6<sup>th</sup> of October 2022
Brussels
Collaborative Workshop
Open Innovation Facilitation
in Horizon Europe

Open Innovation approach applied to the design of Horizon Europe future calls

#### Francesco Matteucci

Programme Managers on Advanced Materials for Energy and Environmental Sustainability, EISMEA

(EIC and SMEs Executive Agency)



## Agenda



- EIC intro
- Open innovation approach when designing HEU calls
- EIC Ecosystemic approach
- Open innovation approach: EIC to beneficiaries & viceversa

## **Horizon Europe Structure**



#### **HORIZON EUROPE**

#### **EURATOM**

#### SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

Exclusive focus on defence research & development

Research actions

Development actions

#### SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT\*

Exclusive focus on civil applications



European Research Council

Marie Skłodowska-Curie

Research Infrastructures



PILIAR II
GLOBAL CHALLENGES &
EUROPEAN INDUSTRIAL
COMPETITIVENESS

- Health
- Culture, Creativity & Inclusive Society
- · Civil Security for Society
- Digital, Industry & Space
- · Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre



European Innovation Council

European innovation ecosystems

European Institute of Innovation & Technology\* Fusion

Fission

Joint Research Center

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

<sup>\*</sup> The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

## Deeptech

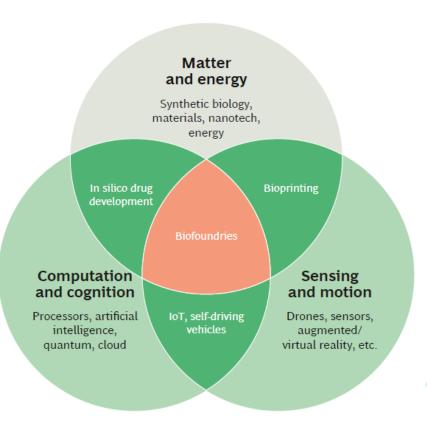


#### Powerful technologies are emerging faster...

- · Artificial intelligence
- · Quantum computing
- Synthetic biology
- Nanotechnology
- NextGen UX (augmented/virtual reality)
- Blockchain
- Robotics
- Universal printing

#### ...and they converge to solve major business issues

- · Process automation for materials
- New chemical development via AI or quantum computing
- Neuron-machine interface



#### Deep tech brings together powerful capabilities

- Data volume
- · Moore's law
- · DNA sequencing cost
- · DNA synthesis cost (in progress)
- · Quantum (in progress)

#### DEEP TECH

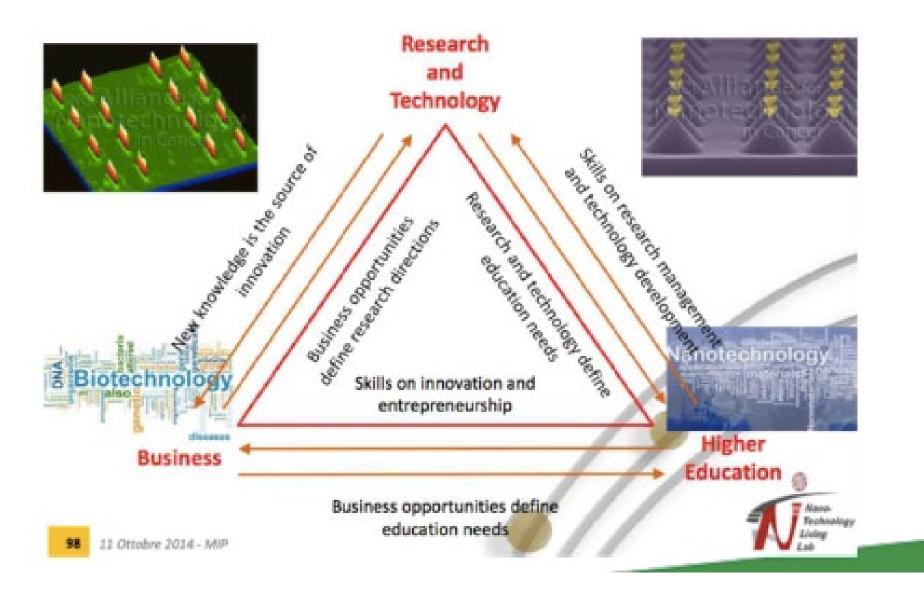
Problem and Hardware oriented Multidisciplinary
High risk, high fund needed
Open innovation approach
(ecosystem of innovation)

