



Impact of Social Sciences & Humanities

4-5 October 2018, Copenhagen

Gemyse 2, 13.45-15.00

# Institutional Assessment

*Tim Wilson (chair)*

*Claire Donovan*

*Maurice Vanderfeesten*



# Impact of Social Sciences & Humanities

4-5 October 2018, Copenhagen

## Institutional Assessment

Tim Wilson

*Executive Director at Social Sciences  
and Humanities Research Council, Canada*



# Impact of Social Sciences & Humanities

4-5 October 2018, Copenhagen

## Institutional Assessment

Claire Donovan

*Reader at Brunel University*

*London, UK*

[Link to presentation](#)



Impact of Social Sciences & Humanities

4-5 October 2018, Copenhagen

## Institutional Assessment

Maurice Vanderfeesten

*Innovation Manager Research*

*Library, Vrije Universiteit*

*Amsterdam, Netherlands*

# UN SUSTAINABLE DEVELOPMENT GOALS

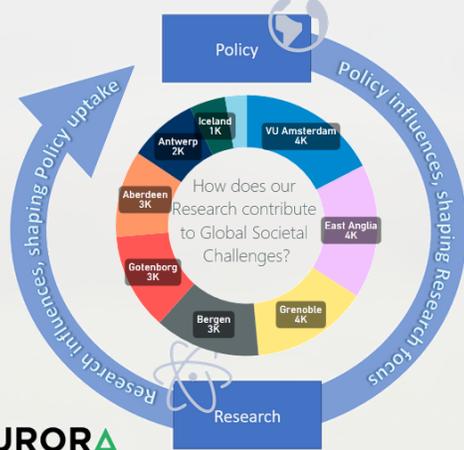
## A BIBLIOMETRIC CONCEPT ANALYSIS



**Research Performance**  
Amount of publications related to SDG's



Top 10% Journals Published Publications related to SDG's



- Aberdeen
- Antwerp
- Bergen
- Duisburg-Essen
- East Anglia
- Gotenborg
- Grenoble
- Iceland
- VU Amsterdam

**Societal Attention**  
Freely and Open Accessible Publications related to SDG's



Policy Documents Using Publications related to SDG's



# AURORA



LOOKING FURTHER

<http://bit.ly/aurora-sdg>

AESIS Oct 2018 Copenhagen | Maurice Vanderfeesten | Vrije Universiteit Amsterdam | Twitter: maurice\_

# 2015: OCCUPATION; AGAINST THE PERFORMANCE DELIVERY CULTURE OF SCIENCE AND EDUCATION



UNIVERSITY OF AMSTERDAM



Source: <https://www.at5.nl/artikelen/142130/UvA%20raamt%20schade%20Maagdenhuisbezetting%20op%20460.000%20euro>

# OVER THE YEARS: TRANSITION IN VALUING RESEARCH: METRIC TIDE, LEIDEN MANIFESTO, ...

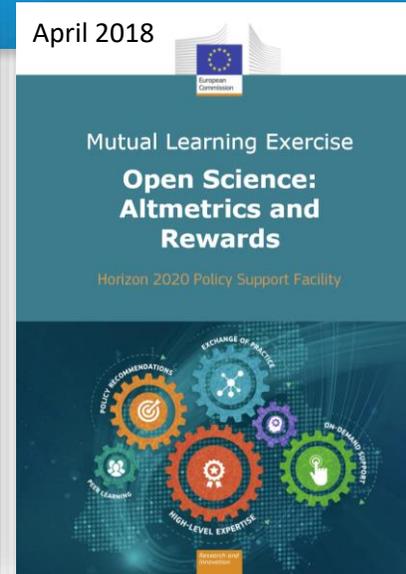
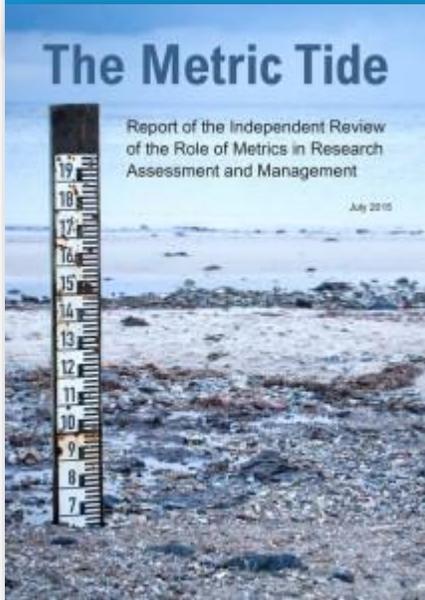
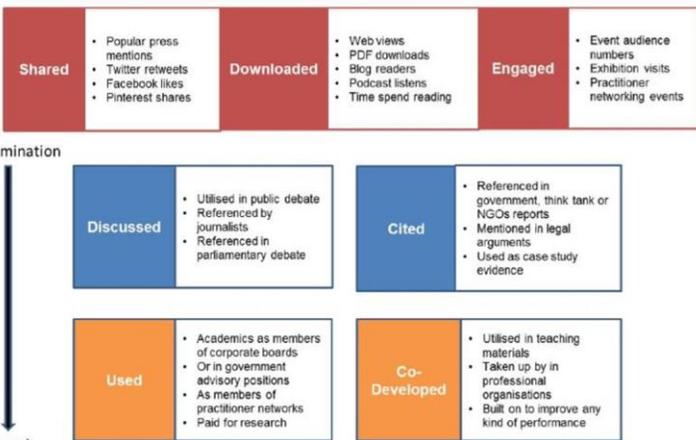


Figure 3: The Metric Tide: Report of the Independent Review of the Role of Metrics in Research

Assessment and Management.

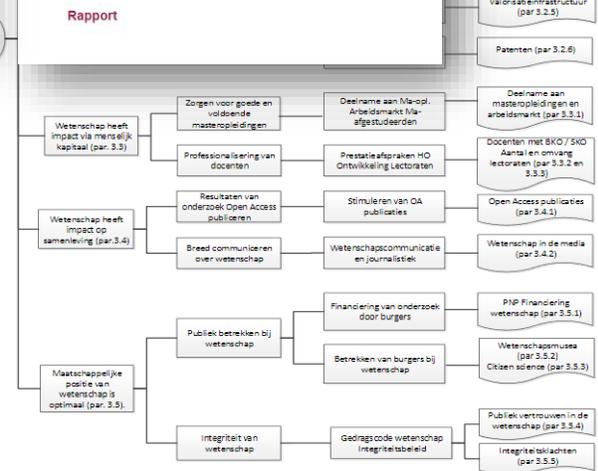


Source: Wilsdon, 2016

- 1) Quantitative evaluation should support qualitative, expert assessment.
- 2) Measure performance against the research missions of the institution, group or researcher
- 3) Protect excellence in locally relevant research.
- 4) Keep data collection and analytical processes open, transparent and simple.
- 5) Allow those evaluated to verify data and analysis.
- 6) Account for variation by field in publication and citation practices.
- 7) Base assessment of individual researchers on a qualitative judgement of their portfolio
- 8) Avoid misplaced concreteness and false precision.
- 9) Recognize the systemic effects of assessment and indicators
- 10) Scrutinize indicators regularly and update them.

