



# IDEAS FROM EUROPE

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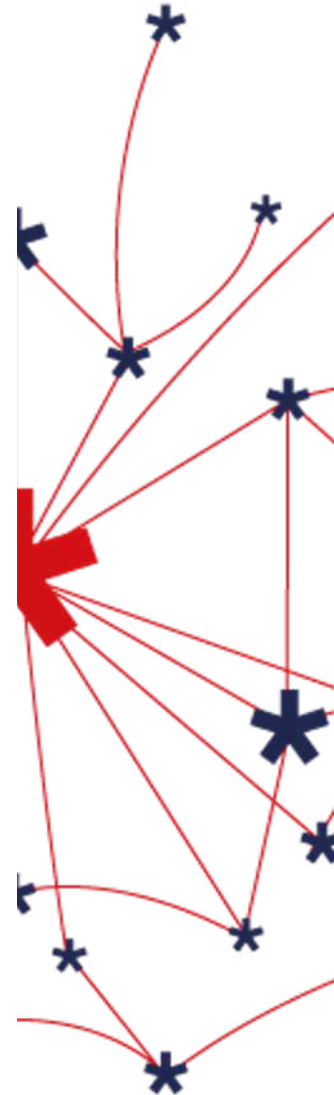
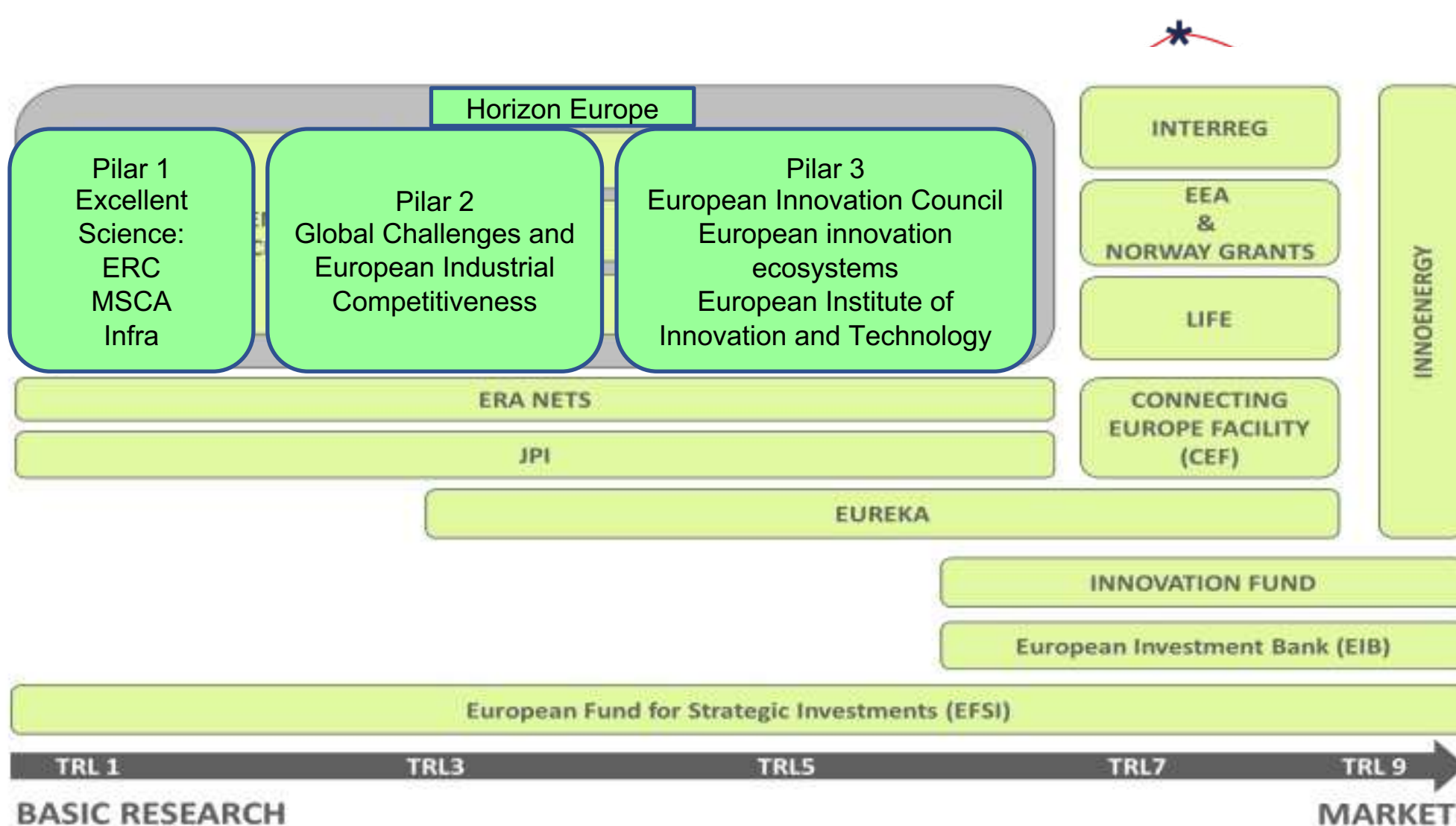
18.11.2021 | 14:00 - 16:15 CET

