

11.00 - 12.15

# Funding Agencies

*Joanna Makocka (chair) – National Centre for Research & Development*

*Sven Stafström – Swedish Research Council*

*Stig Slipersæter – Research Council Norway*

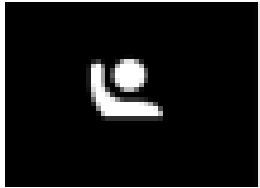
## Funding Agencies



Smocza Jama room

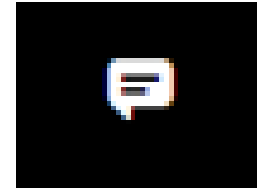
# Impact of Science

4-6 November, Krakow



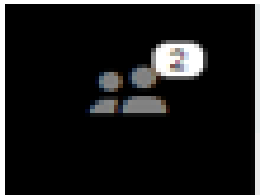
## Broadcast permission:

- Turn on your microphone and/or camera
- Participate in the discussion



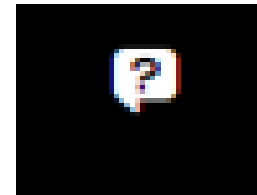
## Conversations:

- General remarks
- Discussion
- News (links)



## Who are the attendees?

- Speakers
- Participants



## Q&A:

- (Targeted) questions
- Speakers answer the questions live



## Lay out view:

Full screen, Tiled, Thumbnail



The National Centre  
for Research and Development

# INNOVATIONS FOR POLAND

The National Centre for  
Research and Development

Joanna Makocka  
International Cooperation Department



Fundusze  
Europejskie



Rzeczpospolita  
Polska



Narodowe Centrum  
Badań i Rozwoju

Unia Europejska  
Europejskie Fundusze  
Strukturalne i Inwestycyjne



# The National Centre for Research and Development



- ✓ **executive agency** of the Ministry of Science and Higher Education **established in 2007**
- ✓ **leading national agency** funding applied research and supporting commercialisation
- ✓ **combines the world of science and business** creating condition for R&D activities
- ✓ **co-finances R&D projects** conducted by public and private entities
- ✓ implements tasks serving **the social and economic development of Poland**



