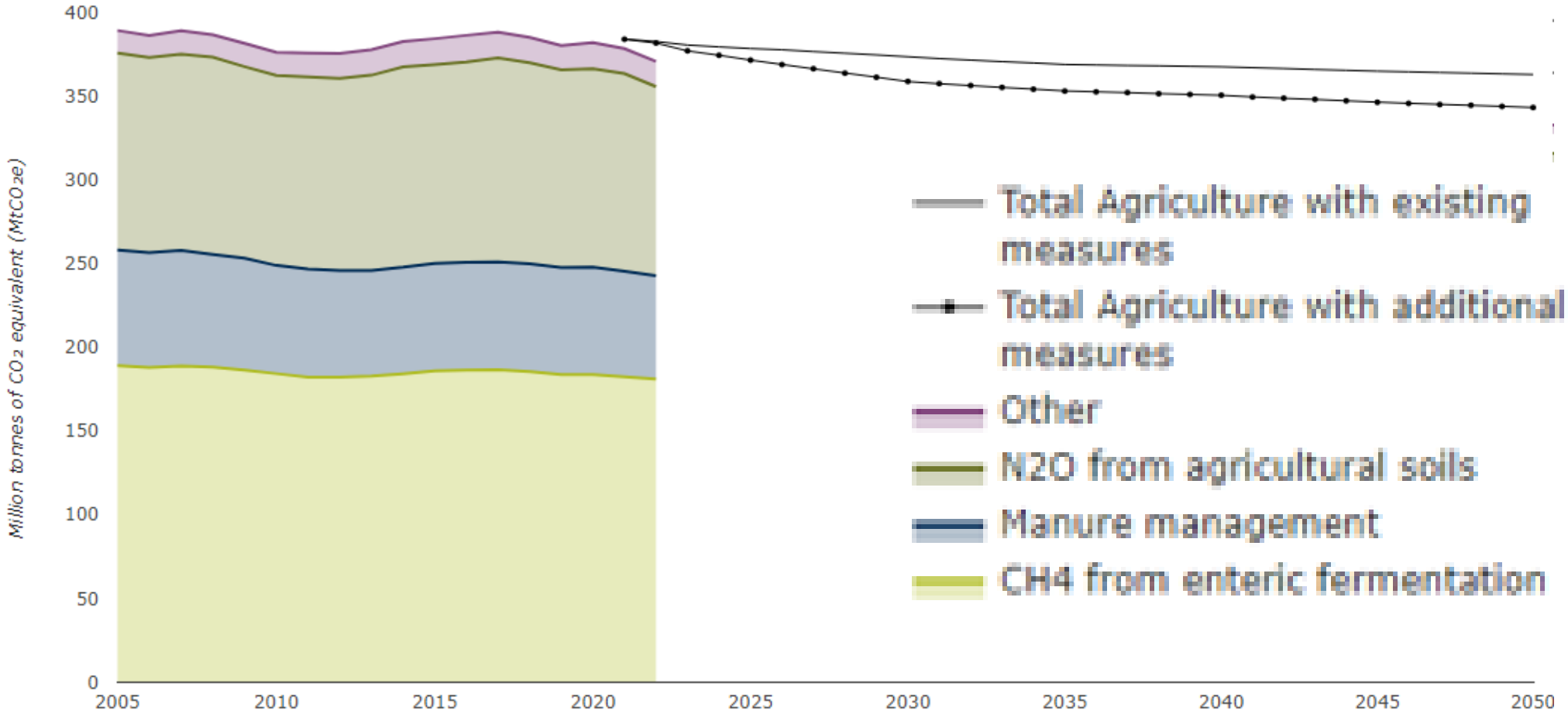
Global agri-food systems GHG emissions shares by gas



Source: FAOSTAT ANALYTICAL BRIEF 31 The share of agri-food systems in total greenhouse gas emissions Global, regional and country trends 1990–2019

3. Background and scope

EU agricultural emissions by source and projected emissions



Source: European Environment Agency

3. Scope

European Innovation Council

This Challenge focuses on supporting novel biotechnology driven solutions in four areas, which can in combination offer a GHG mitigation potential of nearly 1.5 billion tons (tCO2e) , through approaches that:

- Replace fossil fuels in the production of pesticides and fertilizers used in agriculture.
- Achieve efficiency in resource use and support the deployment of climate smart agriculture (including livestock) technologies for sustainable food and feed production.
- Mitigate enteric methane emissions from ruminants and reduce the environmental impact associated with traditional agriculture and animal farming.
- Expand conventional food and feed production.

