

30th of November

Programme Manager on
Green Technologies activities

Backing visionary entrepreneurs

Francesco Matteucci – Antonio Marco Pantaleo

EIC Programme Managers on Green
Technologies

European
Innovation
Council



Deep Tech: The Convergence of Technologies Opens New Opportunities

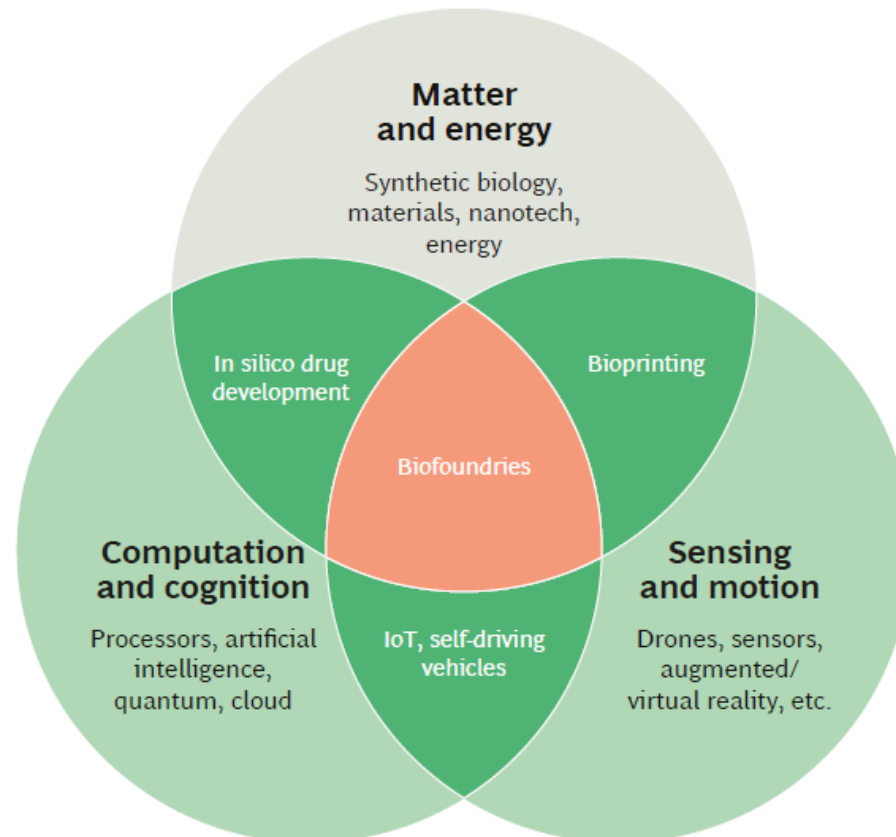


Powerful technologies are emerging faster...

- 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)

- **Problem oriented**
- **Multidisciplinary**
- **High risk & high cost**
- **Open approach**
- **Hardware driven**
- **Long time to market**

● ● ● Digital transformation as prerequisite

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



The main EIC Support Schemes

Pathfinder

For advanced research on breakthrough / game-changing technologies

Pathfinder Open: bottom-up approach; no predefined topics

Pathfinder Challenges: top-down 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

What we do

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

EIC Ambassador

Networking with other programmes and with innovation ecosystem communities
Outreach and organization of events, participation to national events / workshops