# The National Centre for Research & Development

The largest R&D funding agency in Central Europe



## DIVERSITY OF ACTIVITIES

**<50 programmes in  
2014-2019**



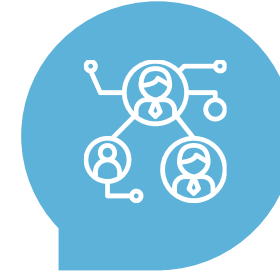
## FINANCIAL RESOURCES

**over EUR 1 bn  
spent annually to  
support R&D activities**



## TERRITORIAL OUTREACH

**12 bilateral agreements  
with: Singapore,  
Taiwan, Israel and EU  
Member States**



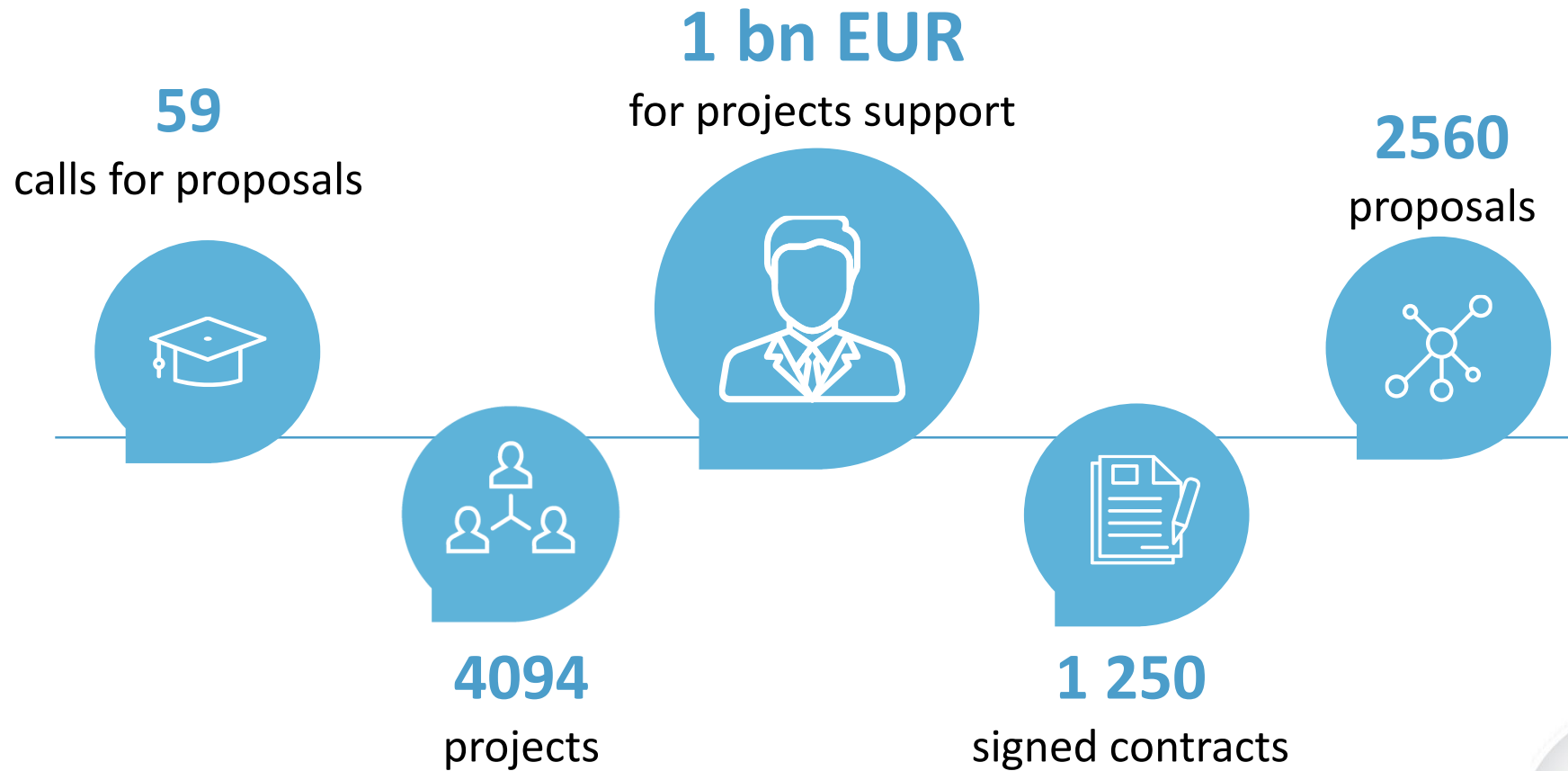
## INSTITUTIONAL OUTREACH

**cooperation with:  
R&I funding agencies,  
numerous consortia  
and partnerships**



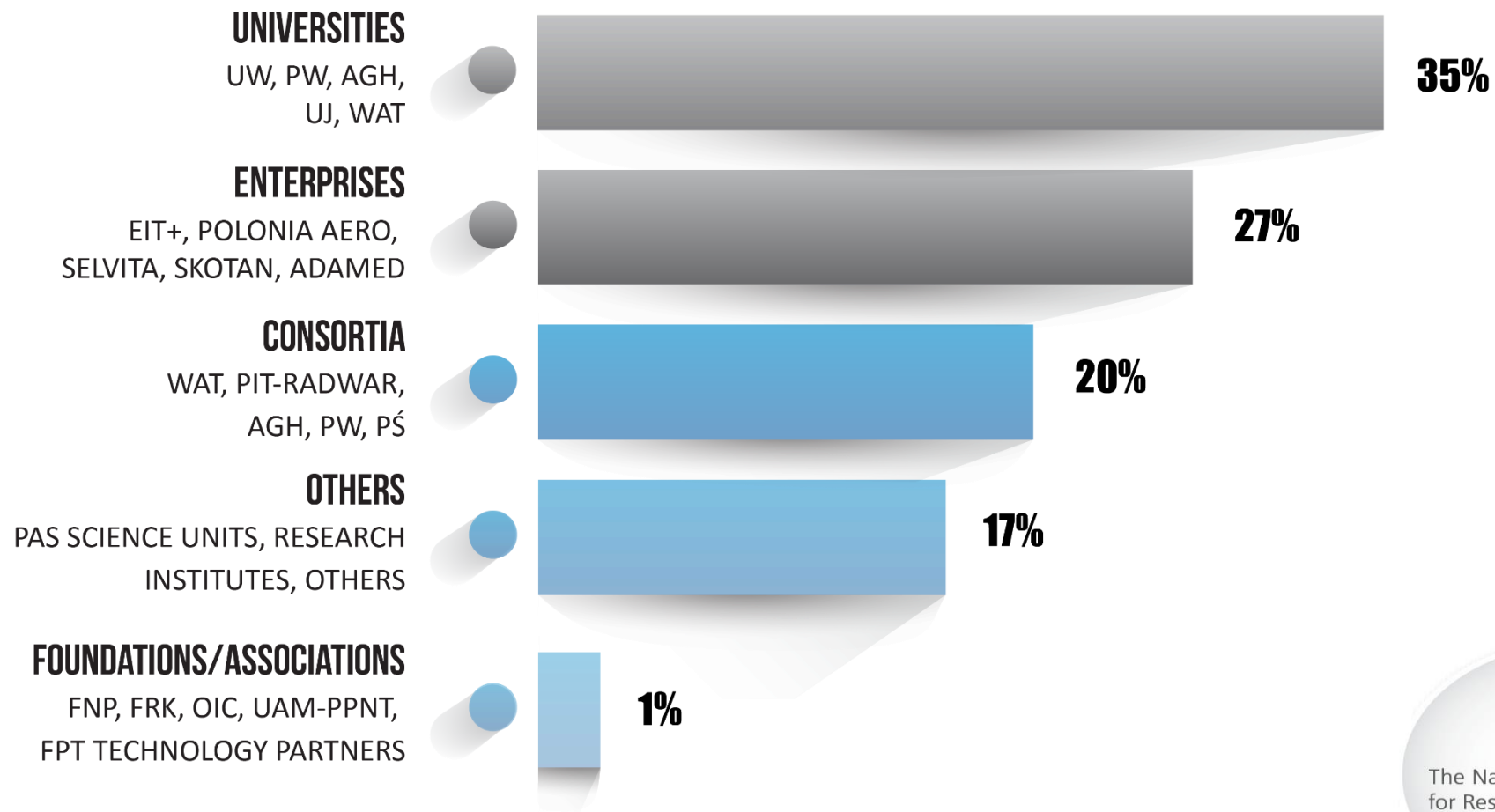
The National Centre  
for Research and Development