4. Specific objectives

European Innovation Council

1. **Biotechnology for biopesticides, bio-stimulants, and biofertilizers**
2. **Biotechnology to support precision crop and livestock farming**
3. **Biotechnology for ruminant methane mitigation**
4. **Biotechnology for feed and food production**

5. Important

European Innovation Council

- Regardless of the specific area addressed, companies are encouraged to leverage digital tools such as AI.
- All projects must provide a lifecycle assessment considering environmental, social and economic considerations.
- Proposals are also expected to consider regulatory aspects alongside issues surrounding consumer acceptance.
- Articulate suitable strategies to support market entry within and beyond the EU.

6. Expected Outcomes and Impact

European Innovation Council

- This Challenge aims to improve the sustainability and resilience of the European agri-food sector by helping it overcome challenges linked to climate change and environment stresses including biodiversity loss and pollution.

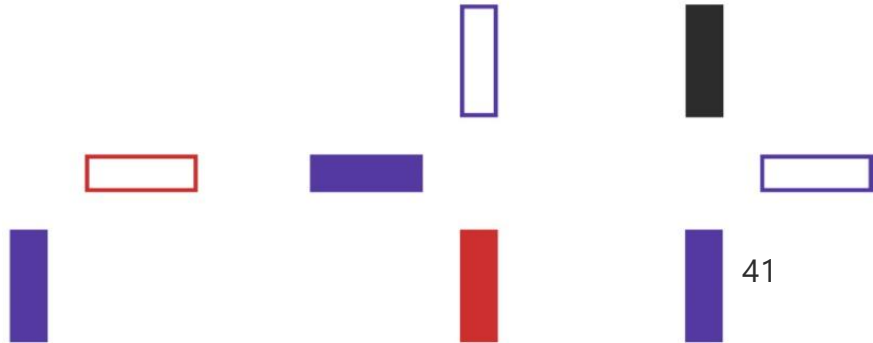
- Breakthrough solutions developed within the challenge will also support Europe's future strategic autonomy and enhance the efficiency and competitiveness of Europe's agricultural sector.

- Support of the Commission strategic initiatives and programs in building the future with nature.

Budget and application deadline

European Innovation Council

- Indicative budget: €50 million
- Grant size: up to €2,5 million
- Equity investment: up to €10 million
- Application deadline: 12. March 2025 and 1. October 2025