<http://ec.europa.eu/research/openscience/pdf/report.pdf>

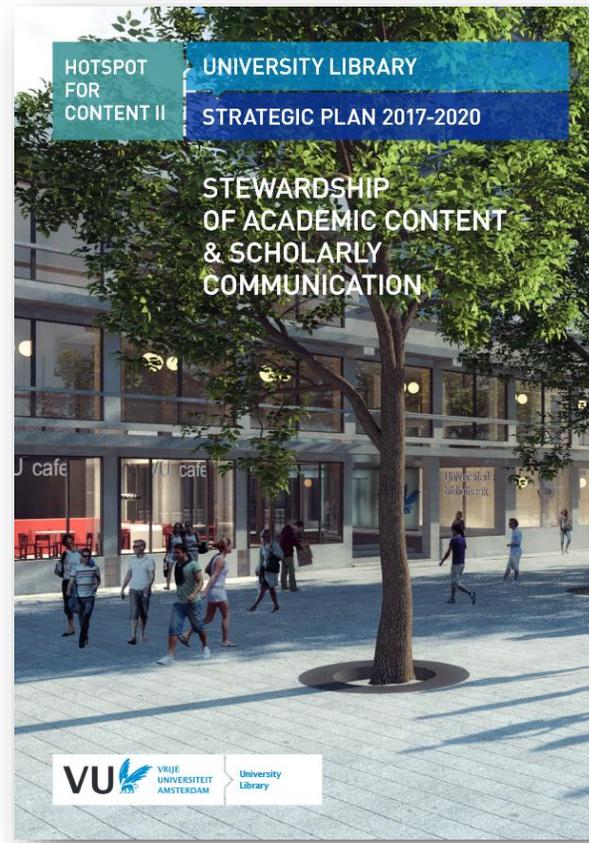
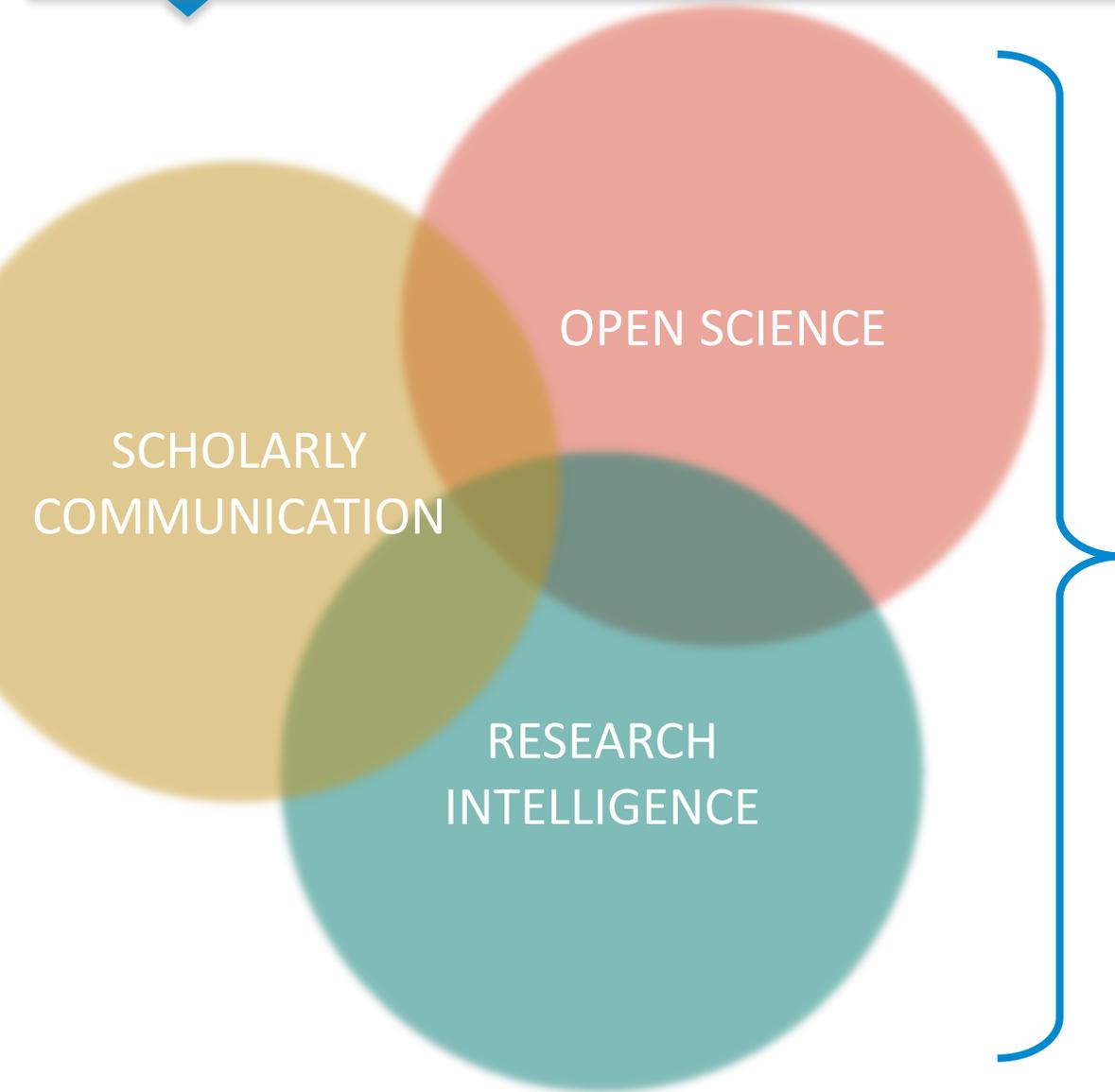
<https://rio.jrc.ec.europa.eu/en/library/mle-open-science-altmetrics-and-rewards-final-report>



Knowledge ecosystem  
<https://www.rathenau.nl/nl/kennisecosystem/balans-van-de-wetenschap-2018>



# 2016: BIG THEMES IN VU LIBRARY FOR RESEARCH SERVICES



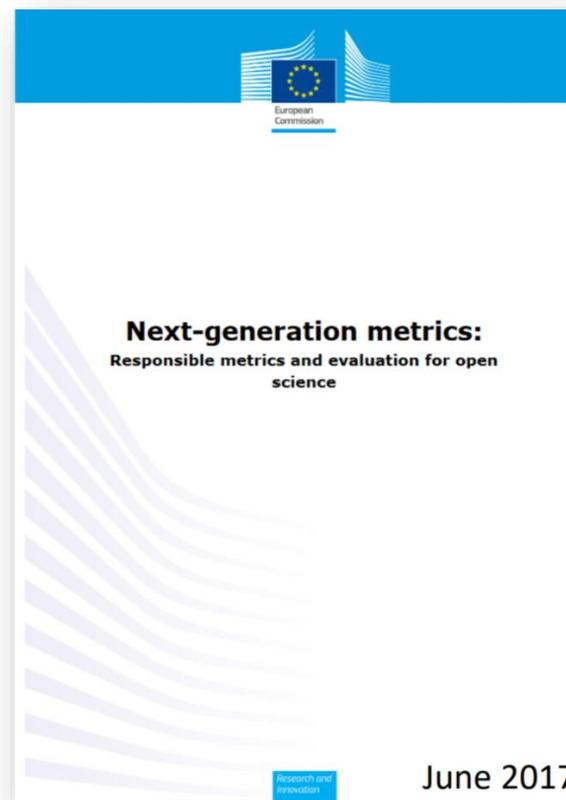
<https://ub.vu.nl/en/about-us/mission-strategic-plan/>



Strategic program:  
Open Science &  
Academic Value

# 2017: GROSS ACADEMIC VALUE, NEXT GENERATION IMPACT

“Gross National Happiness is more important than Gross National Product.”  
By: HM. Jigme Singye Wangchuk.