# NCBR in numbers in 2019



# NCBR Beneficiaries

joint share in total funding in 2008-2017






---


## international cooperation programmes



complementary source for funding nationally relevant research activities



various different programmes - over 70 international initiatives in the NCBR portfolio



international project means international research & international team



research challenge can be dealt better through joint transnational efforts



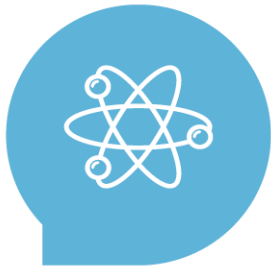
The National Centre  
for Research and Development

# international cooperation programmes



## WHO CAN APPLY?

international consortium with the participation of Polish research organisation and/or company



## FOR WHAT?

various research topics – medicine, agriculture, environmental protection, electromobility, technology, transport



## WHERE?

over 20 competitive calls for proposals each year



# Calls for proposals – evaluation criteria



scientific value



level of Innovation and technology transfer



cooperation within the project and contribution to the achievement of the project's objective



adequate material and human resources necessary to perform project



project partners achievements



project costs



economic effects and potential impact through the development, dissemination and use of project results



The National Centre  
for Research and Development

# International project– impact assesment



WP progress and execution



communication plan



project schedule implementation



economic and social impact of the project results



achivement of project goals and results



Implementation and commercialisation of project results



The National Centre  
for Research and Development



The National Centre  
for Research and Development

**THANK YOU  
FOR YOUR  
ATTENTION**

**The National Centre  
for Research and Development**  
47a Nowogrodzka Str.  
00-695, Warsaw, Poland

Follow us:



Fundusze  
Europejskie



Rzeczpospolita  
Polska



Narodowe Centrum  
Badań i Rozwoju

Unia Europejska  
Europejskie Fundusze  
Strukturalne i Inwestycyjne





# Impact – a research funders perspective

Sven Stafström  
Director General  
Swedish Research Council



# The role of the Swedish Research Council

The Swedish Research Council plays a leading role in developing Swedish research of the highest scientific quality, thereby contributing to society's development.

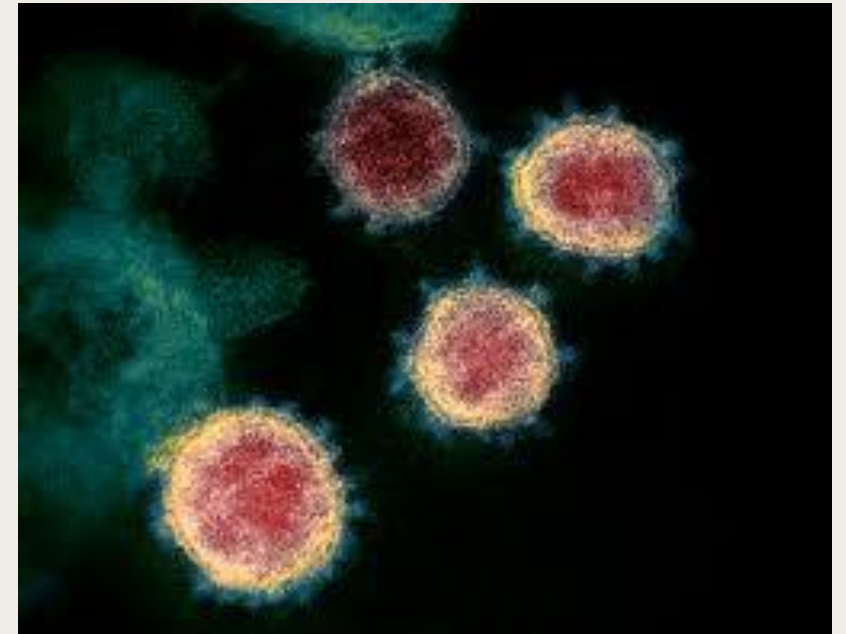
- We provide funding for researchers-initiated research (share of total funding, approx. 60%)
- We initiate and support strategic initiatives in research (10%)
- We work to ensure that researchers gain access to advanced research infrastructure (30%)
- We analyze the conditions of the research, evaluate research and give the government advice on future research policy
- We coordinate and develops communication about the significance, results and conditions of research
- We promote international collaborative research



# Impact of science - A research funders perspective/responsibility

Policies and activities that are aimed at increasing the impact of science (“for the benefit to humankind”)?

- Research programs: balance between long- and short-term goals
- Assessment of proposals: assessment criteria that match the call text
- Carry out (use-oriented) research: involvement of stakeholders
- Assessment of research output: methodology!







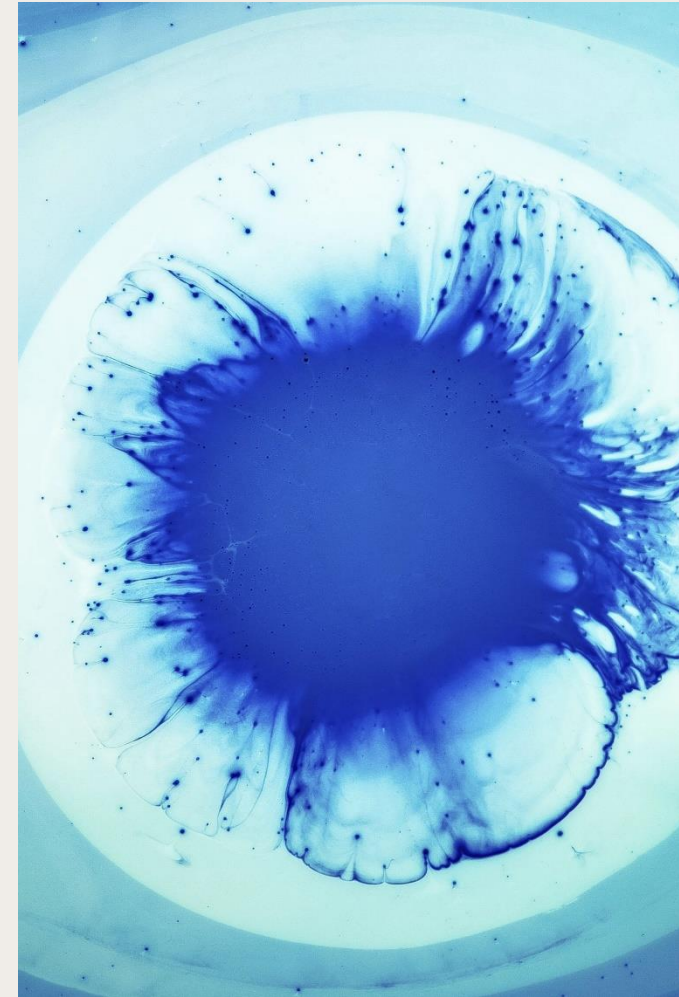
# National research policies should state a good balance between long- and short-term goals