Digital transformation as prerequisite

investments include private investments, minority stakes, initial public offerings and M&A

# Where deeptech happens: open innovation is a requirement







One stop shop for breakthrough, deeptech, 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 (<€4 million)</li>
- Transition from lab to commercial setting (<€2.5 million
- Accelerator to scale up innovations by start-ups & SMEs (<€2.5 million grant, <€15 million equity)</li>

**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 Support Schemes for EU deeptech innovation**



#### Pathfinder

For advanced research on breakthrough / game-changing technologies

**Pathfinder Open**: bottom-up approach; no predefined topics

Pathfinder Challenges: topdown challenge-driven calls for tackling specific issues by portfolios of projects

#### **Transition**

For transforming research results into innovation opportunities;
follow up results from EIC
Pathfinder and ERC Proof of
Concept

**Transition Open**: no topic prescription

**Transition Challenges**: selected challenges

#### Accelerator

For individual companies to develop and scale up breakthrough innovations with high risk and high impact

Grant Funding
Equity Funding
Business Acceleration Service

EIC Fund: VC fund – EC shareholder / Bridging equity funding gap at early stage / Crowding in other investors

Business Acceleration Service: access to advice, to business partners and to innovation ecosystems & peers



## Programme Managers main activities

## Identify emerging challenges for Europe's deep-tech roadmap

Science and innovation intelligence activity

#### Hands on approach

Strategic assessment and clustering of projects
Building strategic intelligence portfolios
Scientific / Business portfolios management

#### **Stakeholder engagement / Community management**

Networking with other programmes and with innovation ecosystem communities

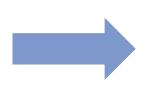
Outreach and organization of events, participation to national events / workshops

EIC Proactive Management

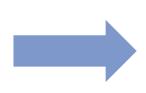
## EIC Programme Managers (EIC PMs): three key roles Council



Oversees a thematic sector in a cross-cutting manner EIC (Pathfinder—Transition—Accelerator).



Identifies S/T critical thematic areas, pre-select topics within these areas and validates the topics for the purpose of developing Challenge Calls



Manages sector-specific portfolios (a set of projects with shared perspectives) created on the basis of the outcome of Challenge Calls

## Thematic Portfolios & content-wise approach



Renewable Hydrogen (production, storage, logistics, end use)

**Energy storage** (electrical, thermal, chemical, mechanical and electrochemical)

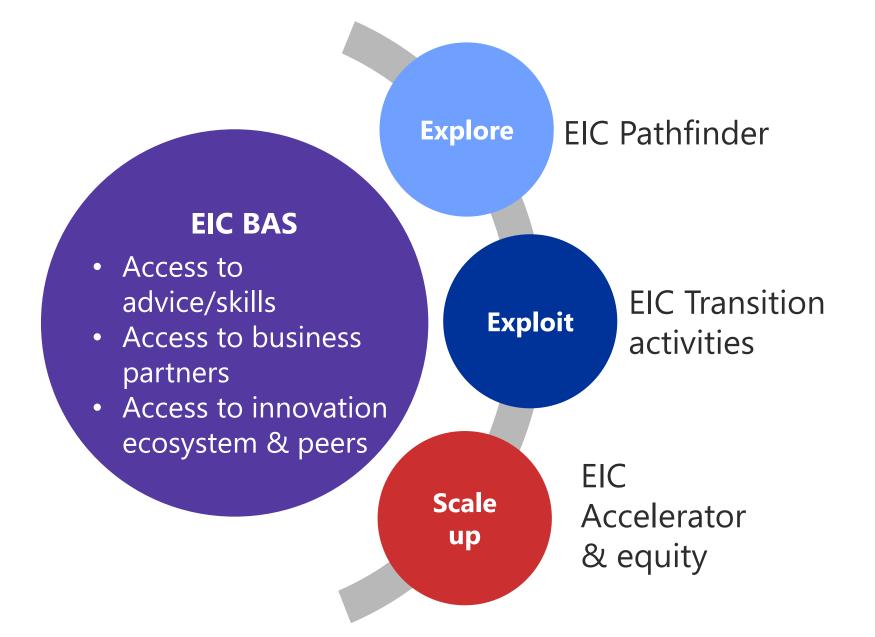
Solar conversion technologies (solar-to: thermal, fuel, electricity)