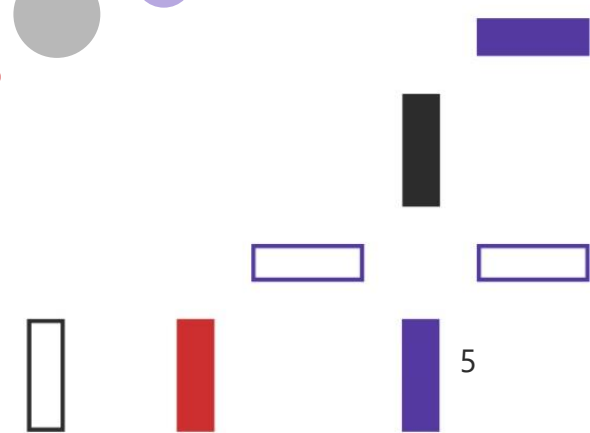
**EIC
Proactive
Management**



Programme Managers overlook different portfolios of projects



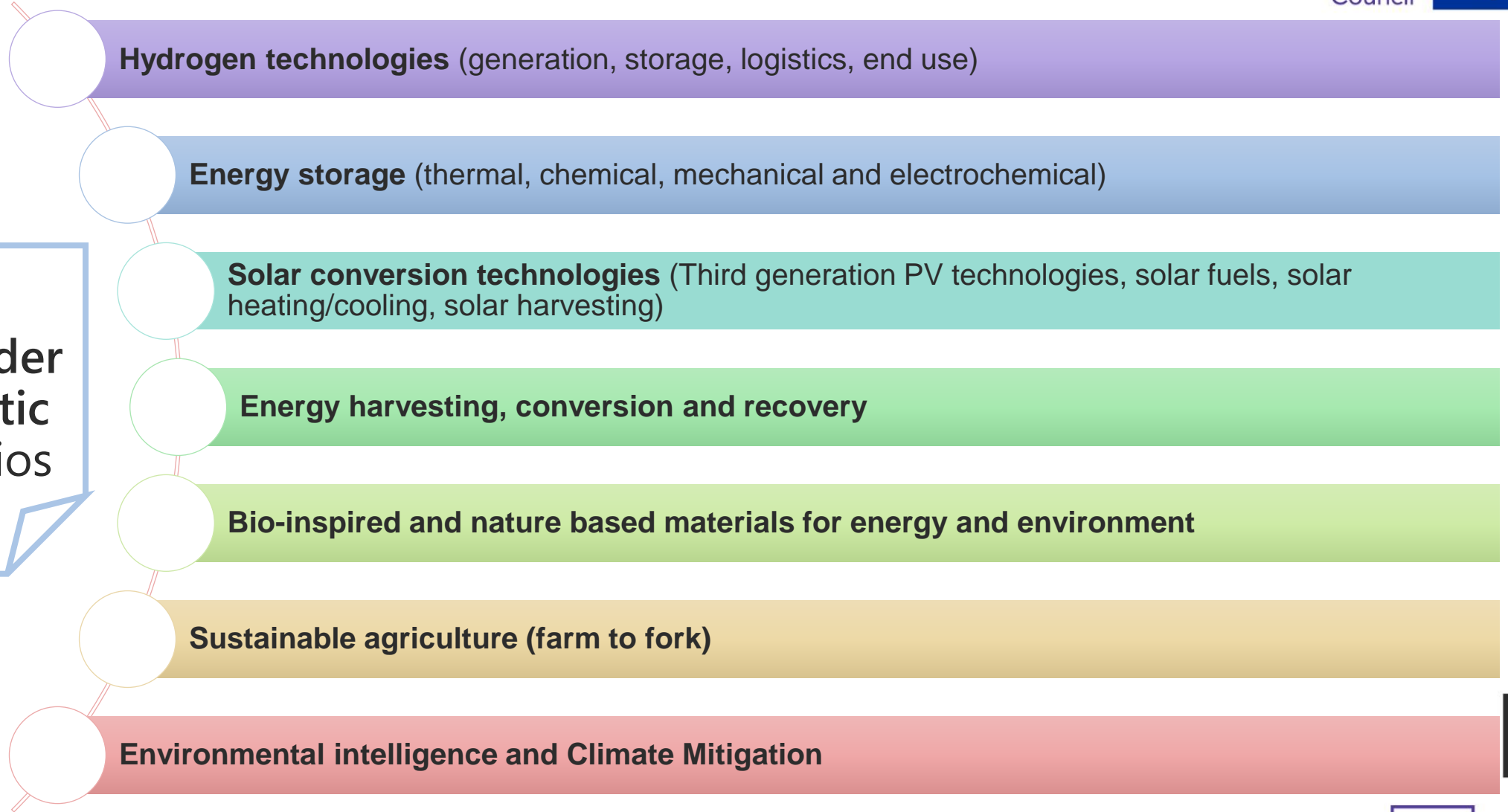
Portfolios are initially centred on Pathfinder, but can be extended with Transition and Accelerator Actions, or with non-EIC funded ones.



