SAC Symposium
Building a Scientific Narrative on Impact and the Societal Value of Science
Session 1

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Political context

"Make sure that every action we take delivers maximum performance and value added"

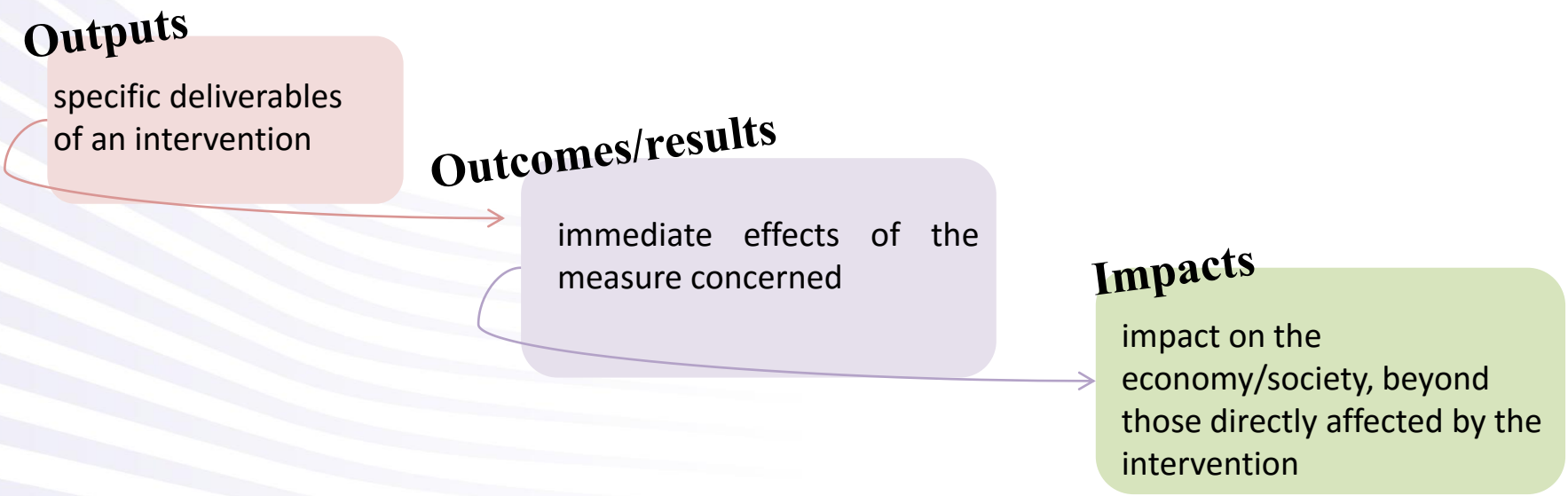
Jean-Claude Juncker

Political Context

"We have an obligation and an incentive to be much better at understanding and communicating the impact of what we do. Not only to ministers of finance, but to the general public!."