- A major part of academic research should be focused on creating a broad basis of knowledge
- Major societal challenges can only be solved by a combination of curiosity-driven and use-oriented research
- Collaborative research involving stakeholders is key to achieve impact
- Funding programs and call texts have to be clear about the aim and the expected goals



# How can assessment help to improve research impact

- Criteria for (*ex ante*) assessment of grant proposals should have a direct relation to the call text – scientific impact only or, in addition to scientific impact, societal impact, economic impact etc.
- *Ex post* assessment of the output of research should include criteria related to impact, both for curiosity-driven and use-oriented research





# Statement of Principles of Societal and Economic Impact

- GRC 2019 Statement of Principles on Expectations of Societal and Economic Impact
- The DORA declaration: for the purposes of research assessment (*ex post*), consider
  - the value and impact of all research outputs (including datasets and software) in addition to research publications,
  - a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.





# Example – Evaluation of Swedish Clinical Research 2018

An evaluation in three parts conducted by three external and independent international expert panels:

- the quality of the scientific output (panel 1)
- **the clinical significance and societal impact of the clinical research (panel 2)**
- the prerequisites for clinical research (panel 3).





# The clinical significance and societal impact of the clinical research (panel 2)

## Method:

- Self-evaluation, including impact case studies and SWOT analysis
- Indicators and statistics
- Hearings with persons in management positions



Assessment area	Assessment criteria
1. Clinical research and its impact on <b>health care and public health</b>	<ul style="list-style-type: none"><li>• Is the clinical research strategic, structured and planned in order to achieve an impact on health care and public health?</li><li>• Are there appropriate and sufficient practices and strategies for keeping the clinical practice in line with the best evidence?</li></ul>
2. Clinical research and <b>education</b>	<ul style="list-style-type: none"><li>• Is the clinical research an integrated part in the education of health care professionals?</li></ul>
3. <b>Innovation</b> and <b>life science</b>	<ul style="list-style-type: none"><li>• Is the clinical research strategic, structured and planned towards innovation and life science development?</li></ul>
4. Impact case studies	<ul style="list-style-type: none"><li>• The ability to provide examples of clinical and/or societal impact of clinical research?</li></ul>



# The result

	The quality of the scientific output	<b>The clinical significance and societal impact of the clinical research</b>	The prerequisites for clinical research
A	Very high quality	<b>Good–high quality</b>	Good–high quality
B	Very high quality	<b>Good–high quality</b>	Very high quality
C	Good–high quality	<b>Very high quality</b>	Very high quality
D	Good–high quality	<b>Good–high quality</b>	Good–high quality
E	Good–high quality	<b>Good–high quality</b>	Very high quality
F	Good–high quality	<b>Good–high quality</b>	Good–high quality
G	Good–high quality	<b>Inferior quality</b>	Good–high quality

# How can a public funders foster an ecosystem that enables impact? - perspectives from the Research Council of Norway

---

AESIS conference 2020

Stig Slipersæter  
ssl@rcn.no





---

1

Context

2

Modus operandi

3

Ex ante evaluation

4

Ex post evaluation

5

Wrapping up



# The Norwegian government's long-term plan for research and higher education

## Three overarching goals

1. Competitiveness and innovation
2. Social challenges
3. Research quality

## Five strategic areas





# The Norwegian government's goals for the Research Council

Increase scientific quality	Increase value creation in business	Meeting major societal challenges	A well-functioning research system	Good counselling
World leading research groups/institutions	Increase competitiveness	Public sector renewal	Increase participation in Horizon 2020	Well-founded R&D policy advice
Scientific excellence	Strengthened transformative capacity	Seas and oceans	Structuring changes	
	Improve knowledge transfer	Climate, the environment and clean energy		
		Societal security and social cohesion in a globalised world		