Portfolios approach



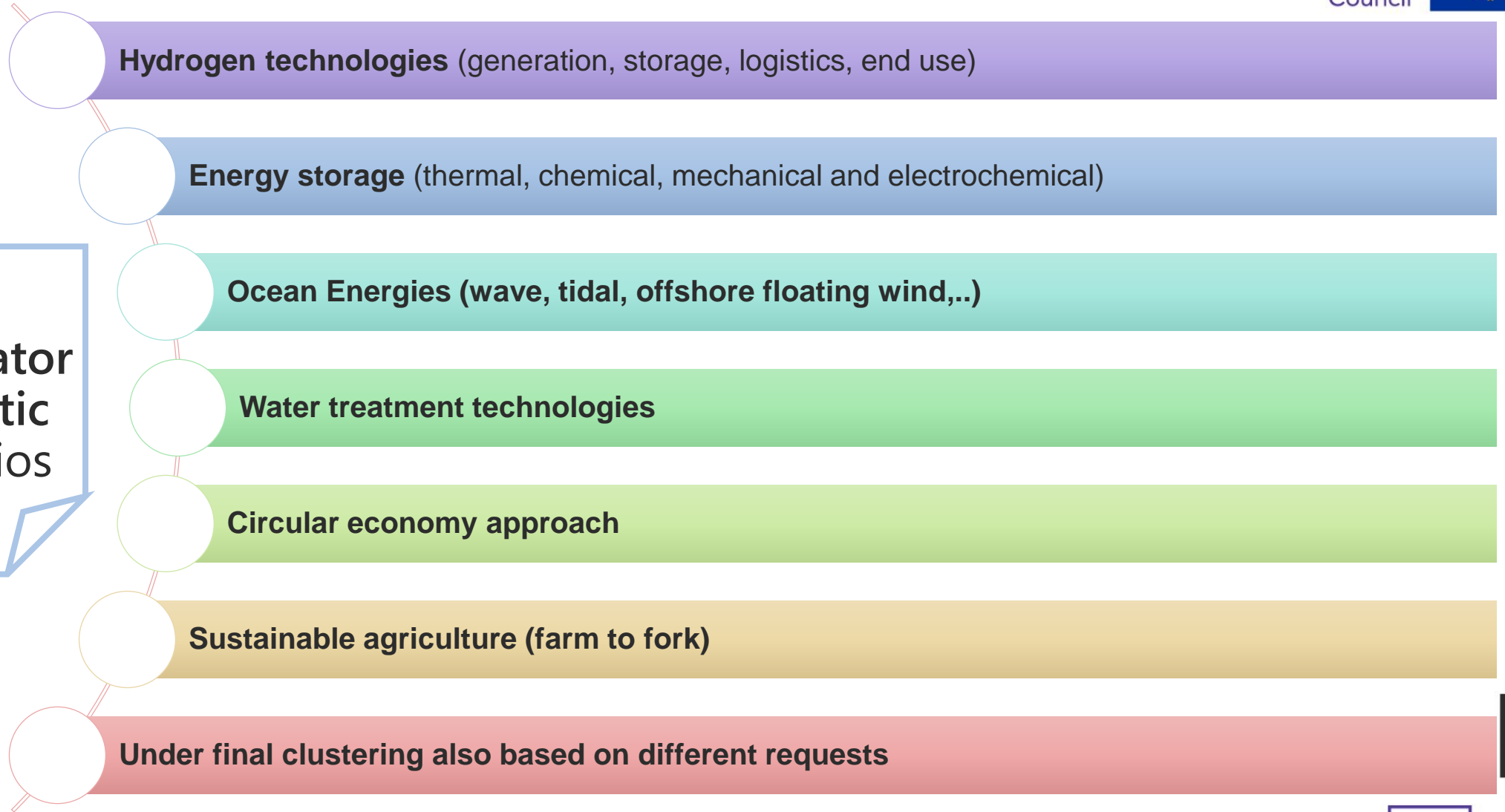
Pathfinder
Thematic
portfolios



Portfolios approach



Accelerator
Thematic
portfolios







Novel routes to green hydrogen production

- **Goal:** to **develop novel processes and technologies to produce Green H₂**, at different scales (distributed or centralized approaches) and with higher flexibility, entirely based on renewable sources and using toxic free, non-critical raw materials. It focuses on the potential of new biological, chemical and physical routes for Green H₂ production adopting **process circularity**, possibly including the **co-production** of decarbonized chemicals and the **integration** with existing technologies at system and process level.
- **Target:** support the development of innovative technologies and value chains for Green H₂ production, including both centralized and distributed solutions, for transport, industrial or residential sector
- **Outcome:** a **proof of concept** or **lab-scale validated innovative Green H₂ production technology**