Commissioner of Research and Innovation Carlos Moedas

BFOR: Performance based budgeting - from input to measurable results



Better Regulation

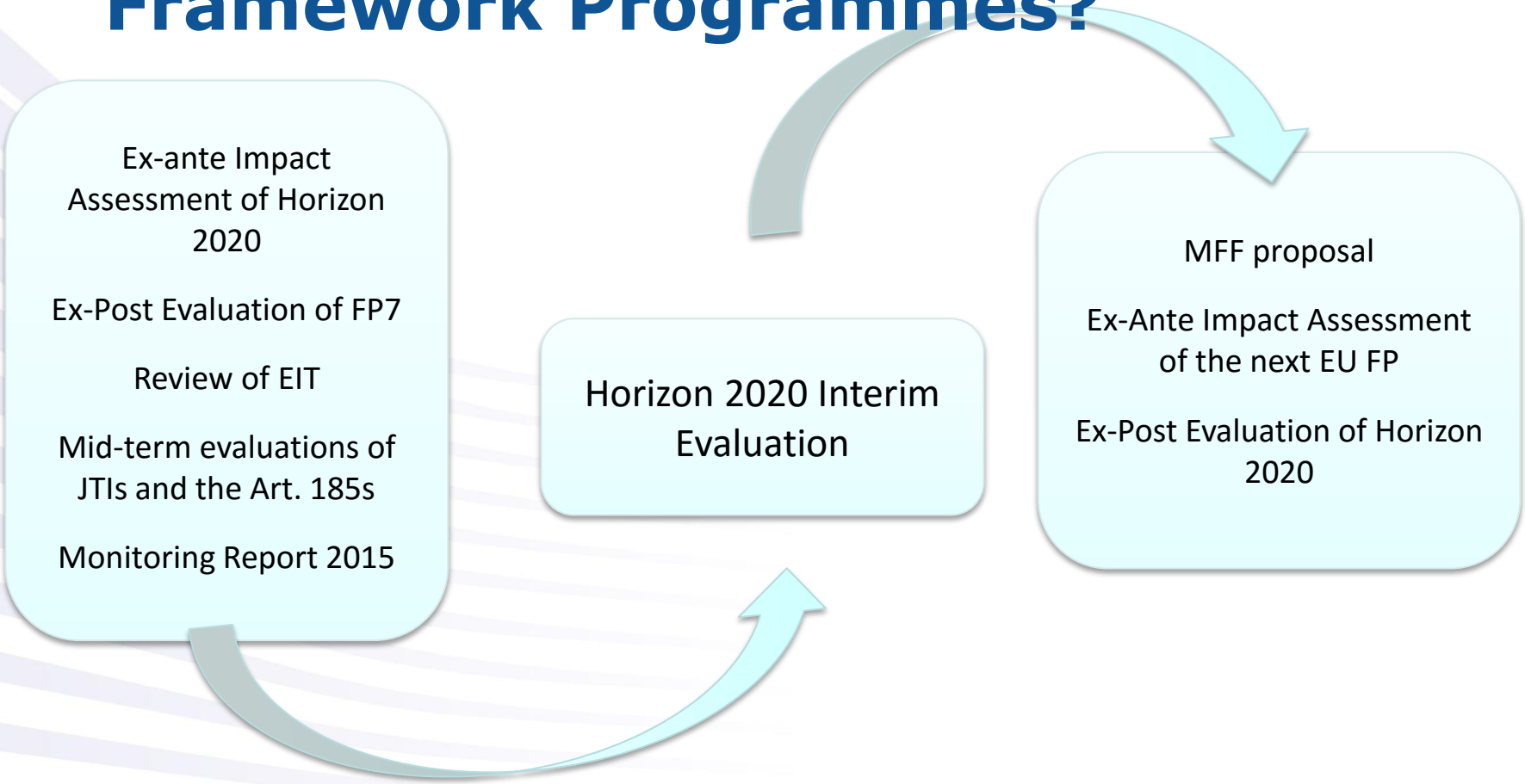
Evidence-based Policy making

Reduction of administrative burden/simplification

Impact assessments for new EU policy initiatives

Monitoring and evaluation of existing EU policy initiatives

When do we report on impacts of EU Framework Programmes?