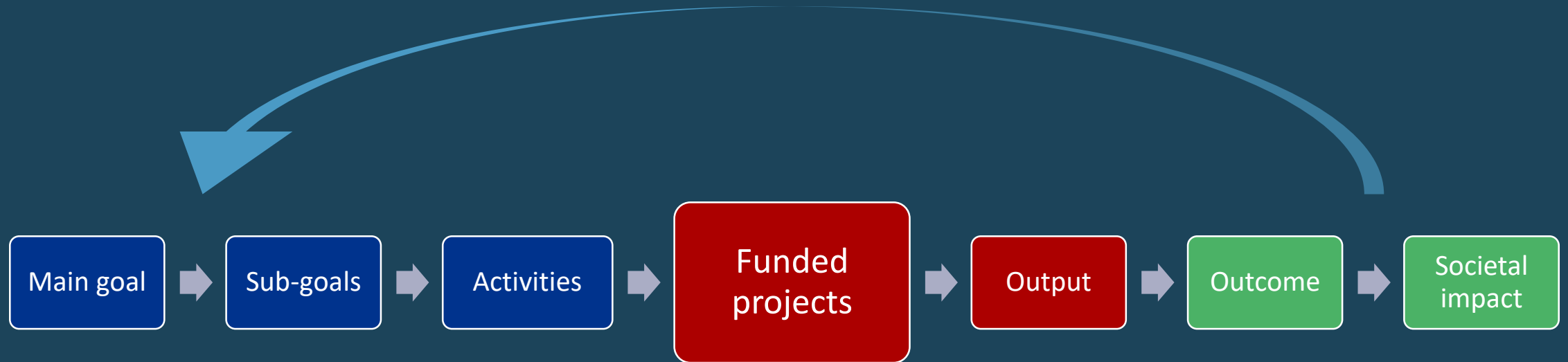


---

# RCN modus operandi



# Realizing the expectations by intervention logic





## Planning for impact

- Program plans
  - Disciplines
  - Thematic priorities
  - Types of research
  - Societal and user specific goals
  - Anticipated output, outcome and impact
- Calls outline expectations in further detail





---

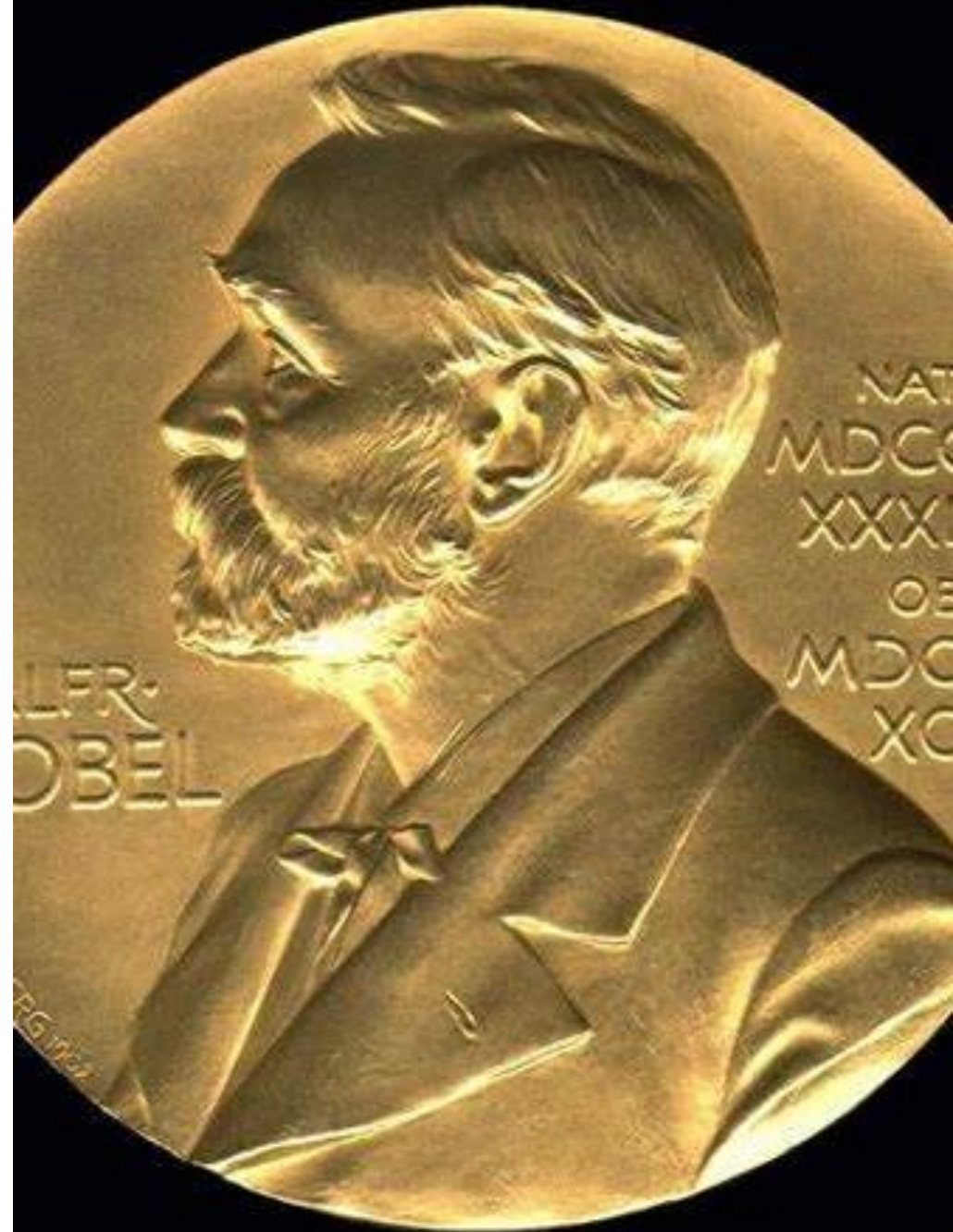
# Ex ante evaluation



## Ex ante evaluation criteria #1: Excellence

The extent to which the proposed work is ambitious, novel, and goes beyond the state-of-the-art

- Originality / Innovative research and innovation
- Solidity / robustness







## Ex ante evaluation criteria #2: Implementation

- The quality of the project management and project group
- The quality of the project organisation