**Matchmaking Heat Pumps and Stakeholders no.2 :**  
Research, Innovation and Projects

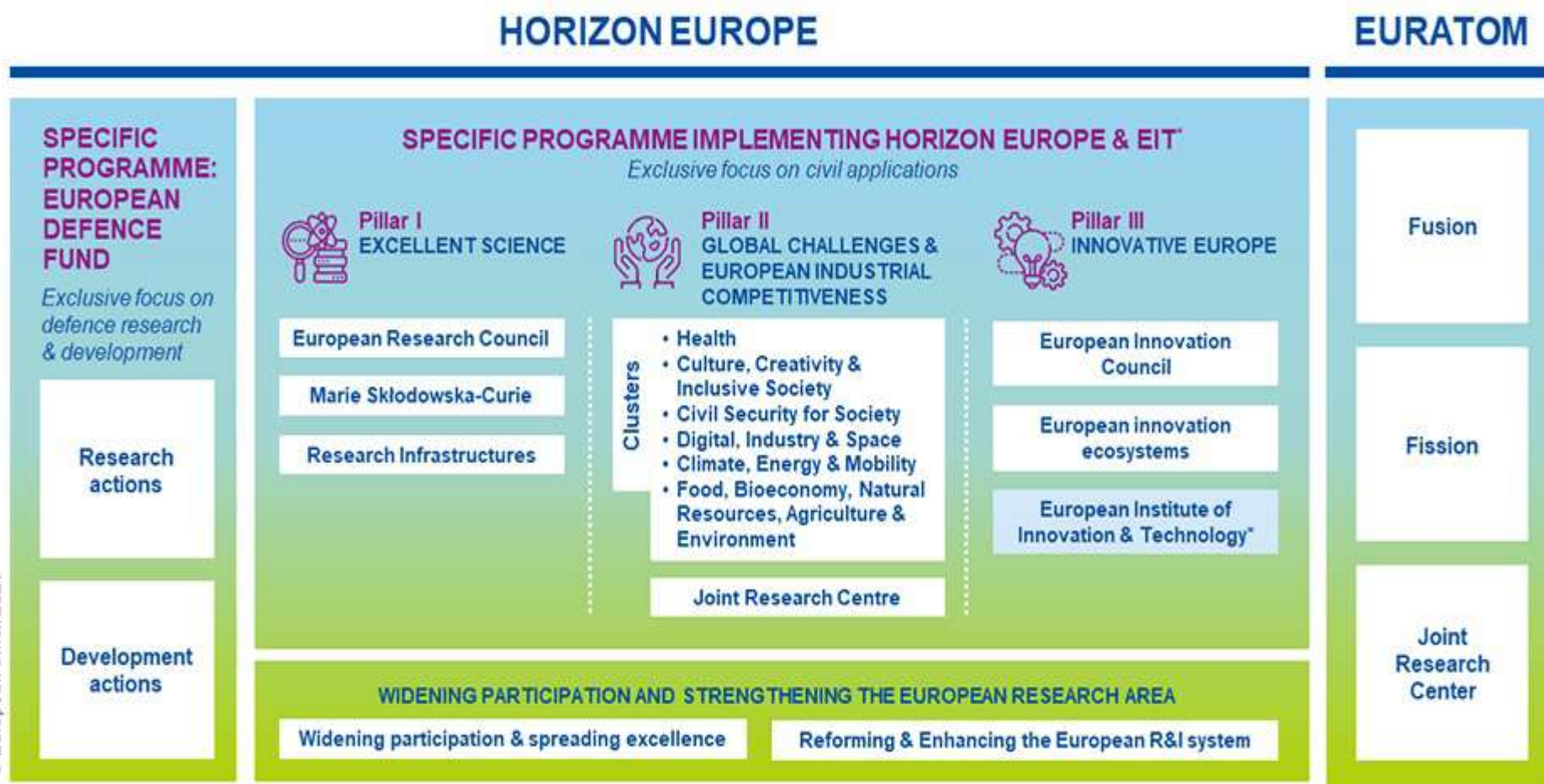
Online Matchmaking Event



# European funding programmes - Overview



# \* European funding programmes 1



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

**Research and Innovation programme**



# \* European funding programmes 2



EU funding instrument for the environment and climate action (and 2021-2027 also transition to clean energy)

Bridging the gap between development of new knowledge (Horizon Europe) and implementation (large-scale deployment finance).

Budget € 5.4 billion

## Digital Europe (DIGITAL)

Accelerate the recovery and drive the digital transformation of Europe.

Fill the gap between the research of digital technologies and their deployment, and to bring the results of research to the market – for the benefit of Europe's citizens and businesses – in particular SMEs.