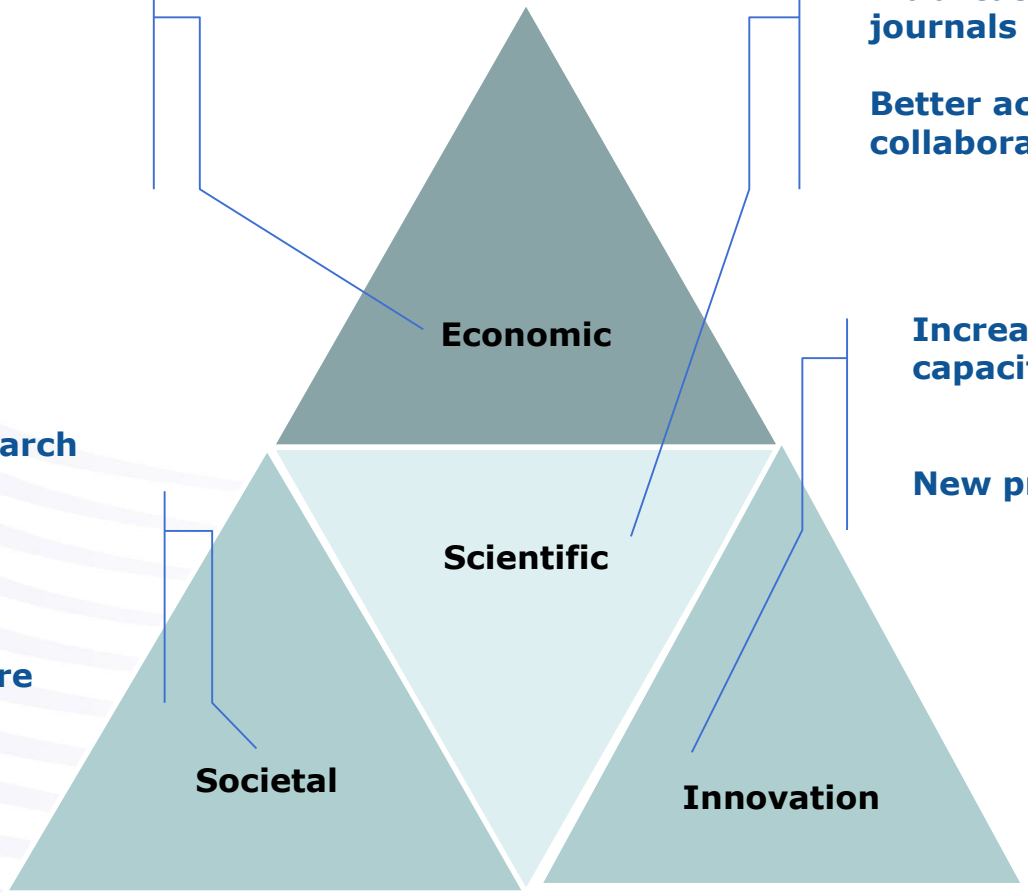
Examples of different types of impact

Jobs creation

Growth due to R&I investments

Publications in high impact journals

Better academic/private collaboration



Increased innovation capacity in private sector

New products and services

Progress on cancer research

Better understanding of radicalisation

Improved health and care sector

Horizon 2020 Impact Assessment looked at….

- Structuring effects
- Network effects
- Promoting scientific and technological excellence
- Leverage effects
- Innovation impacts
- Wider socio-economic impacts
  - **Job creation**
  - **Contribution to societal challenges**
  - **….**

Horizon 2020 objectives

- Horizon 2020 shall maximise Union added value and impact, focusing on objectives and activities that cannot be efficiently realised by Member States acting alone.

- General objective:
  - to contribute to building a society and an economy based on knowledge and innovation across the Union;
  - to support the implementation of the Europe 2020 strategy and other Union policies, as well as the achievement and functioning of the European Research Area (ERA).