## Ex ante evaluation criteria #3: Impact

- Potential for impact on research, society and business
- Plans for sharing knowledge and applying research results

### Sub-criteria for some calls

- Provide basis for value creation in Norwegian business and/or development of the public sector.
- Address UN Sustainable Development Goals

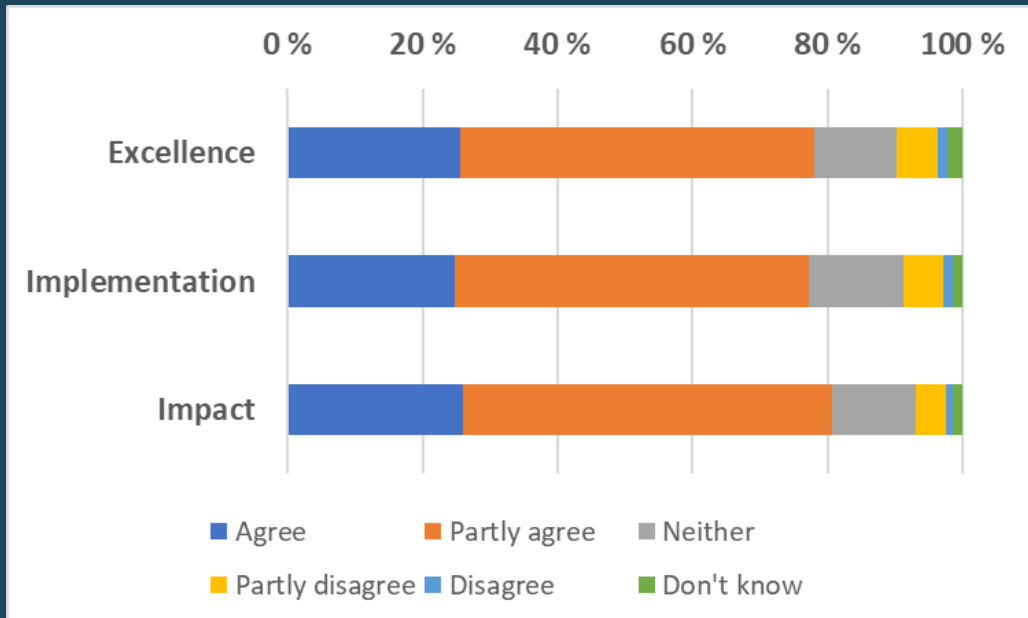




# Impact criteria – some experience

## Questionnaire to principal investigators

- *“I consider the evaluation criteria as well suited and understand its purpose”*



## Ex ante peer review of proposals

- High correlation between scores for excellence and impact

		EXCELLENCE	IMPACT
SOCIAL SCIENCES	EXCELLENCE		
	IMPACT	0.657	
	OVERALL	0.884	0.79
HUMANITIES	EXCELLENCE		
	IMPACT	0.776	
	OVERALL	0.875	0.85



