



Towards a OPEN INNOVATION HUBS EU STRATEGY in Nanotech and Advanced Materials

EURONANOFORUM 2017

***Session 13: Technology and business networks in
Europe - promoting innovation and new industrial
ventures***

Valletta, 22 June 2017

Dr. Peter Dröll, European Commission



European
Commission

Shaping Europe's Future



June
2015

February
2017

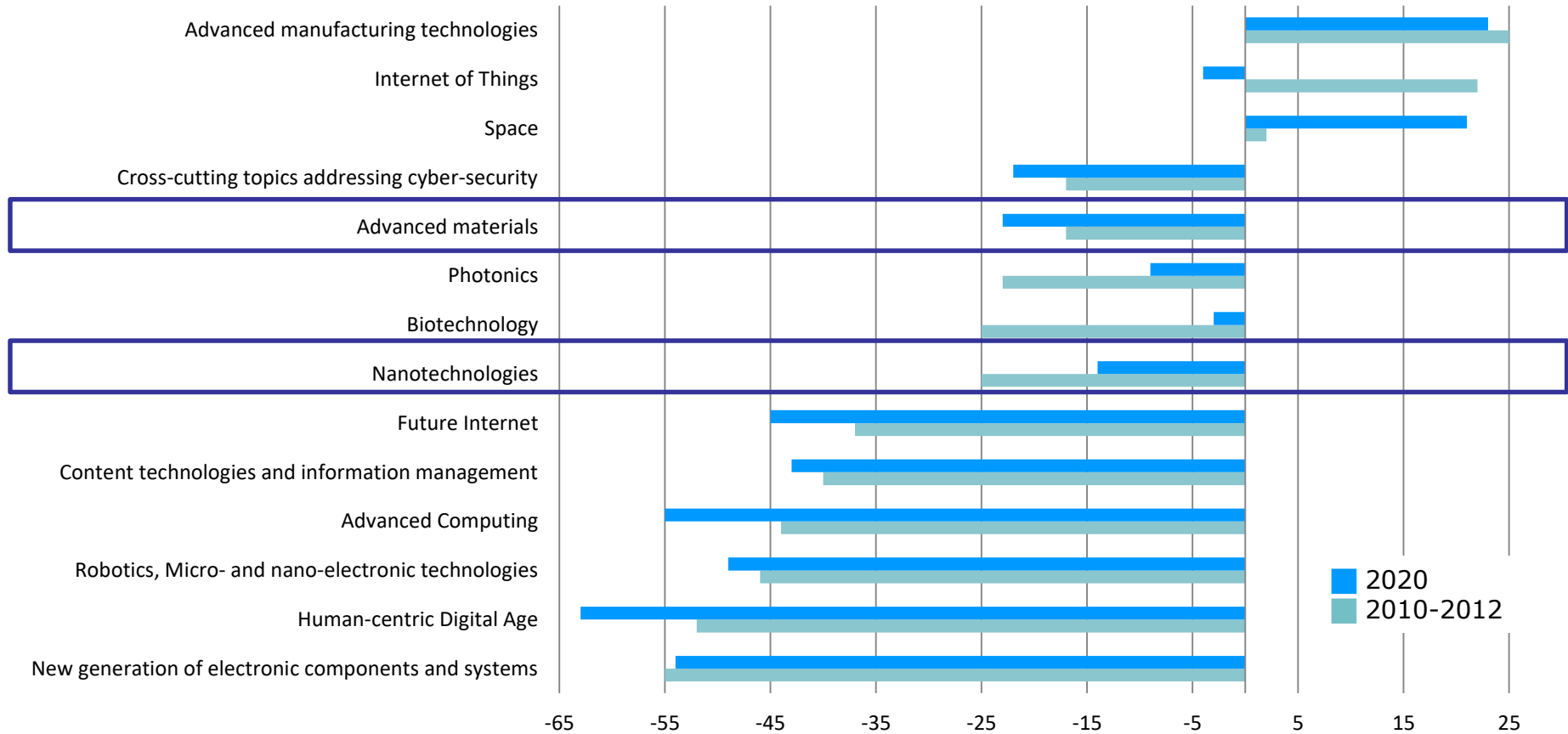
June
2017



EU comparative advantage

Revealed technological advantage - Extrapolation 2020