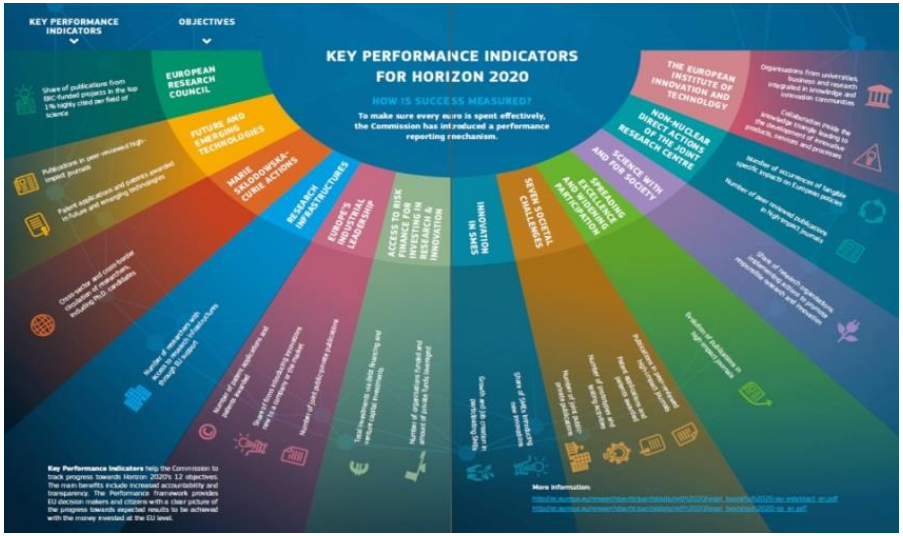
- Specific objectives/three pillars

Interim Evaluation of Horizon 2020

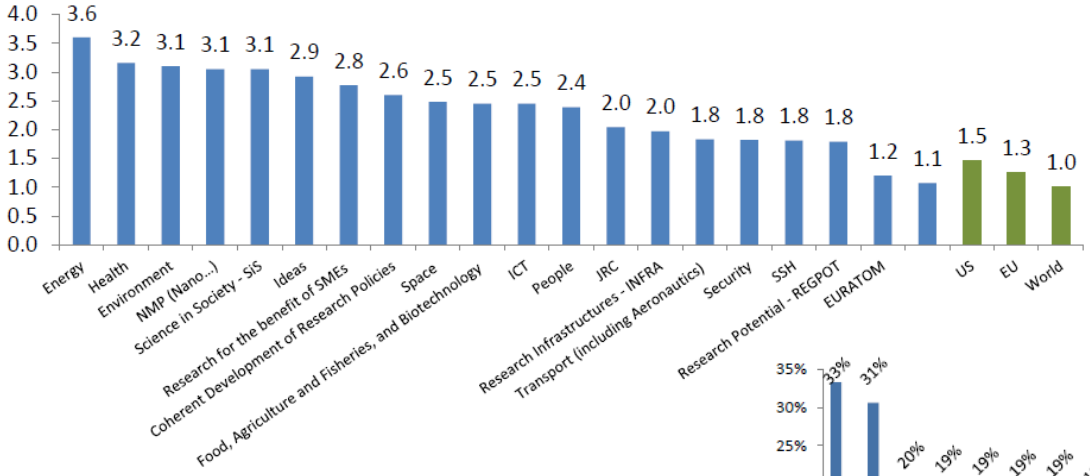
- ✓ *Report on results and progress toward achieving the objectives*
- ✓ *Cost-effectiveness*
- ✓ *Relevance*
- ✓ *Coherence*
- ✓ *EU added value*

Monitoring & evaluation of Horizon 2020

- Key Performance indicators
  - 3% target
  - Innovation output indicators
  - researchers
- Indicators for cross-cutting issues
  - Eg publications and patents