Budget € 7.6 billion



CEF supports the development of high performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services. CEF investments fill the missing links in Europe's energy, transport and digital backbone.

Budget: €5.84 billion (Energy)

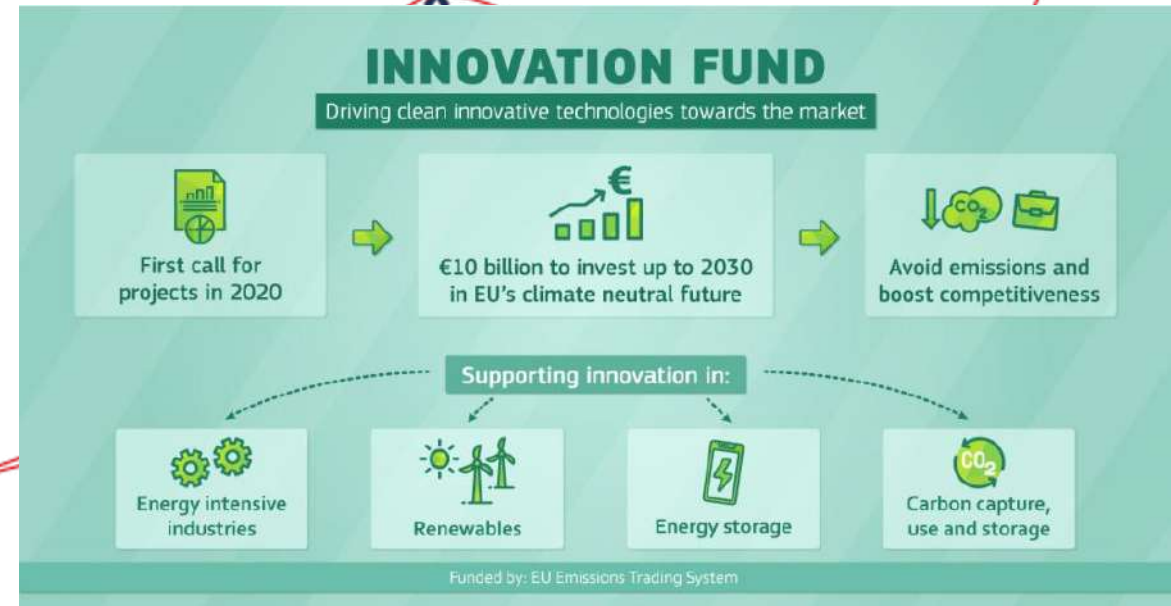
# \* European funding programmes 3

The [Innovation Fund](#) focuses on:

- Innovative low-carbon technologies and processes in energy-intensive industries, including products substituting carbon intensive ones
- Carbon capture and utilisation (CCU)
- Construction and operation of carbon capture and storage (CCS)
- Innovative renewable energy generation
- Energy storage

## [Eureka Eurostars](#)

Largest international funding programme for SMEs wishing to collaborate on R&D projects that create innovative products, processes or services for commercialisation. Your consortium must spotlight an innovative SME as the main project participant.