## Author Contributions

 Methodology	 Conceptualization	 Data Curation	 Data Visualization
Daniel Graziotin	Daniel Graziotin Pekka Abrahamsson	Daniel Graziotin	Daniel Graziotin
 Investigation	 Writing - Initial Draft	 Writing - Review	 Computation
Daniel Graziotin	Daniel Graziotin	Daniel Graziotin Pekka Abrahamsson	Daniel Graziotin
 Funding Acquisition	 Resources	 Testing	 Supervision
Pekka Abrahamsson	Pekka Abrahamsson	Pekka Abrahamsson	Pekka Abrahamsson

<https://github.com/mozillasience/PaperBadger>



UNIVERSITY OF ICELAND

*“United by our commitment to build a different kind of inclusive university community ...*

*Aurora institutions are committed to working together to find solutions to globally relevant problems”*



UNIVERSITY OF ABERDEEN



UNIVERSITY OF GOTHENBURG



University of East Anglia



VRIJE UNIVERSITEIT AMSTERDAM



University of Antwerp



Offen im Denken



UNIVERSITÉ Grenoble Alpes



UNIVERSITY OF ICELAND

## Workgroup: Societal Impact and Relevance of Research



UNIVERSITY OF GOTHENBURG

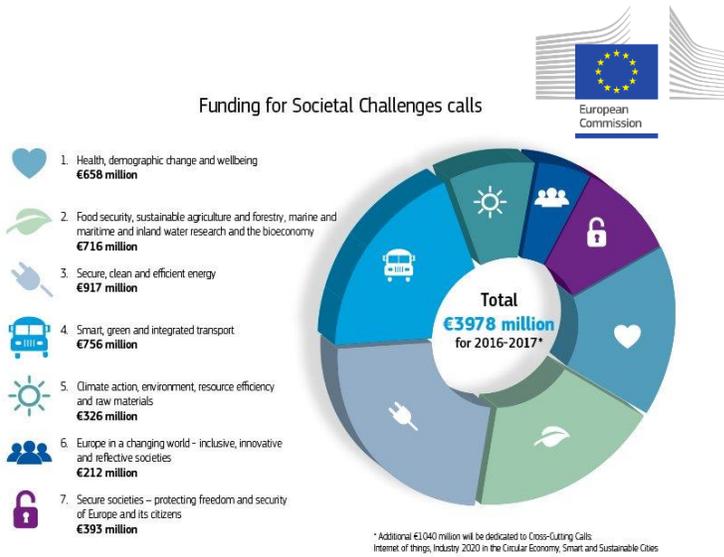


Offen im Denken

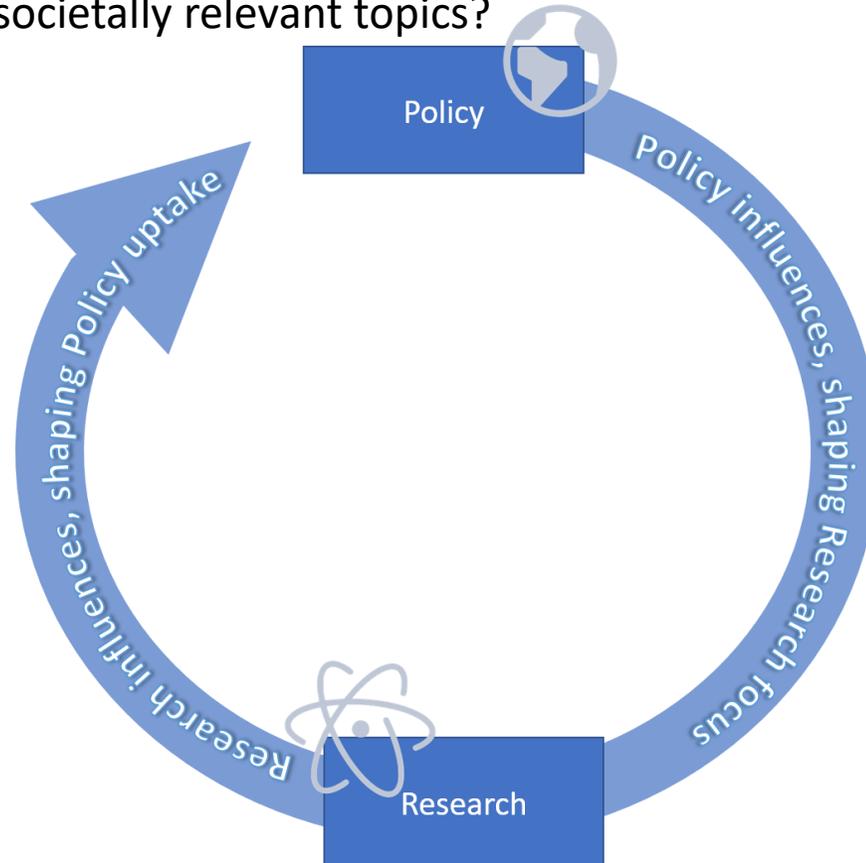


# “HOW CAN WE SHOW SOCIETAL IMPACT ON SOCIETALLY RELEVANT TOPICS?”

What are those societally relevant topics?