**Energy harvesting and conversion** 

**Nature-derived technologies** 

Climate and Environment (air/water/soil monitoring/depolluting, environmental intelligence)





## Innovation intelligence: Open innovation example



# Challenges Process of Selection (Methodology)



## Initiation

PMs competences and know-how

Foresight reports, key scientific literature assessment

Overview of ERC/EIC funded projects and related innovation/research trends

## Guidance

EIC internal brainstorming for preliminary challenges definition

Structured interviews with selected scientists and key experts

## Outcome

Assessment of Horizon EU funding programmes/topics

Challenge

## Strategic Intelligence Activity



- 1. **Meetings/Interviews with experts** (external experts (EIC contracted), scientists, entrepreneurs, innovation managers, VCs, DGs, JRC, JU partnerships, etc..) see more details below
- 2. Study of papers/reports/patents/ongoing projects H2020/HEU funded (EPO undergoing collaboration)
- 3. Research & Innovation data collected by D01 intelligence team
- **4. Database search** (Cleantech, etc..)

#### January-May 2021

- Informal meetings with experts coming from science/business/financial field
- EIC and EC internal Discussion

#### September/October 2021

- Interservice consultation, opinion of PC, adoption of WP with challenge calls
- Discussion in PC on selection of EIC Challenges for 2022 WP
- External expert advice (workshops etc.)

#### Jan - April 2022

 Discussion with experts and study of the recent updates in the fields

#### April/May 2022

Challenge guide writing

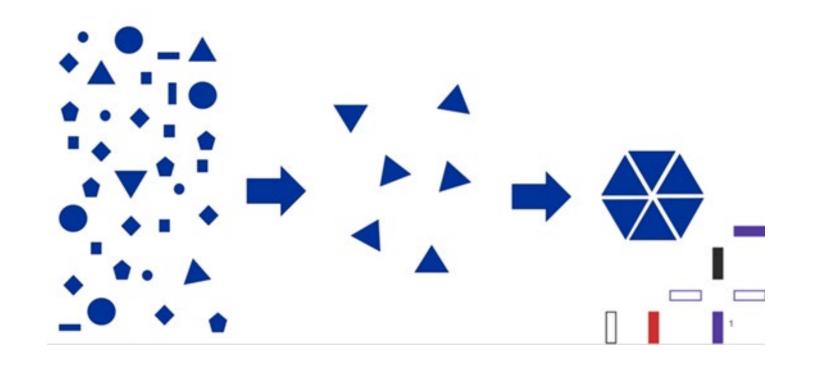
# EXERNAL EXPERTISE Academy / RTOs (40) VCs (10) 20%

Academy / RTOs (40)

80%

## Open innovation and Ecosystemic approach





### Access to advice/skills





## Access to business partners

















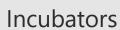
## Access to innovation ecosystem and peers