# \* European funding programmes 4



For innovators, start-ups and scale-ups

Research and Innovation, Education, Capital,  
Coaching, Entrepreneurship





# Information sources

- EU Funding & Tender opportunities portal
- Access to finance portal
- H2020 project SmartSpend
- Enterprise Europe Network
- European Investment Bank InnovFin Advisory
- European Business Angel Network (EBAN)
- Whitehelm Capital Smart City Investment Fund (SCIF)

# \* Horizon calls – how does it work



Destination: Sustainable, secure and competitive energy supply

Unique call number

## HORIZON-CL5-2022-D3-01-10: Interoperable solutions for flexibility services using distributed energy storage

Cluster 5: Climate, Energy & Mobility ([WP8](#))

Work programme year

Type of action: IA  
Budget (EUR million): 7  
Expected EU contribution/project (EUR million): 2-3  
Opening: 14 October 2021  
Closing: 26 April 2022 17:00 Brussels time  
Single Stage  
TRL 5-7 at end of project

### Topic description:

Expected outcome: description of the concrete results the project is expected to deliver (during the project lifespan) and the outcome (medium-term effect of the project results)

Scope: what activities should be included in the project

### NEW

Destination description (policy context and targets: Key Strategic Objectives / KSO)

Expected impacts: credible pathways towards scientific, societal and economic impact of the project (longer-term)





# From H2020 to Horizon Europe

## SCIENTIFIC IMPACT

1. EU world-class excellence in science
2. Emergence of new technologies or fields of science in the EU
3. Better transnational and cross-sector coordination of R&I efforts

1. Creating high-quality new knowledge
2. Strengthening human capital in R&I
3. Fostering diffusion of knowledge and Open Science

## SOCIETAL IMPACT

4. Better contribution of R&I to tackle societal challenges
5. EU steering the international agenda to tackle global SCs
6. Better societal acceptance of science and innovative solutions

4. Addressing EU policy priorities through R&I
5. Delivering benefits & impact via R&I missions
6. Strengthening the uptake of innovation in society

## ECONOMIC IMPACT

7. Diffusion of innovation generating jobs, growth and investments
8. Strengthened competitive position of European industry
9. Better innovation capabilities of EU firms

7. Generating innovation-based growth
8. Creating more and better jobs
9. Leveraging investments in R&I

# Scientific impact indicators

| Toward scientific impact                          | Short-term   | Medium-term   | Longer-term   |
|---|--|---|---|
| Creating high-quality new knowledge               | Publications – Number of FP peer reviewed scientific publications  | Citations – Field-Weighted Citation Index of FP peer reviewed publications                    | World-class science – Number and share of peer reviewed publications from FP projects that are core contribution to scientific fields                         |
| Strengthening human capital in R&I                | Skills – Number of researchers having benefitted from upskilling activities in FP projects   | Careers – Number and share of upskilled FP researchers with more influence in their R&I field | Working conditions – Number and share of upskilled FP researchers with improved working conditions  |
| Fostering diffusion of knowledge and Open Science | Shared knowledge – Share of FP research outputs (open data / publication / software etc) shared through open knowledge infrastructures | Knowledge diffusion – Share of open access FP research outputs actively used / cited          | New collaborations – Share of FP beneficiaries having developed new transdisciplinary / trans-sectoral collaborations with users of their open FP R&I outputs |

# Societal impact indicators

| Toward societal impact                              | Short-term   | Medium-term  | Longer-term   |
|---|--|--|---|
| Addressing EU policy priorities through R&I         | Outputs – Number and share of outputs aimed at addressing specific EU policy priorities                                    | Solutions – Number and share of innovations and scientific results addressing specific EU policy priorities                | Benefits – Aggregated estimated effects from use of FP funded results, on tackling specific EU policy priorities, including contribution to the policy and law-making cycle |
| Delivering benefits and impact through R&I missions | R&I mission outputs – Outputs in specific R&I missions   | R&I mission results – Results in specific R&I missions   | R&I mission targets met – Targets achieved in specific R&I missions   |
| Strengthening the uptake of innovation in society   | Co-creation – Number and share of FP projects where EU citizens and end-users contribute to the co-creation of R&I content | Engagement – Number and share of FP beneficiary entities with citizen and end-users engagement mechanisms after FP project | Societal R&I uptake – Uptake and outreach of FP co-created scientific results and innovative solutions  |