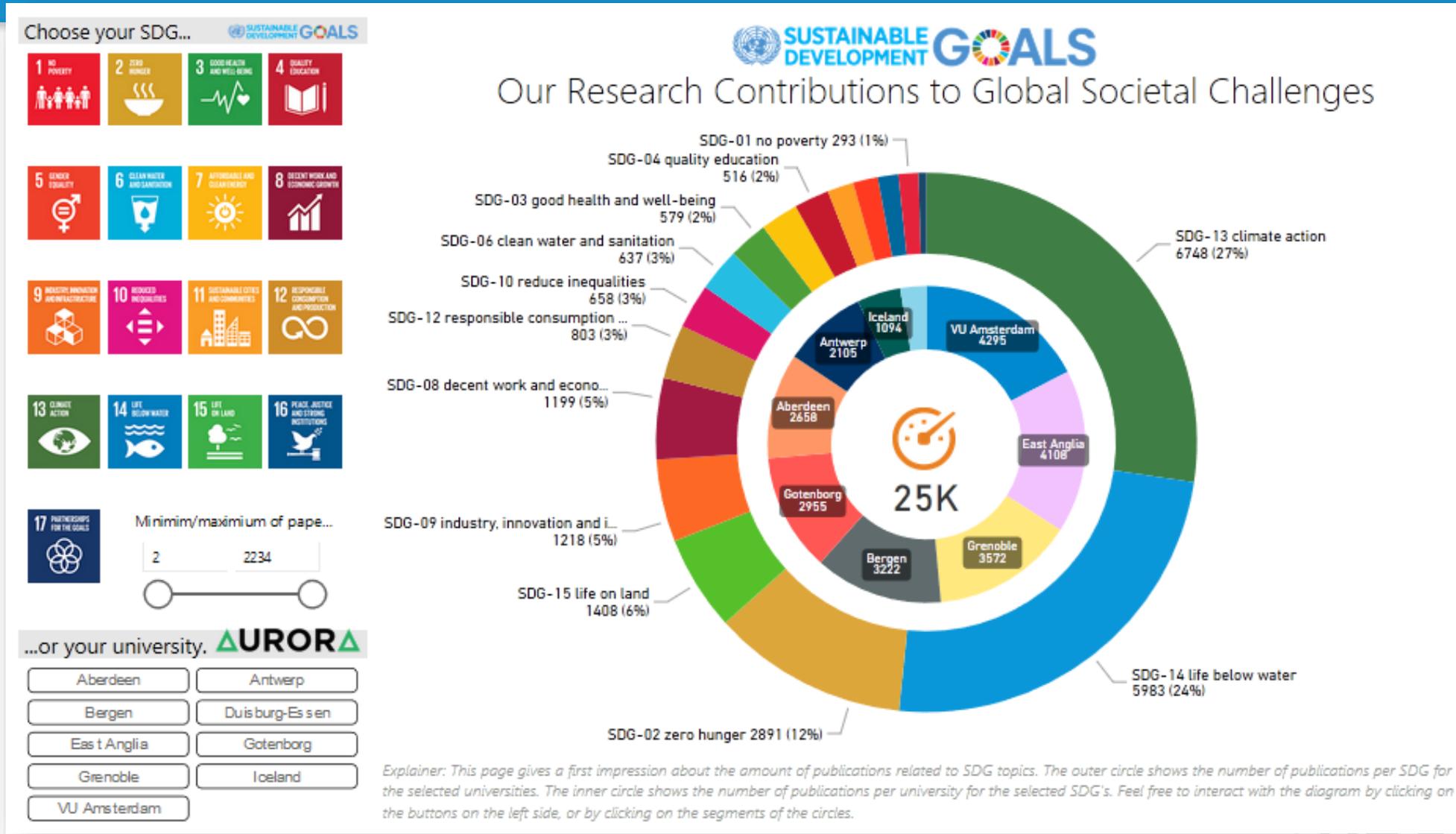


What research are we doing within these societally relevant topics?



Is this research on societally relevant topics, actually influencing policy of societal relevant organisations?

# WHAT RESEARCH ARE WE DOING WITHIN THESE SOCIETALLY RELEVANT TOPICS?



## 3 GOOD HEALTH AND WELL-BEING

3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.



UN goal & target indicators

*Collaborative effort in converting UN policy texts to bibliometric search strings, reviewing & testing results, and data acquisition*



- 3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations
- 3.3.2 Tuberculosis incidence per 1,000 population
- 3.3.3 Malaria incidence per 1,000 population
- 3.3.4 Hepatitis B incidence per 100,000 population
- 3.3.5 Number of people requiring interventions against neglected tropical diseases

## Query for SDG 03 good health and well-being

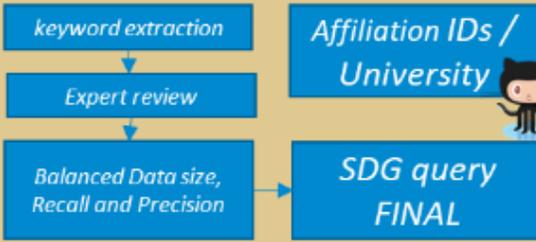
From Targets and Indicators on <https://sustainabledevelopment.un.org/sdg3>

Needs improvement!

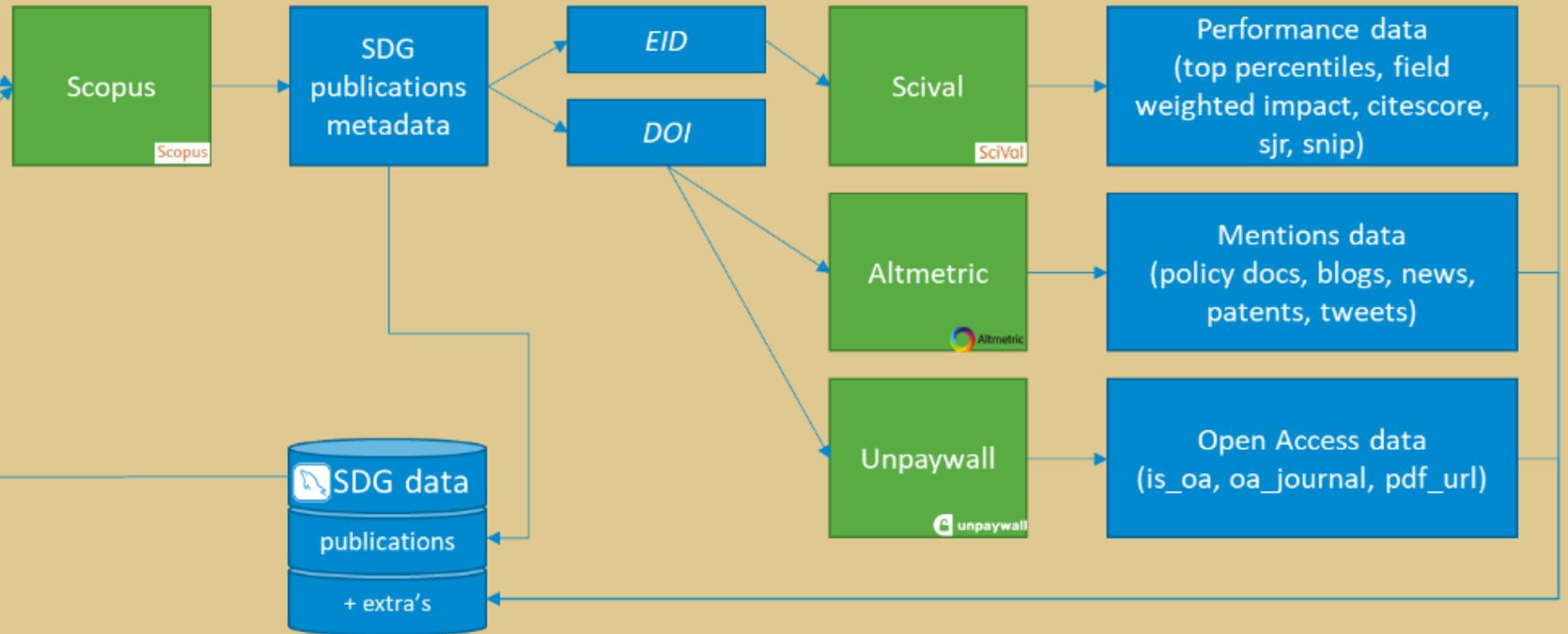
```
("mortality" AND ("suicid*" OR "premature" OR "maternal" OR "neonatal" OR "under-five" OR ("under" AND "five"))) OR  
("malaria" OR "hepatitus b" OR "hiv" OR "aids" OR "tropical disease*" OR "zika" OR "ebola") OR  
("abuse" AND ("substance*" OR "drug*" OR "alcohol")) OR  
("road traffic" AND ("injur*" OR "death*" OR "accidents" )) OR  
"family planning" OR  
"adolescent birth rate" OR  
(("health") AND ("large household") AND ("expenditur*" OR "income*")) OR  
(("mortality") AND ("pollution" OR "unsafe" OR "poisoning") AND ("water" OR "air" OR "sanitation" OR "hygiene")) OR  
(("health") AND ("tobacco") AND ("prevalence")) OR (("national") AND ("vaccine*") AND ("programme*")) OR  
(("health worker*") AND ("density" OR "distribution*")) OR  
"International Health Regulation*" OR  
"health emergency preparedness"
```