---

# Ex post evaluations and analysis

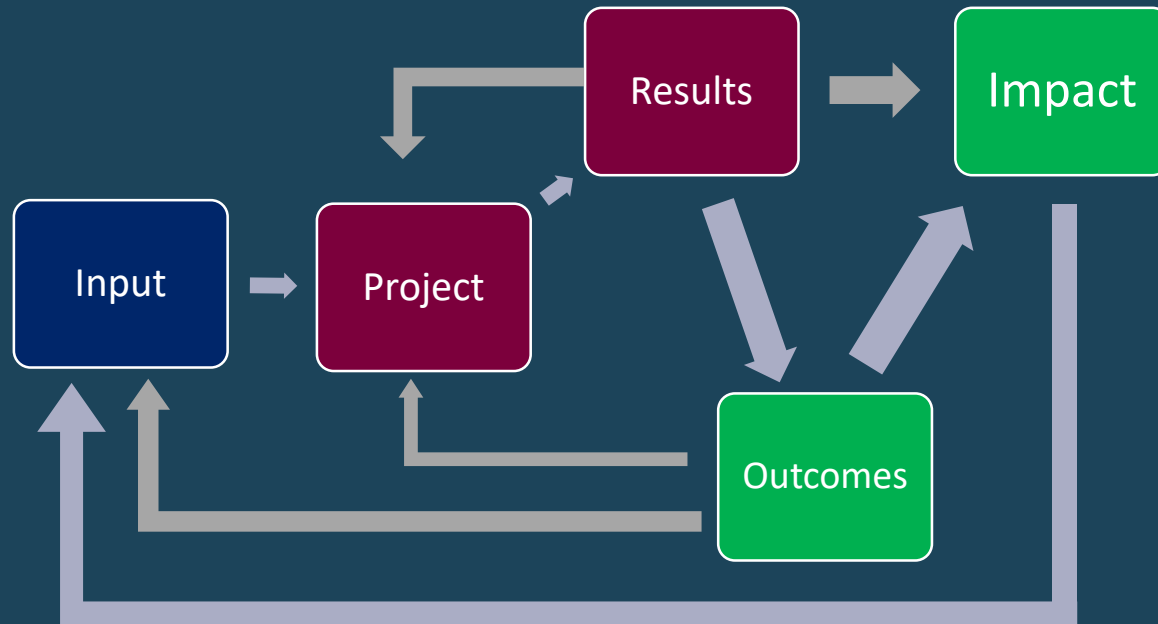
## - some examples



# How to identify and document outcomes and impacts?

## - A few well-known challenges

Reality is non-linear



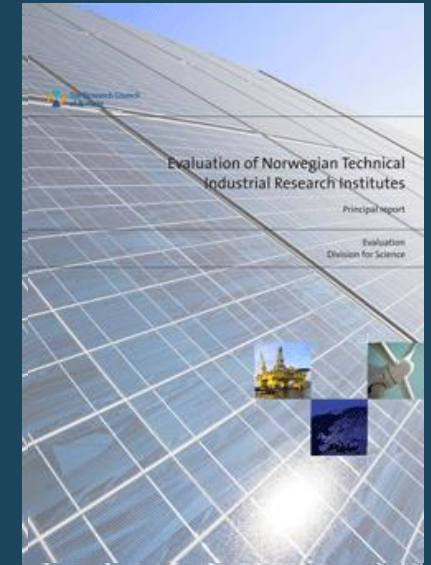
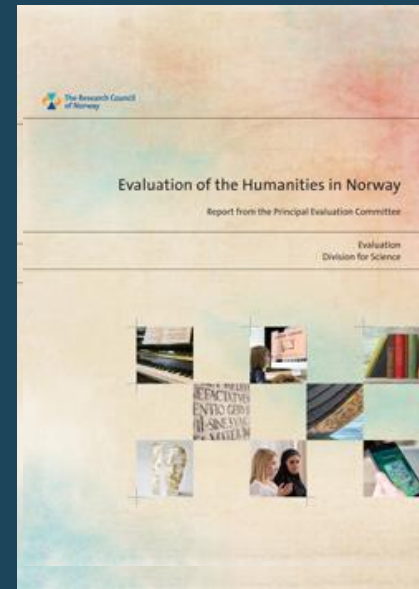
- Latency
- Attribution
- Effects develop and evolve
- Micro vs macro level
- Effects can be positive, negative or completely absent



# Impact in evaluations

Analysis of impact used in the evaluations of

- Humanities
  - Social sciences
  - Research institutes
- 
- Starting point in the British REF's definition of impact
  - Impact described by the research communities themselves
  - Has helped to make impact visible in many areas





## Econometric analysis

- Economic return on investment in research
- May be complicated and includes many variables
- Often difficult to identify groups for comparison
- Shows in general that investments in R&D and innovation are profitable, but to varying degrees

Nilsen et al., Research Policy, 2020

*“ ... policymakers should design R&D policy instruments in favour of R&D-starters, that is, shifting the focus from the intensive to the extensive margin. For other purposes, such as supporting regular R&D performers, it should be on the basis that the project will have positive spillovers, e.g. in the form of non-proprietary technology which may be beneficial to third parties.”*





## «Pathways to impact» - ex-post impact assessments

### A mixed methods approach

- Funding schemes
- Human resources
- Bibliometrics
- Dissemination, grey literature etc.
- Researchers' participation in public committees etc
- Interviews

### Types of impact analyzed

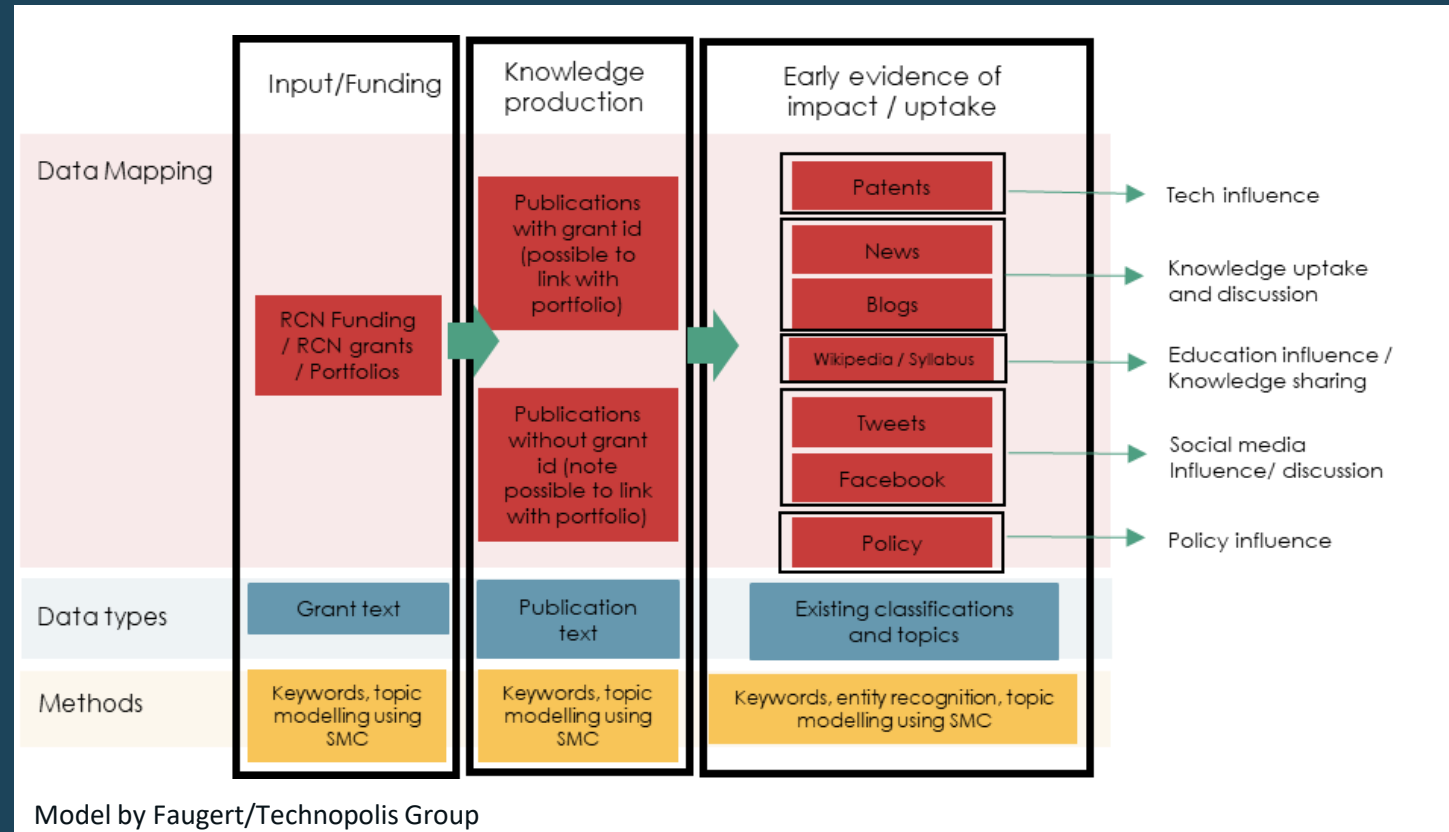
- Impact on researchers' careers
- Scientific impact
- Impact on users and practitioners
- Political and administrative effects
- Cultural effects