# Economic impact indicators

| Toward economic impact             | Short-term   | Medium-term   | Longer-term   |
|------------------------------------|--|---|---|
| Generating innovation-based growth | Innovative outputs – Number of innovative products, processes or methods from FP (by type of innovation) & Intellectual Property Rights applications | Innovations – Number of innovations from FP projects (by type of innovation) including from awarded IPRs  | Economic growth – Creation, growth & market shares of companies having developed FP innovations                             |
| Creating more and better jobs      | Supported employment – Number of FTE jobs created, and jobs maintained in beneficiary entities for the FP project (by type of job)                   | Sustained employment – Increase of FTE jobs in beneficiary entities following FP project (by type of job) | Total employment – Number of direct and indirect jobs created or maintained due to diffusion of FP results (by type of job) |
| Leveraging investments in R&I      | Co-investment – Amount of public & private investment mobilised with the initial FP investment   | Scaling up – Amount of public & private investment mobilised to exploit or scale up FP results            | Contribution to ‘3% target’ – EU progress towards 3% GDP target due to FP   |

# \* Canvas part 1

## SPECIFIC NEEDS

*What are the specific needs that triggered this project?*

### Example 1

Most airports use process flow-oriented models based on static mathematical values limiting the optimal management of passenger flow and hampering the accurate use of the available resources to the actual demand of passengers.

### Example 2

Electronic components need to get smaller and lighter to match the expectations of the end-users. At the same time there is a problem of sourcing of raw materials that has an environmental impact.

## EXPECTED RESULTS

What do you expect to generate by the end of the project?

### Example 1

#### **Successful large-scale demonstrator:**

Trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management.

#### **Algorithmic model:**

Novel algorithmic model for proactive airport passenger flow management.

### Example 2

Publication of a **scientific discovery on transparent electronics.**

**New product:** More sustainable electronic circuits.

**Three PhD students trained.**

## D & E & C MEASURES

What dissemination, exploitation and communication measures will you apply to the results?

### Example 1

**Exploitation:** Patenting the algorithmic model.

#### **Dissemination towards the scientific community and airports:**

Scientific publication with the results of the large-scale demonstration.

**Communication towards citizens:** An event in a shopping mall to show how the outcomes of the action are relevant to our everyday lives.

### Example 2

**Exploitation of the new product:** Patenting the new product; Licencing to major electronic companies.

#### **Dissemination towards the scientific community and industry:**

Participating at conferences; Developing a platform of material compositions for industry; Participation at EC project portfolios to disseminate the results as part of a group and maximise the visibility vis-à-vis companies.



# Canvas part 2

## TARGET GROUPS

*Who will use or further up-take the results of the project? Who will benefit from the results of the project?*

Example 1

**9 European airports:**

Schiphol, Brussels airport, etc.

**The European Union aviation safety agency.**

**Air passengers (indirect).**

Example 2

**End-users:** consumers of electronic devices.

**Major electronic companies:** Samsung, Apple, etc.

**Scientific community** (field of transparent electronics).

## OUTCOMES

*What change do you expect to see after successful dissemination and exploitation of project results to the target group(s)?*

Example 1

**Up-take by airports:** 9 European airports adopt the advanced forecasting system demonstrated during the project.

Example 2

**High use of the scientific discovery published** (measured with the relative rate of citation index of project publications).

**A major electronic company** (Samsung or Apple) **exploits/uses the new product** in their manufacturing.

## IMPACTS

*What are the expected wider scientific, economic and societal effects of the project contributing to the expected impacts outlined in the respective destination in the work programme?*

Example 1

**Scientific:** New breakthrough scientific discovery on passenger forecast modelling.

**Economic:** Increased airport efficiency  
Size: 15% increase of maximum passenger capacity in European airports, leading to a 28% reduction in infrastructure expansion costs.

Example 2

**Scientific:** New breakthrough scientific discovery on transparent electronics.

**Economic/Technological:** A new market for touch enabled electronic devices.

**Societal:** Lower climate impact of electronics manufacturing (including through material sourcing and waste management).

# \* Further information / assistance