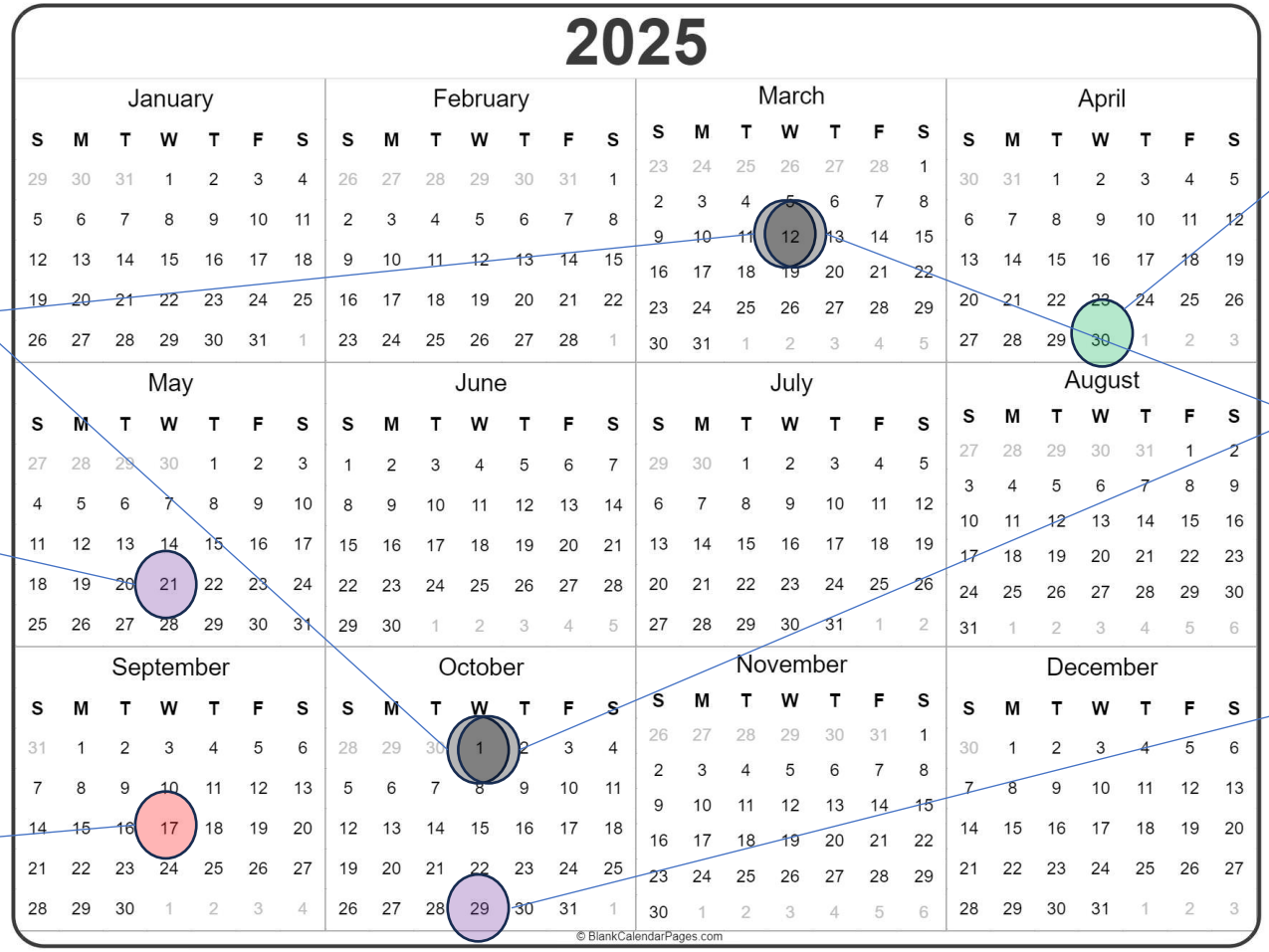


EIC Work Programme – submission deadlines

Deadlines for Accelerator open proposals

Deadline for Pathfinder open proposals

Deadline for Transition open proposals



TODAY

Deadlines for Accelerator challenge proposals

Deadline for Pathfinder challenge proposals

< *YOUR COMPANY* >

EIC Beneficiary

11. Decide & Act! Today!!

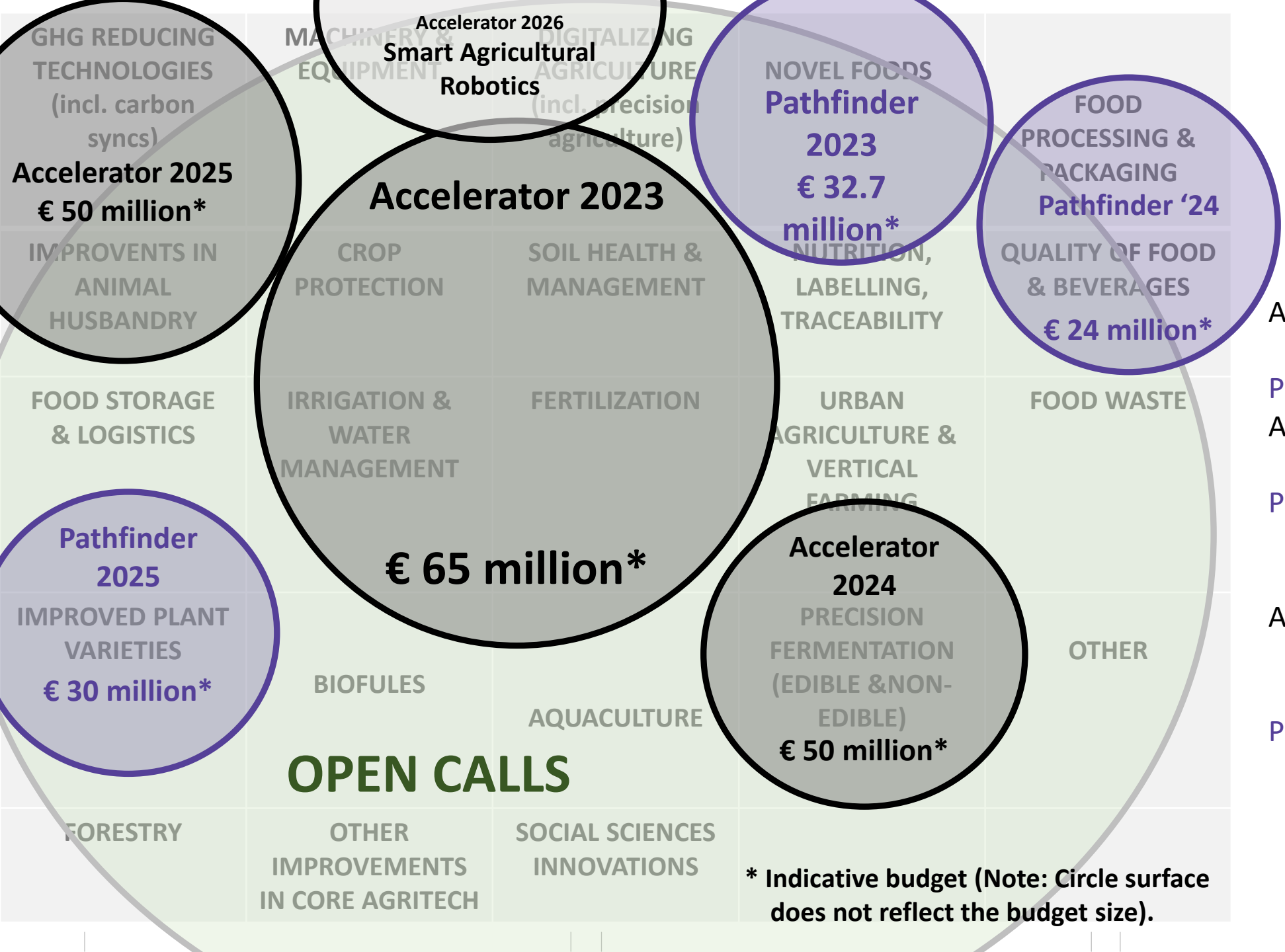
< *YOUR NAME* >

Member of the EIC thematic portfolio

Novel technologies for resilient agriculture

< *Your contact details* >

European Innovation Council



EIC Challenges in Agrifood sector 2023-2025

A23 Novel Technologies for Resilient Agriculture

P23 Precision Nutrition

A24 Food from precision fermentation and algae

P24 Nature inspired alternatives for food packaging and films for agriculture

A25 Biotechnology driven low emission food and feed production systems

P25 Biotech for Climate Resilient Crops and Plant-based Biomanufacturing

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12 reasons why we really need EIC?

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1. Better understanding of your business
2. State of the art evaluation
3. Grant
4. Booster grants for Pathfinder, T2M for Transition projects, BAS - Business Acceleration Support grants for Accelerator + EIC Scaling Club
5. Equity financing
6. Guidance & support by PMs
7. Visibility, promotion & networking
8. Increased credibility with possible investors
9. EIC support to women innovators
10. Possibility to improve the application (in next cut-off date)
11. Seal of excellence (leading to eligibility for EIC service catalogue and post-grant care)
12. Fast track procedure

Innovation
made in Europe

Thank you

Ivan.STEFANIC@ec.europa.eu

www.eic.ec.europa.eu

European
Innovation
Council

EU CAP Network brokerage event
‘Partnering for innovation with impact in agriculture and rural areas’

29-30 April 2025
Prague, Czech Republic

All information on the brokerage event is available on the event webpage:

https://eu-cap-network.ec.europa.eu/events/eu-cap-network-brokerage-event-partnering-innovation-impact-agriculture-and-rural-areas