# Experimental data collection

- > 38 000 grants descriptions
- Key words and phrases
- Publications affiliated to grants
- Patents citing publications
- Web crawling
  - News, blogs, Wikipedia, tweets, Facebook, policy documents ...

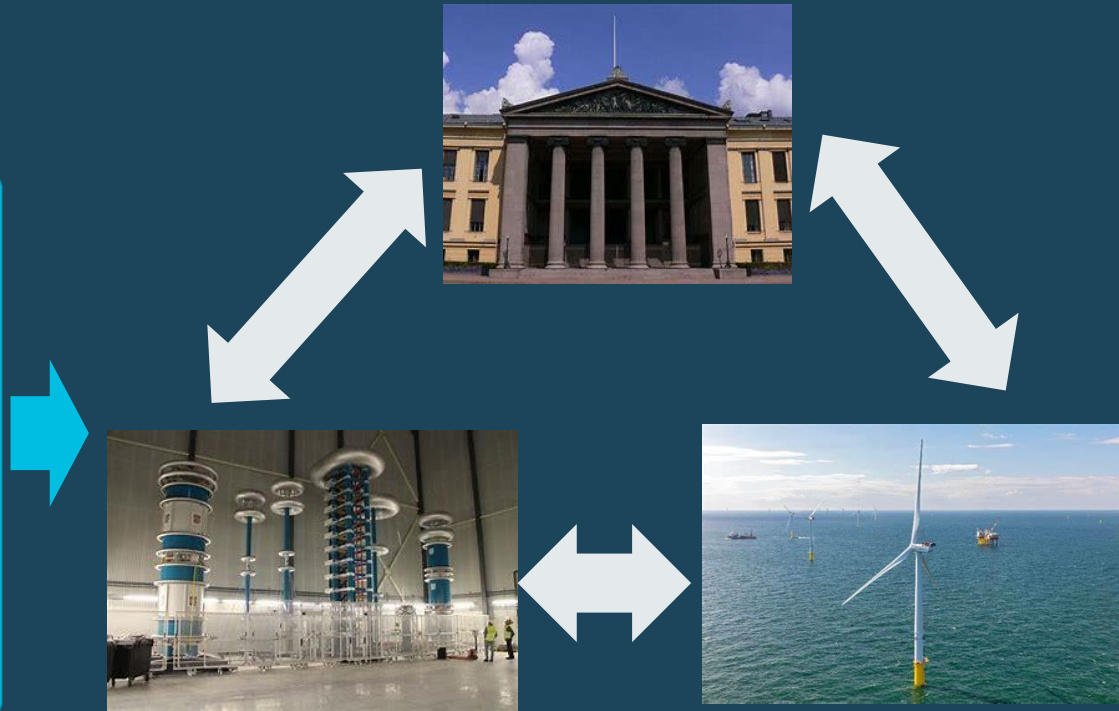




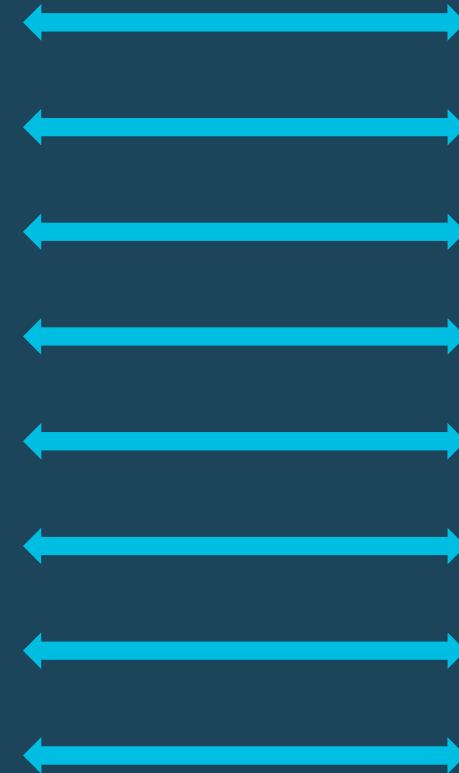
# Wrap up: Focusing impact and knowing how it happens

**RCN**

- Project selection
- Knowledge of impact pathways



Pathways to impact



Business



Public sector



Grand challenges

Thank you!

---



# Impact of Science

4-6 November, Krakow

## Up Next

12.15-12.45

Break

12.45-13.45

Interactive Debate: Implementing Impact Policies