Source: RISE, Fraunhofer, 2016

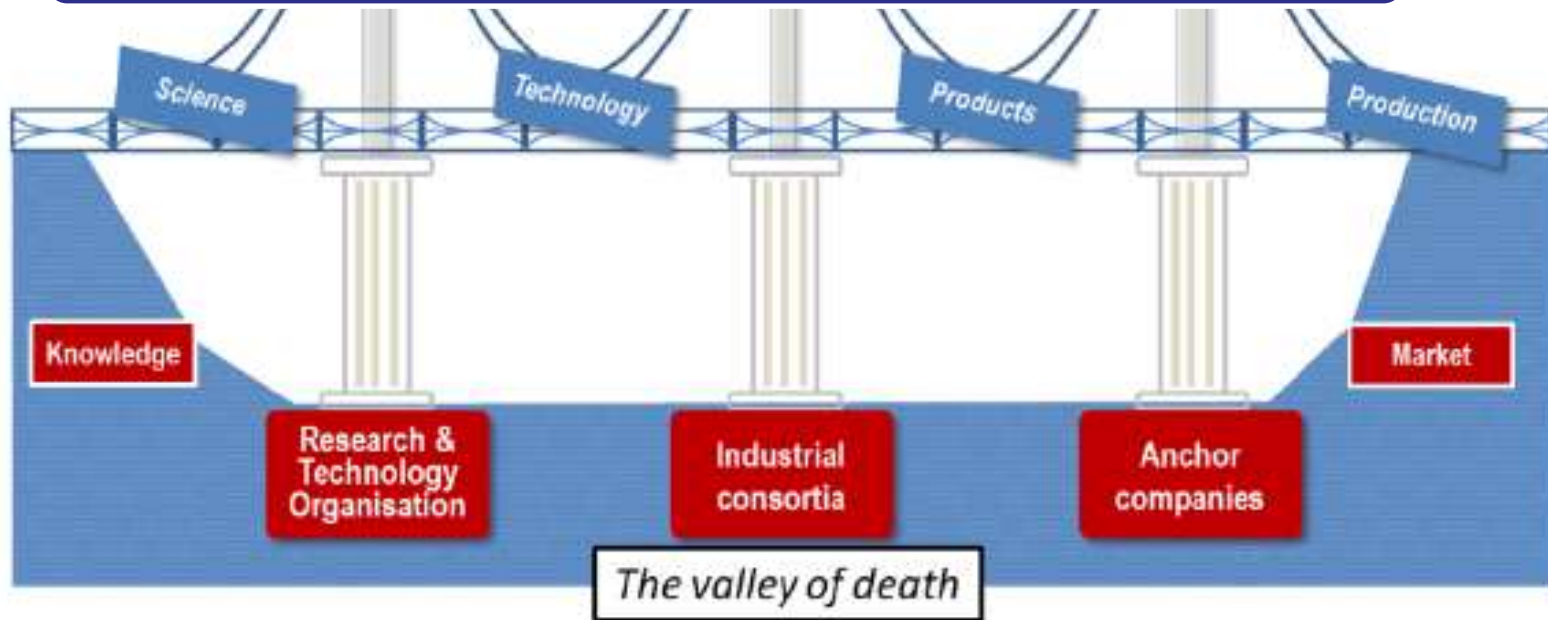


Crossing the valley of death

BUSINESS MODELS & FINANCE

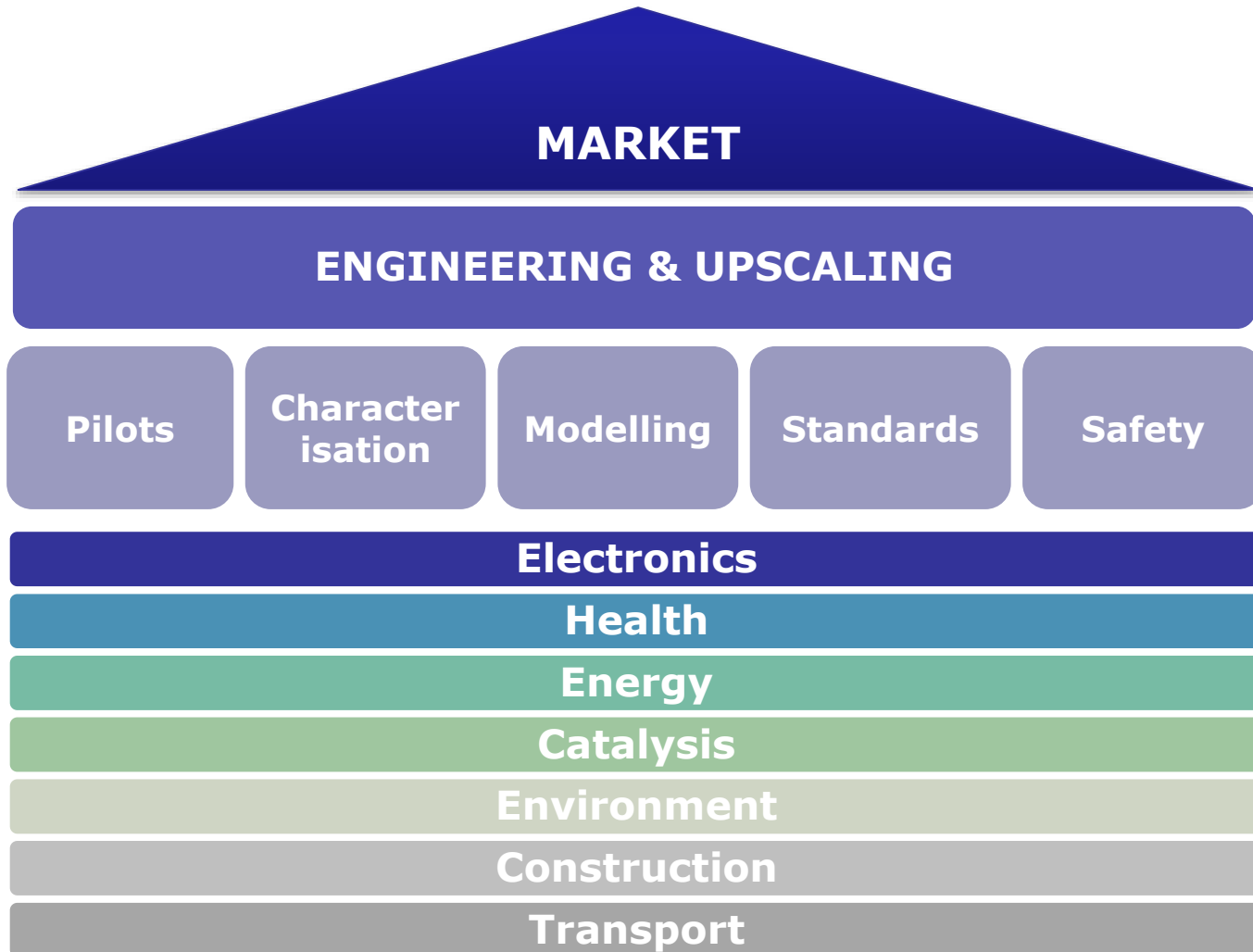
**TESTING, PILOT LINES, MANUFACTURING
FACILITIES**