# DATA COLLECTION

## Query Crafting



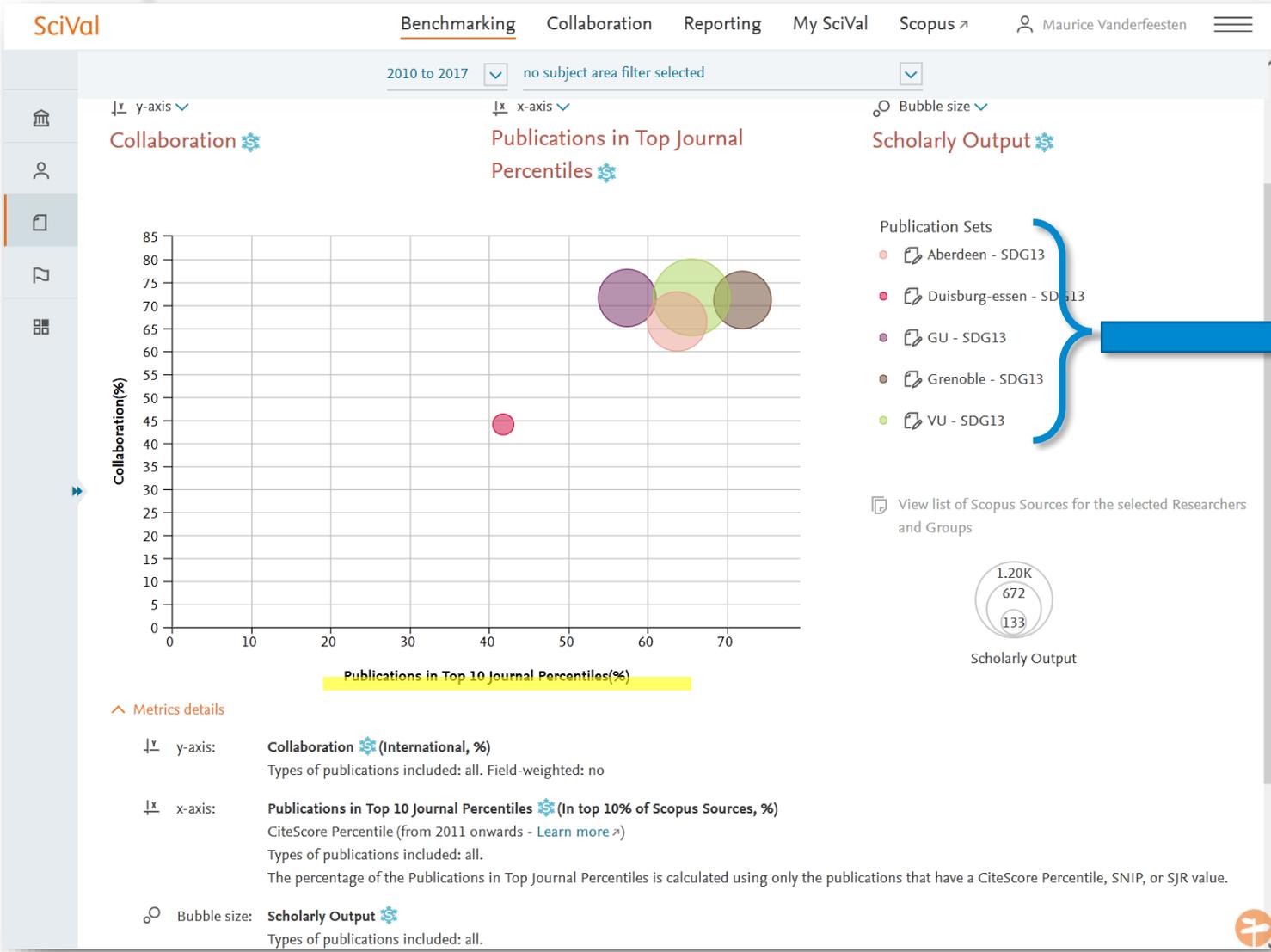
## Data Collection



## Data Visualisation



# RESEARCH QUALITY: TOP 10% PERCENTILE MOST CITED JOURNALS



Top 10% Journals Published Publications related to SDG's



# SOCIETAL ATTENTION: AURORA SDG PAPERS WITH REFERENCES FROM POLICY DOCUMENTS

Showing **232 research outputs** from the results of your search query. Of those, **232** have been mentioned.

EXPC

Sort by: Policy documents



Global Carbon Budget 2016  
Article in **Earth System Science Data**, November 2016  
8 policy mentions



Too much of a good thing.  
Article in **Nature**, April 2011  
7 policy mentions



Have Disaster Losses Increased Due to Anthropogenic Climate Change?  
Article in **Journal of Physical Oceanography**, January 2011  
5 policy mentions



The uncertain climate footprint of wetlands under human pressure  
Article in **Proceedings of the National Academy of Sciences of the United States of America**, March 2015  
4 policy mentions



Coastal flood damage and adaptation costs under 21st century sea-level rise  
Article in **Proceedings of the National Academy of Sciences of the United States of America**, February 2014  
8 policy mentions



Exploring dietary guidelines based on ecological and nutritional values: A...  
Article in **Food Policy**, February 2014  
7 policy mentions



Global Carbon Budget 2015  
Article in **Earth System Science Data**, December 2015  
4 policy mentions



Enhanced nitrogen deposition over China.  
Article in **Nature**, February 2013  
4 policy mentions



Sea-level rise  
4°C world' in

Policy Documents Using Publications related to SDG's



# DETAIL ON POLICY SOURCES: SDG13 PUBLICATIONS REFERRED TO BY POLICY DOCUMENTS



- Mention Type
- Blog post
  - News story
  - Policy document
  - Tweet
  - Video



## Number of Policy documents mentioning Climate action publications



- UK Government (GOV)
- Analysis & Policy Observatory
- World Health Organiza
- World E
- overhei
- nijksoverhei
- UK Parliament Briefing n
- The Inter-American Developme
- The International Fund for Agri
- UNE
- Brookings Insti
- Centers for Disease Control an
- Chatham Ho
- Oxfam GB Policy & Prac
- CARE International - CARE Insit
- National Bureau of Economic R
- The International Institute for S
- European Agency for Safety an
- Institute for Fiscal Stu
- International Monetary F
- MSF
- National Institute for Health an

### Altmetric Details Page



### About this Attention Score

In the top 5% of all research outputs scored by Altmetric

### Mentioned by

- 1 news outlet
- 5 blogs
- 4 policy sources
- 83 tweeters
- 1 Facebook page

### Citations

- 224 Dimensions

### Readers on

- 270 Mendeley
- 4 CiteULike

### SUMMARY

- News
- Blogs
- Policy documents
- Twitter
- Facebook
- Dimensions citations

So far, Altmetric has seen 7 policy documents that reference this research output.



#### Field and numerical investigations of wave transformation and inundation on atoll islands

Cited by Analysis & Policy Observatory (APO) on 01 Jan 2016  
Analysis & Policy Observatory (APO) is a research database and alert service providing free access to full-text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand.



#### Be prepared: climate change, security and Australia's Defence Force

Cited by Analysis & Policy Observatory (APO) on 18 Sep 2015  
Analysis & Policy Observatory (APO) is a research database and alert service providing free access to full-text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand.