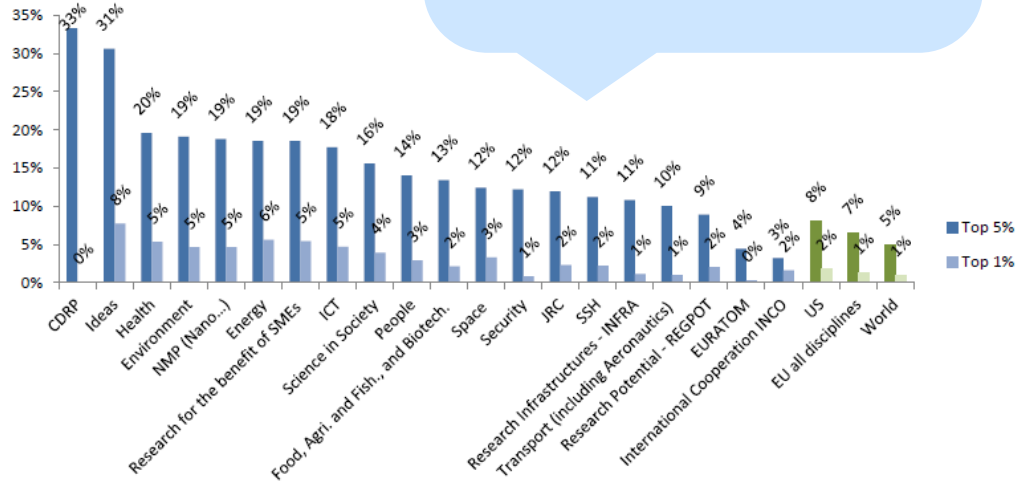


Ex-post evaluation of FP7 – Indicators for scientific excellence



Graph 13: Field weighted citation impact of publications (2007-2015)
Source: SciVal based on Corda-Sesam-Respir

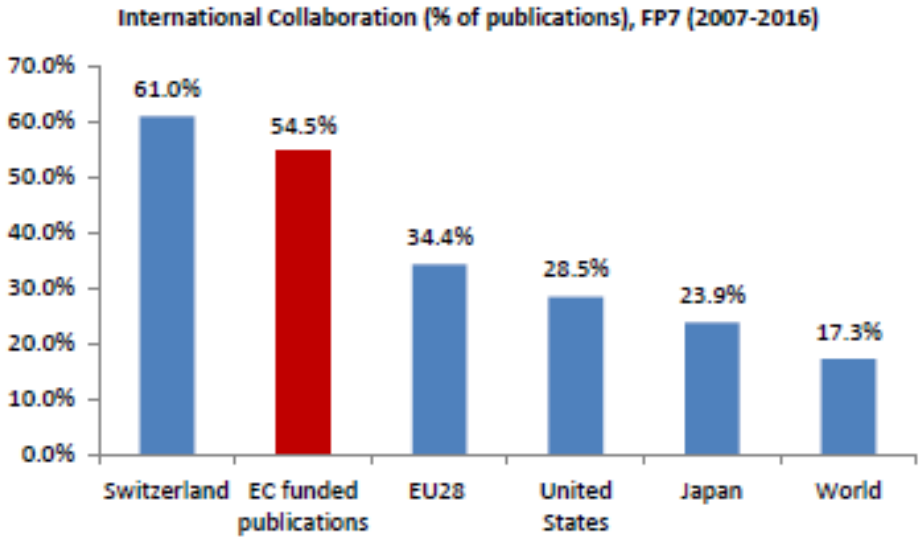
An important share of FP7 publications are among the top 1% and top 5% highly cited publications in their disciplines, in most cases well above the overall EU average and the US average



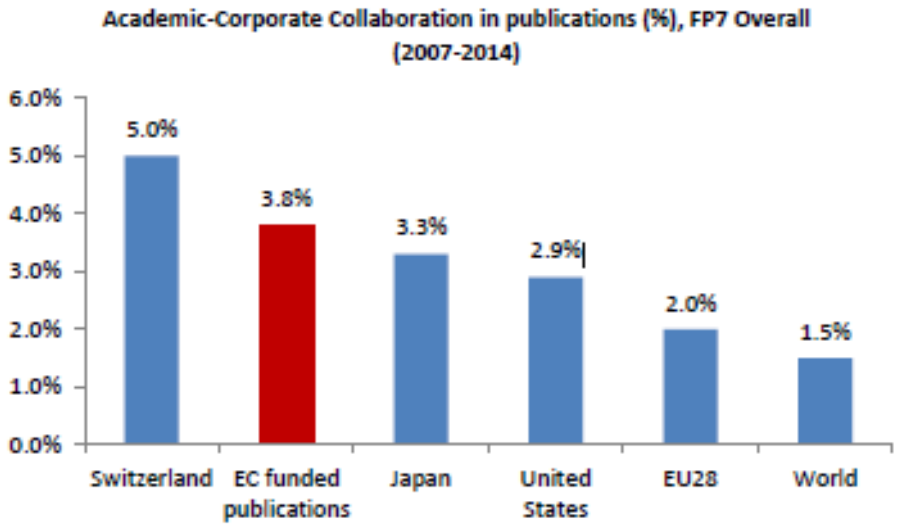
Graph 12: Share of the priorities' publications in top 1% and top 5% highly cited publications (2007-2015)
Source: SciVal based on Corda-Sesam-Respir