Innovation Agencies









Association s & more

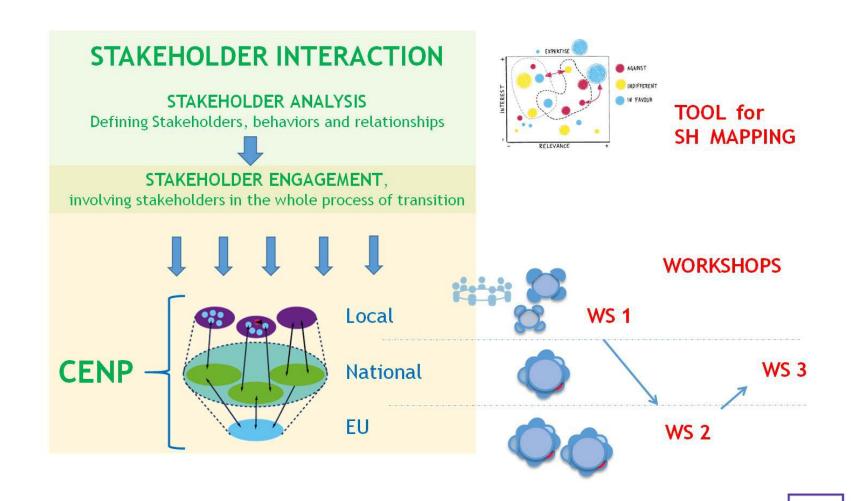
Accelerators

EEN



## Stakeholder or ecosystem analysis

- 1. Mapping
- 2. Categorising
- 3. Engaging
- 4. Implementing



# EIC Ecosystem partners Privileged access to the EU innovation scene



- Access for free or other forms of privilege to incubators, accelerators, venture builders, research infrastructure, test-beds, pilot plants, regulatory advisors and other service providers supporting your path towards market!
- Top partners such as EIT, Collider, Angels Sante, Consilience Group
- Soon, a Catalogue will help you to navigate through the offer!

### Open Call: Attend the EIT Health Bootcamp Tour and get a sneak peak of what you can get on the 2022 EIT Health Bootcamps!

The EIC created a new Story | 4 days ago



Each year after the EIT Health Bootcamps take place, EIT Health holds the Bootcamp Tour, an event where selected companies go through a validation programme, content sessions, peer-to-peer gatherings, and meetings with experts. Given that this year we couldn't miss the online twist, we have the pleasure to invite EIC supported companies to join the EIT Health Bootcamp Tour: Online Edition for free.





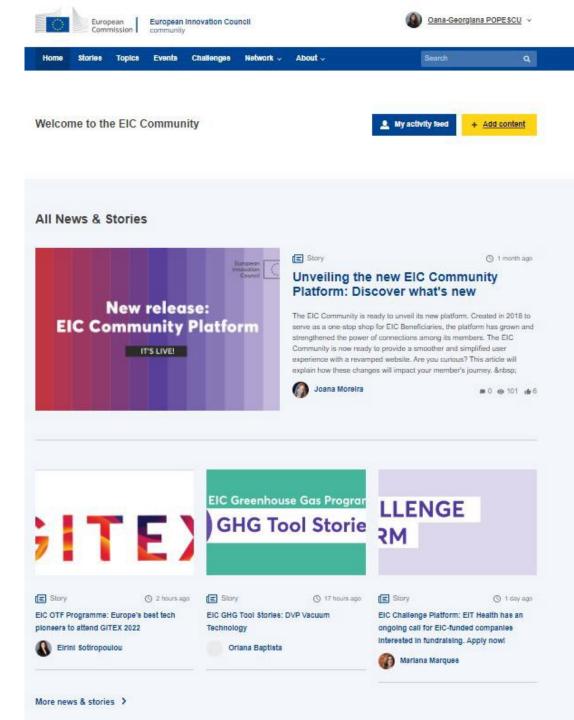
Get access to services worth 50k or more!



## EIC Community Platform https://eic.eismea.eu/community

#### What's in it for me?

- ✓ Apply to EIC Business Acceleration Services
- ✓ Create a personal and company profile
- ✓ Use the powerful search engine to find like minded companies
- ✓ Explore business opportunities & share your experience via groups
- ✓ Promote other interesting events to the EIC Community



## Open innovation and portfolio approach



## Thematic Portfolios & content-wise approach



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### Stakeholder engagement / Community management



Stakeholder			
What	How	Portfolio team needs	Examples of activities
Share of knowledge between EC (or national/regional funded – not yet done) projects	Events or «community» creation: 1) Solar fuels with Sunergy (CSA action) 2) Materials for energy (e-MRS scientific event)	<ol> <li>Data mining from EC projects databases (partner localization, type, background)</li> <li>Data elaboration</li> <li>Networking with DGs</li> <li>Event design</li> <li>Event communication</li> <li>Event implementation</li> </ol>	
Share of knowledge between EIC projects	«Yearly» portfolio meeting	<ol> <li>Data mining from EC projects databases (partner localization, type, background)</li> <li>Data elaboration</li> <li>Event design</li> <li>Event communication</li> <li>Event implementation</li> </ol>	Discussion on:  • sciencetific issues  • facilities (i.e. materials characterization techniques, pilot plants)  • people  •



# Thank you!

www.eic.ec.europa.eu

@EUeic

#Eueic

Francesco.matteucci@ec.Europa.eu

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