MODELLING, CHARACTERIZATION, SAFETY, STANDARDS





Overcoming the Challenge of Upscaling

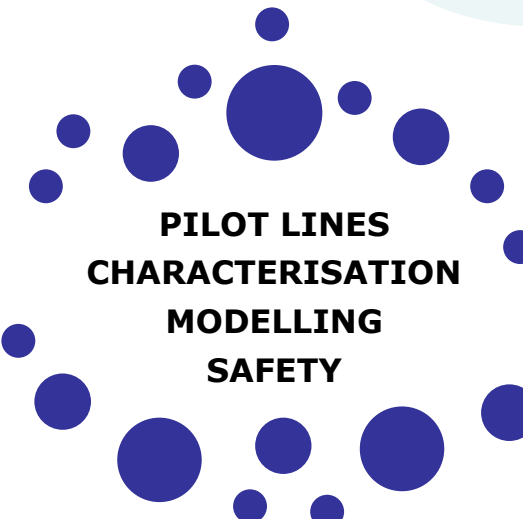


Towards European Open Innovation Hubs

**Industrial
Modernisation**

**Open
Innovation**

**Innovation
Ecosystems**



**PILOT LINES
CHARACTERISATION
MODELLING
SAFETY**

**ACCELERATING
PHYSICAL
INNOVATION
for
MATERIALS Industry**

In the two KETs:
**Nanotechnologies and
Advanced Materials**



**OPEN
INNOVATION
HUBS**

FP7-H2020

Research and
Innovation

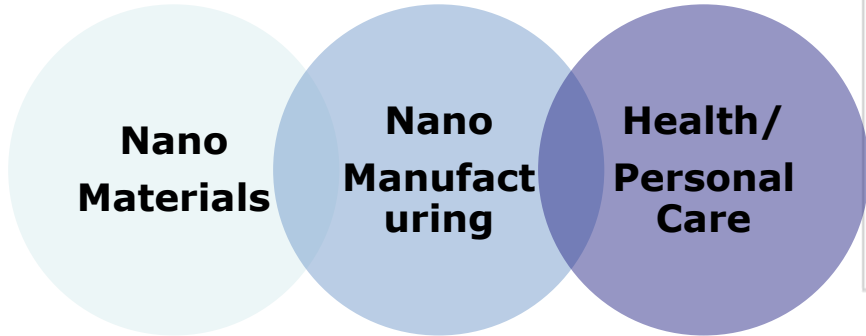
H2020-FP9



Enablers for Innovation Ecosystems (1)

Pilot Line Projects Horizon 2020:

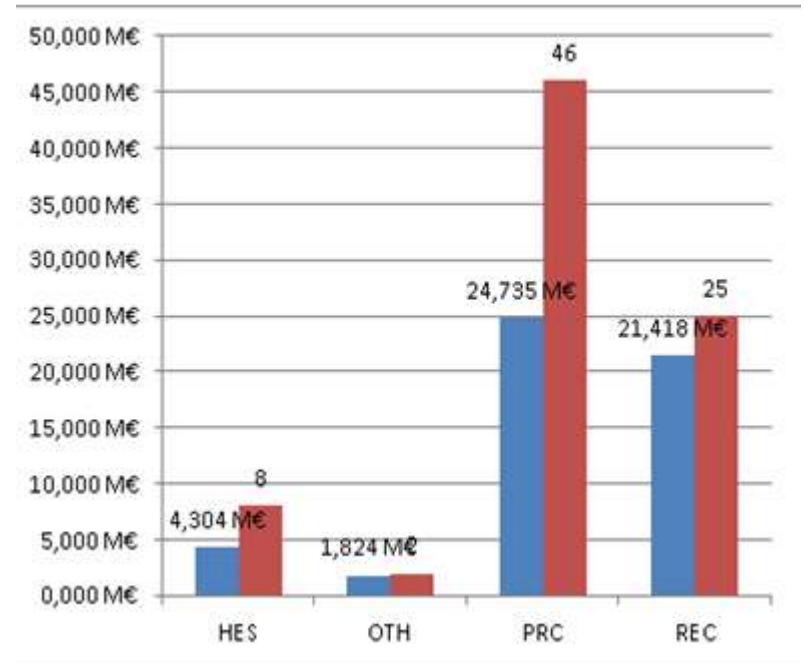
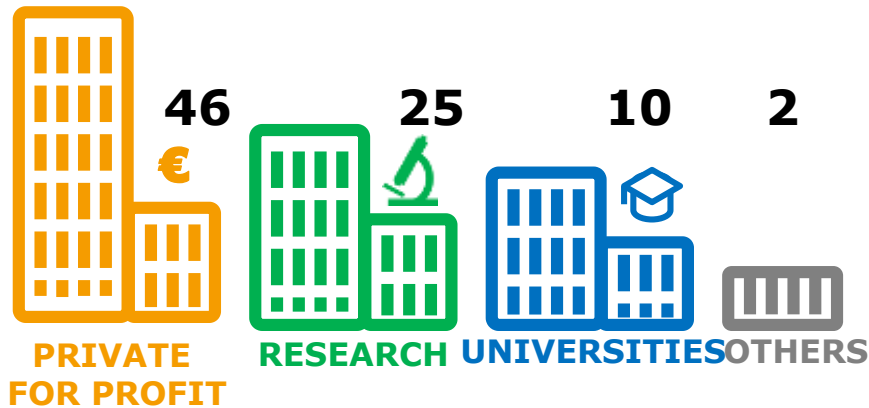
- EU Contribution 150 M€
- 29 Pilot Line Projects
- >80 Pilot Facilities and Demonstrators
- >30 Regions involved