Field-weighted-citation impacts of FP7 publications are above the EU average and in most cases above the US average

The share of cross-border co-publications in all publications is higher for FP7 than for the EU, the US and the world.



Source: SciVal based on Corda-Sesam-Respir data



Source: SciVal based on Corda-Sesam-Respir data

Researchers in institutions participating in the FPs produce more publications and patent applications than researchers in non-participating institutions. Maybe because of higher academic-corporate collaboration in publications.

ERC – an example of impact of research

7% of ERC publications in top 1% of most highly cited publications

Evaluation of July 2016:

More than 70% of projects evaluated made scientific breakthroughs of major advances

30% had a very positive impact on the careers of researchers

Experts estimate that at least 75% of the research outputs will have an impact on the economy or society in the medium and long term.

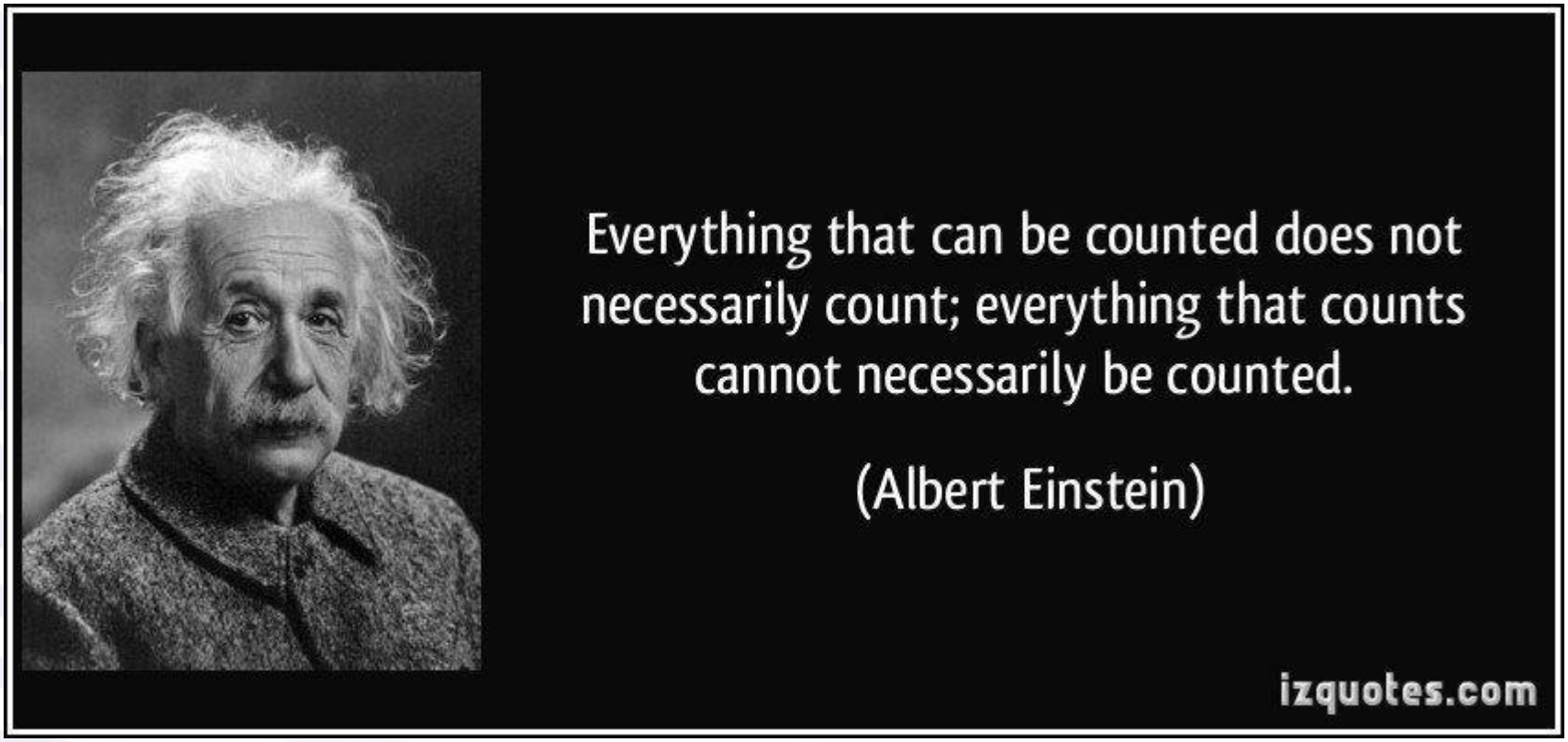
Impact of research - challenges