Some Hands-on / content-wise activities

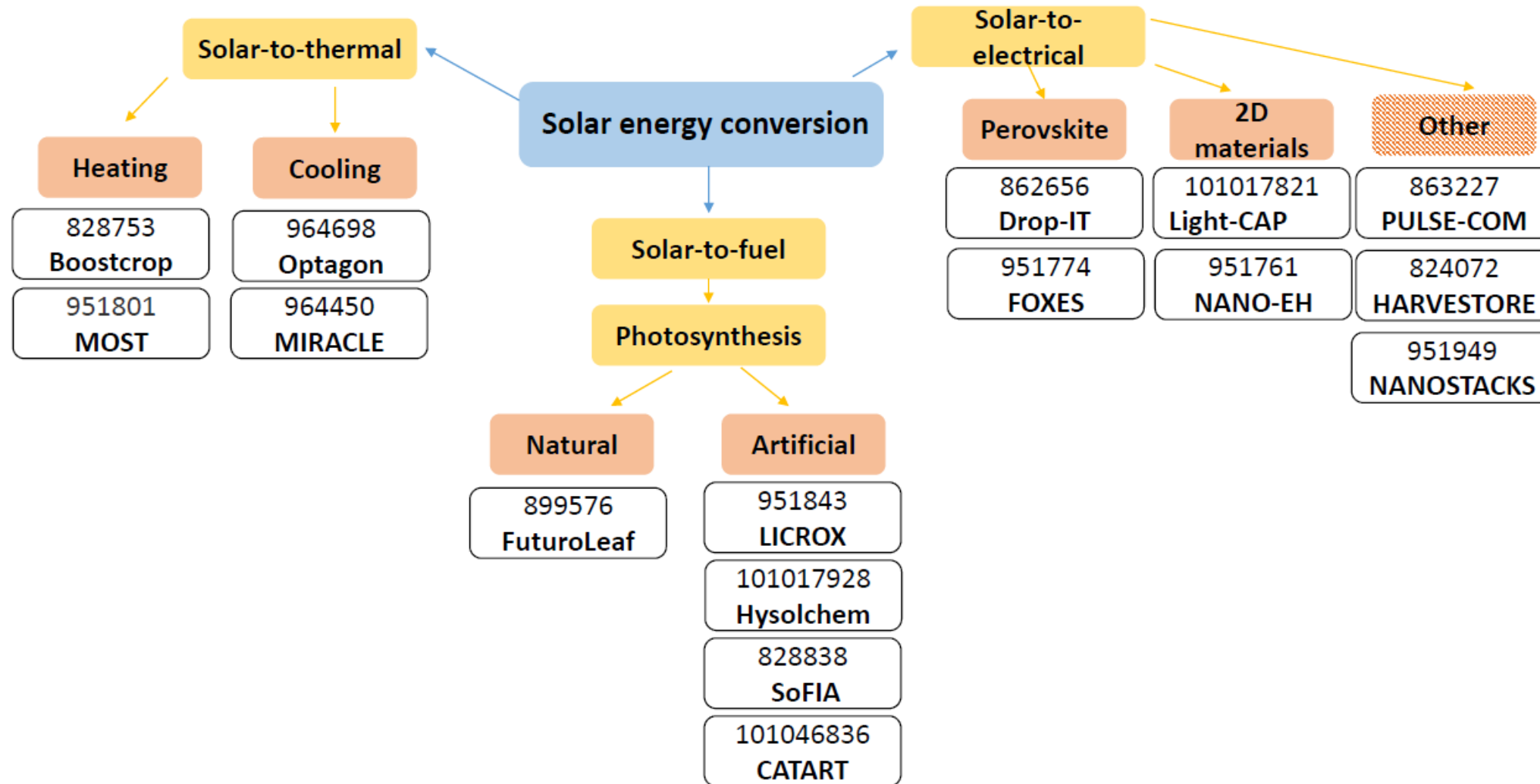
- Scientific:
 - Comparison of different hydrogen storage technologies
 - Evaluation of the system integration of H2 technology (industrial symbiosis, etc..)
 - Pathfinder challenge based proposal on Renewable H2 production routes
- Business
 - Stakeholders engagement meeting (corporates, financial investor, etc..)
 - Innovation deal on RFNBO Guarantee of origin
- Networking
 - Meeting with different EU, national, regional initiatives in the H2 economy
 - Joining of different scientific events
 - EIC Summit: discussion between EIC funded projects / scientists / VCs
 - Discussion with ERRIN to link regional projects with EIC funded projects (thematic ecosystem to promote EU thematic initiative)



Solar Energy Conversion



Solar Energy Conversion Portfolio





Some Hands-on / content-wise activities

- Scientific:
 - Certification issues with JRC on Perovskite solar cells
 - Light absorbing materials without CRM
 - System integration of some technologies (indoor PV, solar fuels)
- Business
 - Stakeholders engagement meeting (corporates, financial investor, etc..)
 - Infrastructure for scale up of nanomaterials facilities/experiences
- Networking
 - Innovation intelligence activities looking at other EU initiatives in the field
 - Joining of different scientific events
 - Discussion with ERRIN to link regional projects with EIC funded projects (thematic ecosystem to promote EU thematic initiative)





Thank you!

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