#### Port of Manzanillo: Climate Risk Management (Final Report)

Cited by The Inter-American Development Bank on 09 Sep 2015  
The Inter-American Development Bank (IDB) is the largest source of development financing for Latin America and the Caribbean. The IDB strives to find innovative and effective approaches to address Latin America and the Caribbean's economic, social, institutional, and environmental development challenges.



#### Climate change 2015: growing risks, critical choices

Cited by Analysis & Policy Observatory (APO) on 24 Aug 2015  
Analysis & Policy Observatory (APO) is a research database and alert service providing free access to full-text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand.



#### Climate impacts in Europe - EU Law and Publications

Cited by The Publications Office of the European Union on 02 Jun 2014  
The Publications Office of the European Union (Publications Office), based in Luxembourg, is an interinstitutional office whose task is to publish the publications of the institutions of the European Union.



#### Past, present and future landscapes: understanding alternative futures for climate change adaptation of coastal settlements and communities

Cited by Analysis & Policy Observatory (APO) on 04 Feb 2013  
Analysis & Policy Observatory (APO) is a research database and alert service providing free access to full-text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand.

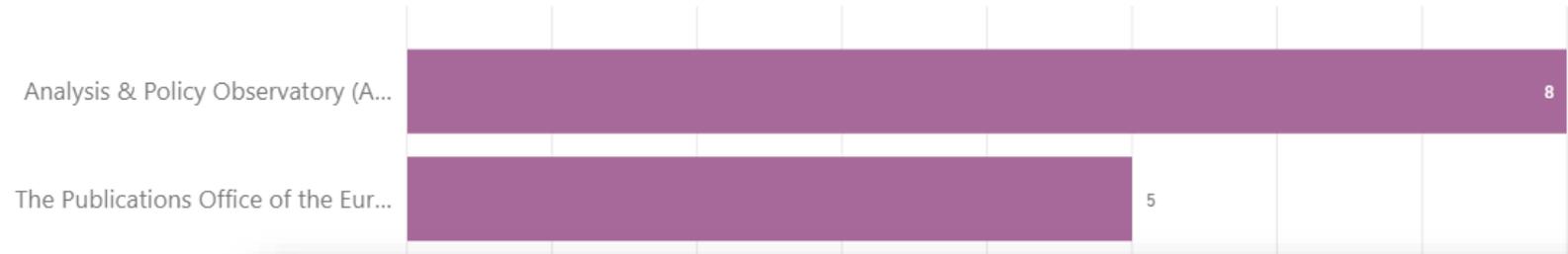
# DETAIL ON POLICY SOURCES: SDG11 PUBLICATIONS REFERRED TO BY POLICY DOCUMENTS



- Mention Type
- Blog post
  - News story
  - Patent
  - Policy document
  - Tweet



Number of Policy documents mentioning publications about sustainable cities and communities



UK Governm  
Food and Agricultur  
World Health  
Broo  
National Ac  
UK Parliament

Altmetric Details Page

**94**

About this Attention Score  
In the top 5% of all research outputs scored by Altmetric

Mentioned by

- 8 news outlets
- 3 blogs
- 4 policy sources
- 4 tweeters

Citations

- 281 Dimensions
- 52 Mendeley

Readers on

- Open in a new tab

Tools

SUMMARY News Blogs Policy documents Twitter Dimensions citations

So far, Altmetric has seen 8 policy documents that reference this research output.

- An impact evaluation framework to support planning and evaluation of nature-based solutions projects**  
Cited by Analysis & Policy Observatory (APO) on 01 Jan 2017  
Analysis & Policy Observatory (APO) is a research database and alert service providing free access to full-text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand.
- The health and social benefits of nature and biodiversity protection - EU Law and Publications**  
Cited by The Publications Office of the European Union on 19 May 2016  
The Publications Office of the European Union (Publications Office), based in Luxembourg, is an interinstitutional office whose task is to publish the publications of the institutions of the European Union.
- A feasibility study using geographic access to general practices and routinely collected data in public health and health services research**  
Cited by Analysis & Policy Observatory (APO) on 24 Sep 2015  
Analysis & Policy Observatory (APO) is a research database and alert service providing free access to full-text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand.
- Urban vegetation, wellbeing and pro-environmental behaviour: a socio-ecological experiment in Wellington City, New Zealand**  
Cited by Analysis & Policy Observatory (APO) on 03 Feb 2015  
Analysis & Policy Observatory (APO) is a research database and alert service providing free access to full-text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand.
- Health and wellbeing benefits of conservation in New Zealand**  
Cited by Analysis & Policy Observatory (APO) on 31 Jul 2013  
Analysis & Policy Observatory (APO) is a research database and alert service providing free access to full-text research reports and papers, statistics and other resources essential for public policy development and implementation in Australia and New Zealand.
- Health in the green economy : health co-benefits of climate change mitigation - transport sector**  
Cited by World Health Organization on 01 Jan 2012  
The World Health Organization (WHO) is the directing and coordinating authority for health within the United Nations system.
- An Integrated Framework for Assessing the Value of Community-Based Prevention**  
Cited by National Academies Press on 01 Jan 2012  
The US National Academies Press (NAP) was created by the National Academy of Sciences to
- Urban transport and health: on behalf of Federal Ministry for Economic Cooperaton and Development (BMZ)**  
Cited by World Health Organization on 01 Jan 2011  
The World Health Organization (WHO) is the directing and coordinating authority for health

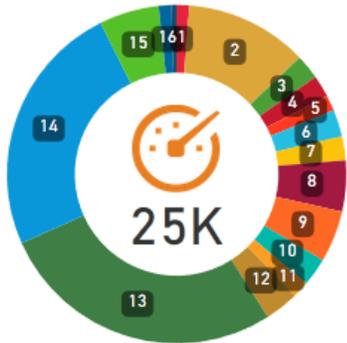


# THIS CONCEPT TOOL ALLOWS YOU TO SEE MULTIPLE DIMENSIONS ON SDG RESEARCH; EXCELLENCE OF THAT RESEARCH, BUT ALSO ITS REACH IN SOCIETY



## Research Performance

Amount of publications related to SDG's

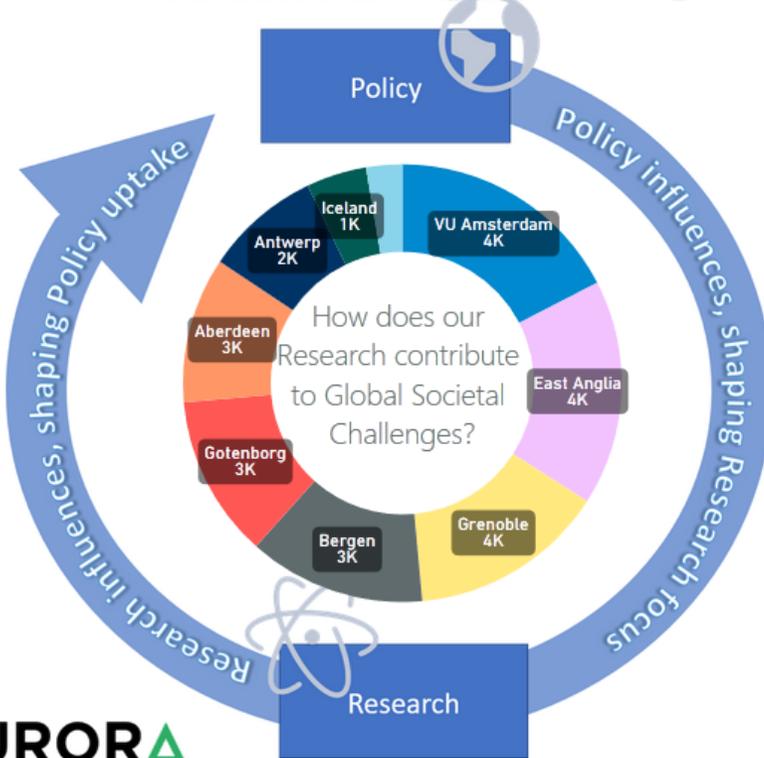


Scopus

Top 10% Journals Published Publications related to SDG's



SciVal



**AURORA**

- Aberdeen
- Antwerp
- Bergen
- Duisburg-Essen
- East Anglia
- Gotenborg
- Grenoble
- Iceland
- VU Amsterdam