- Impact of Research difficult to measure (problem of attribution, intended/unintended effects, effects dispersed throughout economy, etc.)
- Research takes time to produce results, outcomes and impacts
- How to measure impact from just started and ongoing projects?
- FPs accounted for less than 10% of total public R&D expenditures in Europe
- No comparable benchmark

Outlook for the future

- Work with stakeholders to define impact categories and streamline indicators (short, medium and long term) by linking them to an impact category
- Improve benchmarking
- Portfolio analysis and towards more aggregated/challenge-based success stories to demonstrate societal impact
- Continue to report on results and impacts of previous FPs
- Work with Member State to assess FP impact at national level

Thank you for your attention



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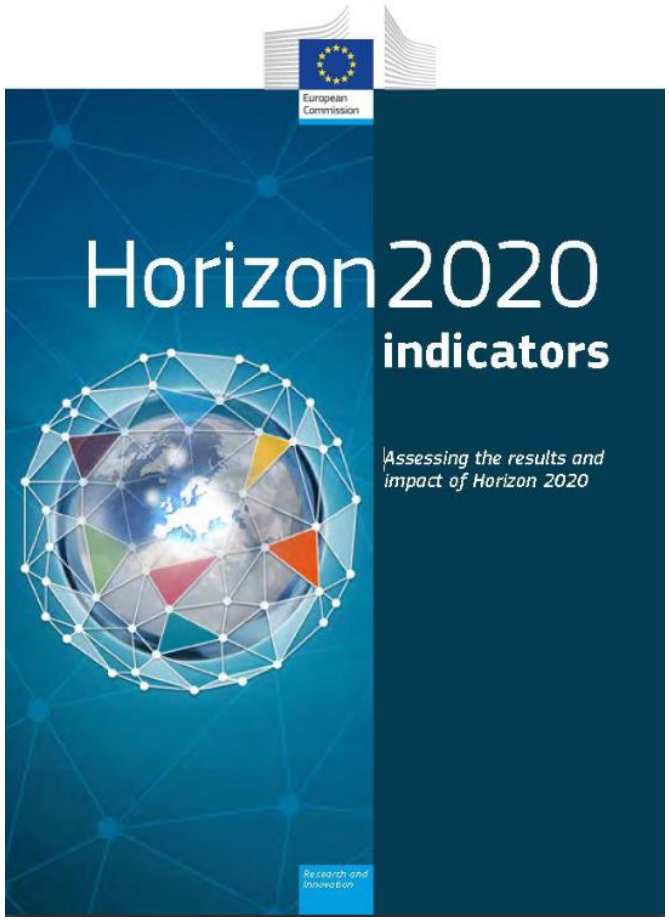
Find all the indicators for monitoring and evaluation here



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Find more information on impact of Research and Innovation funding here