Enablers for Innovation Ecosystems (2)

Industry Pilot Facilities

83 Pilot Facilities and Demonstrators, mostly with industry:





Enablers for Innovation Ecosystems (3)

European Pilot Production Network (EPPN CSA)

- Facilitating further development of pilot production capabilities in Europe.
- Facilitating the development of business, through the access to new customers and potential investors across borders.
- Providing advisory services and facilitate access for SME's and start-ups.
- Setting the scene for the establishment of innovation hubs across the member States and regions. Coordination on resources and actions.
- Mapping of the pilot line capabilities, existing ecosystems and relationships among the value chain.
- Organising and supporting networking and brokerage events at regional, national and European level.

Enablers for Innovation Ecosystems (4)

	Materials Characterisation	Materials Modelling	Safety and Risks Governance
Horizon 2020 NMBP investment	Spread along all projects	42 M€	60 M€
Horizontal platforms	European Materials Characterisation Council EMCC	European Materials Modelling Council EMMC	NanoSafety Cluster

Open Innovation Hubs

Lightweight materials and components

Medical Technologies for Health

Surfaces and membranes

Bio-based materials

Materials for Construction

Nano-Pharmaceutical

Characterisation

Nanosafety

Modelling

Open Innovation Hubs - Tasks

Open access to facilities and services for design, development (prototyping), testing, and upscaling materials and nanotechnologies for new products

Demonstration in the relevant industrial environments

Show-casing technologies with user industry in cross border applications

Facilitate access of European SMEs along product supply chains

Identification and assessment of potential regulatory, economic and technical barriers

Engagement of stakeholders across the EU and the Associated Countries

Open Innovation Hubs – Expected Impact

Open and upgraded facilities at the EU level

Reduced services access costs for companies using the hubs

Improved industrial productivity

Accelerated innovation in the specific domain

Increased access to finance (for SMEs in particular) for investing in these materials or in applications using them

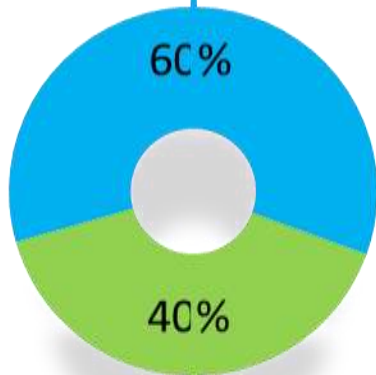
20% increase in SMEs access to hubs' services and increased access to finance for investing in these materials or in applications using them.

NMBP 2018-2020

Priorities

Bringing the digital to
the physical world

Industry 4.0



Circular Economy (20%)

Climate, Energy (20%)

Climate, Energy and
the Circular Economy

Calls

FOUNDATIONS
for tomorrow's industry
(~395M€)

TRANSFORMING
European industry
(~525M€)

Industrial
SUSTAINABILITY
(~665M€)

Impacts

Eco-system for
design/testing/upscaling

Global industrial
leadership for
re-industrialisation

Less energy input,
more energy/ resource
efficiency



THANK YOU VERY MUCH

..... ANY "OPEN" QUESTIONS?