## Societal Attention

Freely and Open Accessible Publications related to SDG's



unpaywall

Policy Documents Using Publications related to SDG's



Altmetric



# SEE THE DIMENSIONS OF RESEARCH EXCELLENCE AND SOCIETAL ATTENTION OF RESEARCH ON SOCIETAL TOPICS

Choose your SDG... 



Minimum/maximum of pa...



...or your university. 

- Aberdeen
- Antwerp
- Bergen
- Duisburg-Essen
- East Anglia
- Gotenburg
- Grenoble
- Iceland
- VU Amsterdam

## Opportunities & Strong papers on SDG's - SDG Level

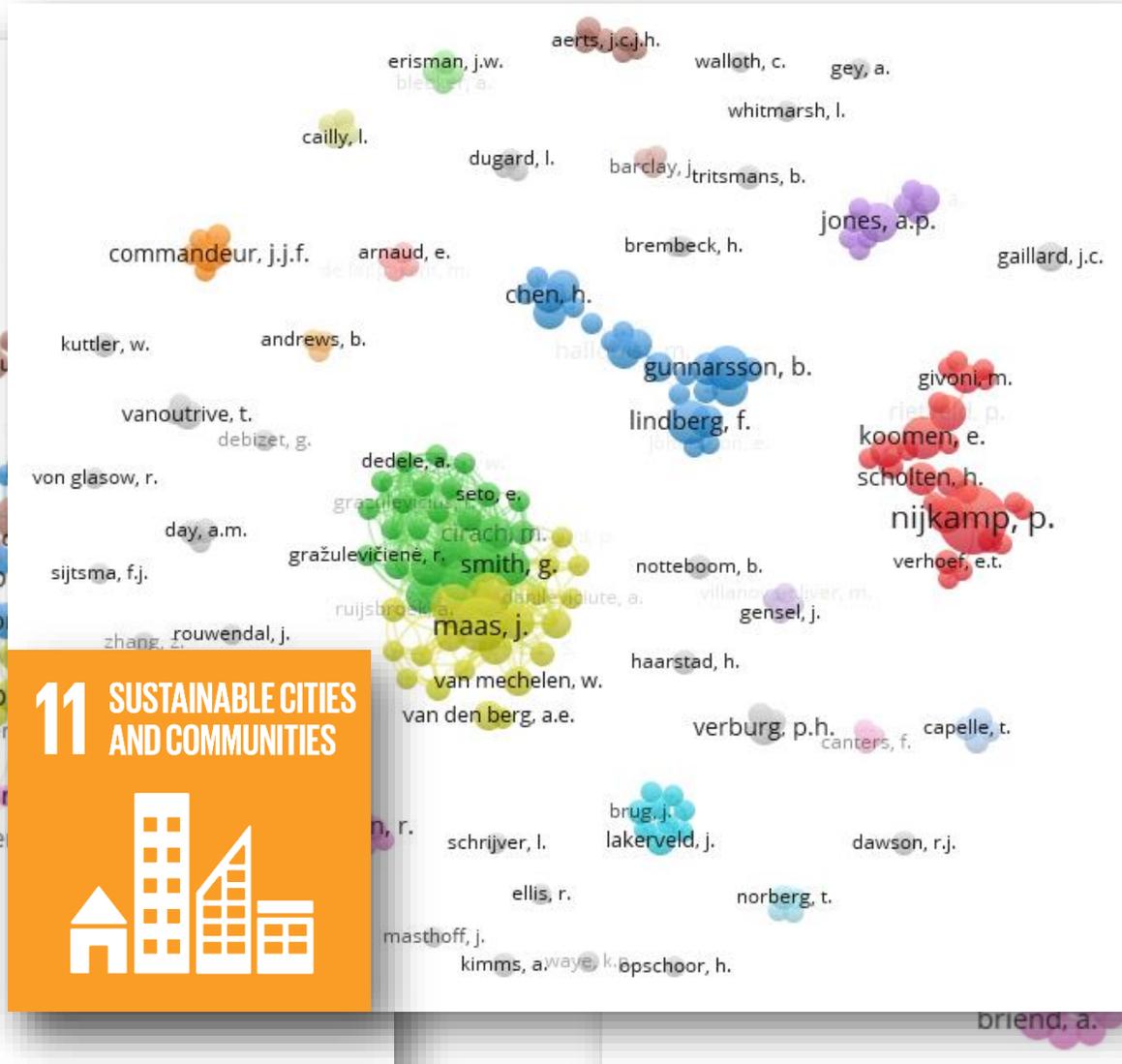
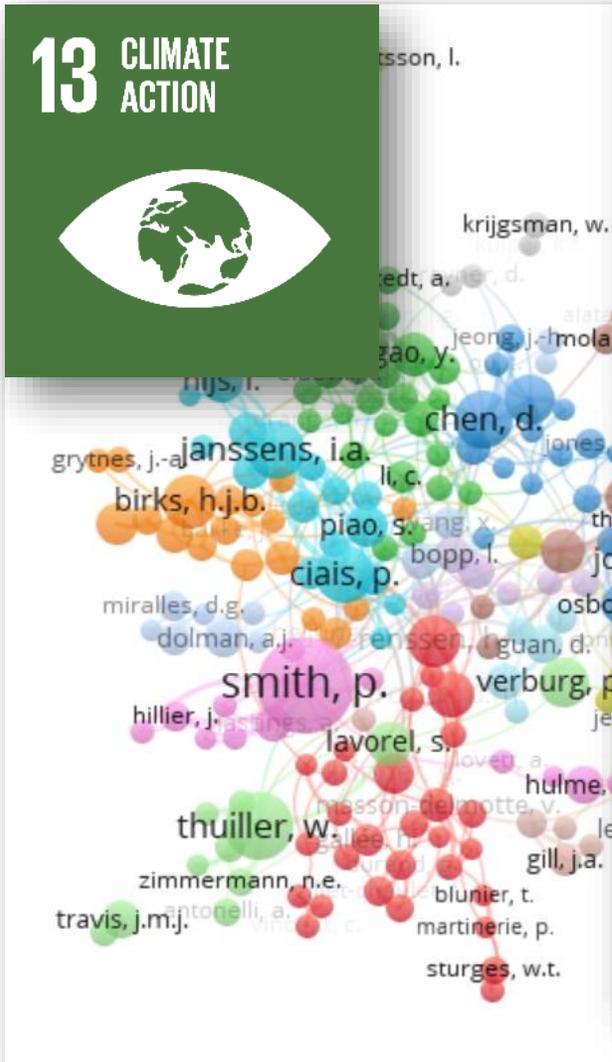


Explainer: Mint dash lines represent the average score in the visual axis. Red dashline on average 41% of all Aurora publications (also non-SDG-related) appear in the Top10% percentile of most cited journals. The Top Right Quadrant show the SDG publications that appear the most in Top 10% percentile of most cited journals, and have the most mentions in policy documents.

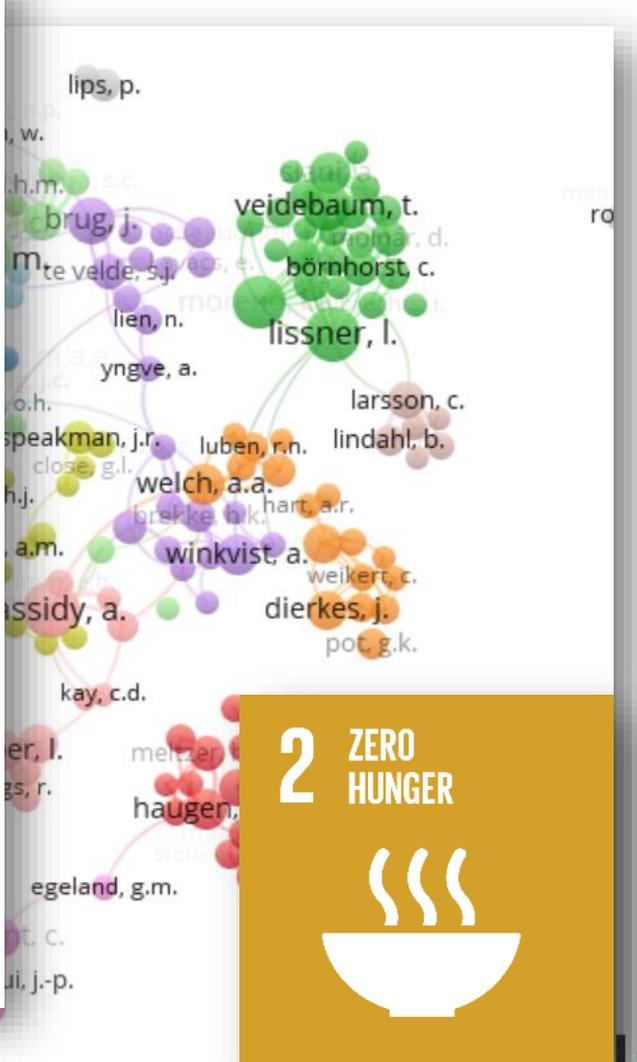


# WHAT: AURORA COULD ESTABLISH CROSS DISCIPLINARY COLLABORATIVE RESEARCH NETWORKS (CO-AUTHORSHIP)

**13 CLIMATE ACTION**



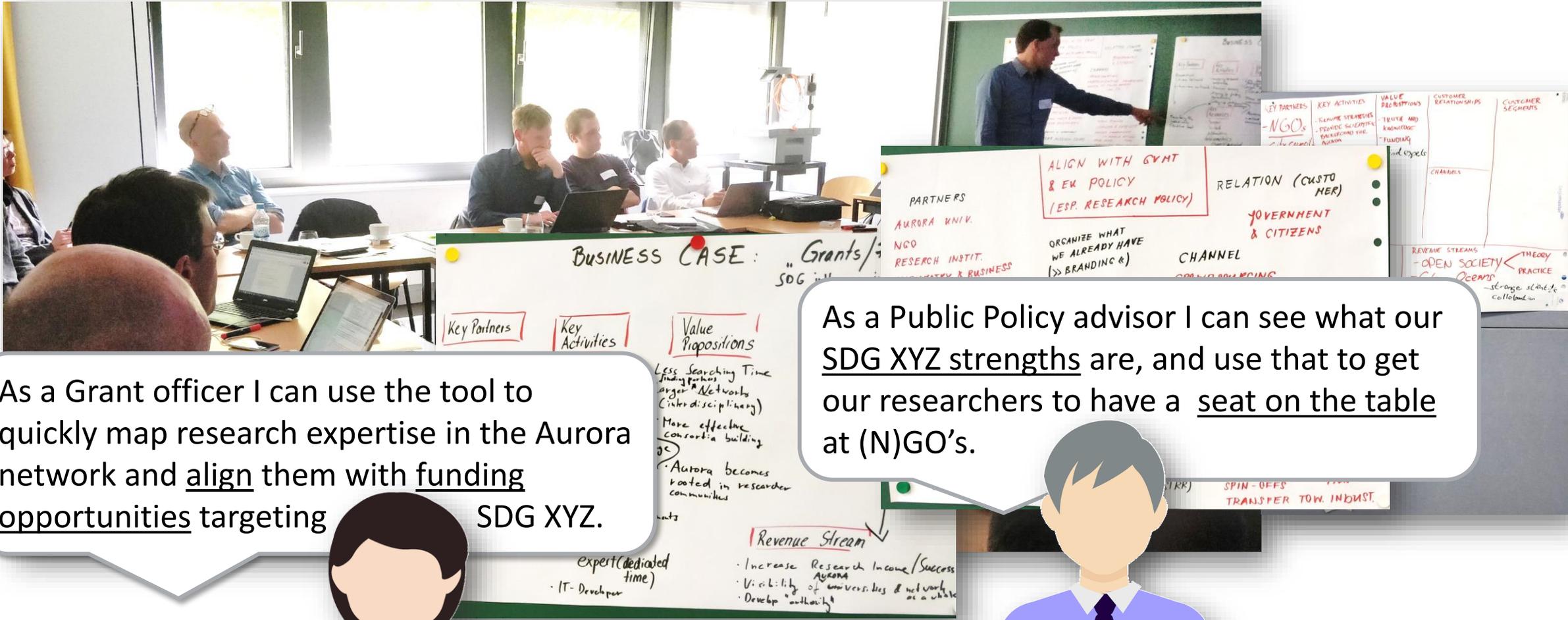
**11 SUSTAINABLE CITIES AND COMMUNITIES**



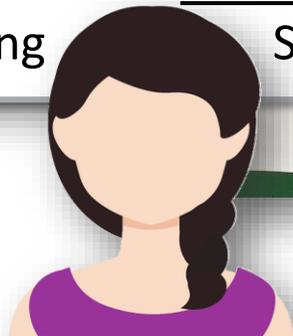
**2 ZERO HUNGER**



# USER BENEFITS: HOW CAN WE POTENTIALLY USE THIS KIND OF INFORMATION?

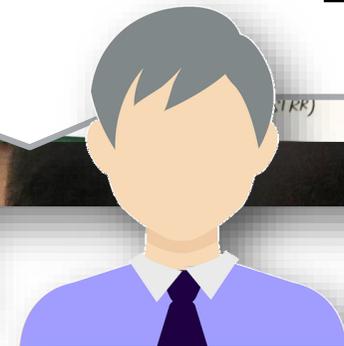


As a Grant officer I can use the tool to quickly map research expertise in the Aurora network and align them with funding opportunities targeting SDG XYZ.



Grant officer

As a Public Policy advisor I can see what our SDG XYZ strengths are, and use that to get our researchers to have a seat on the table at (N)GO's.



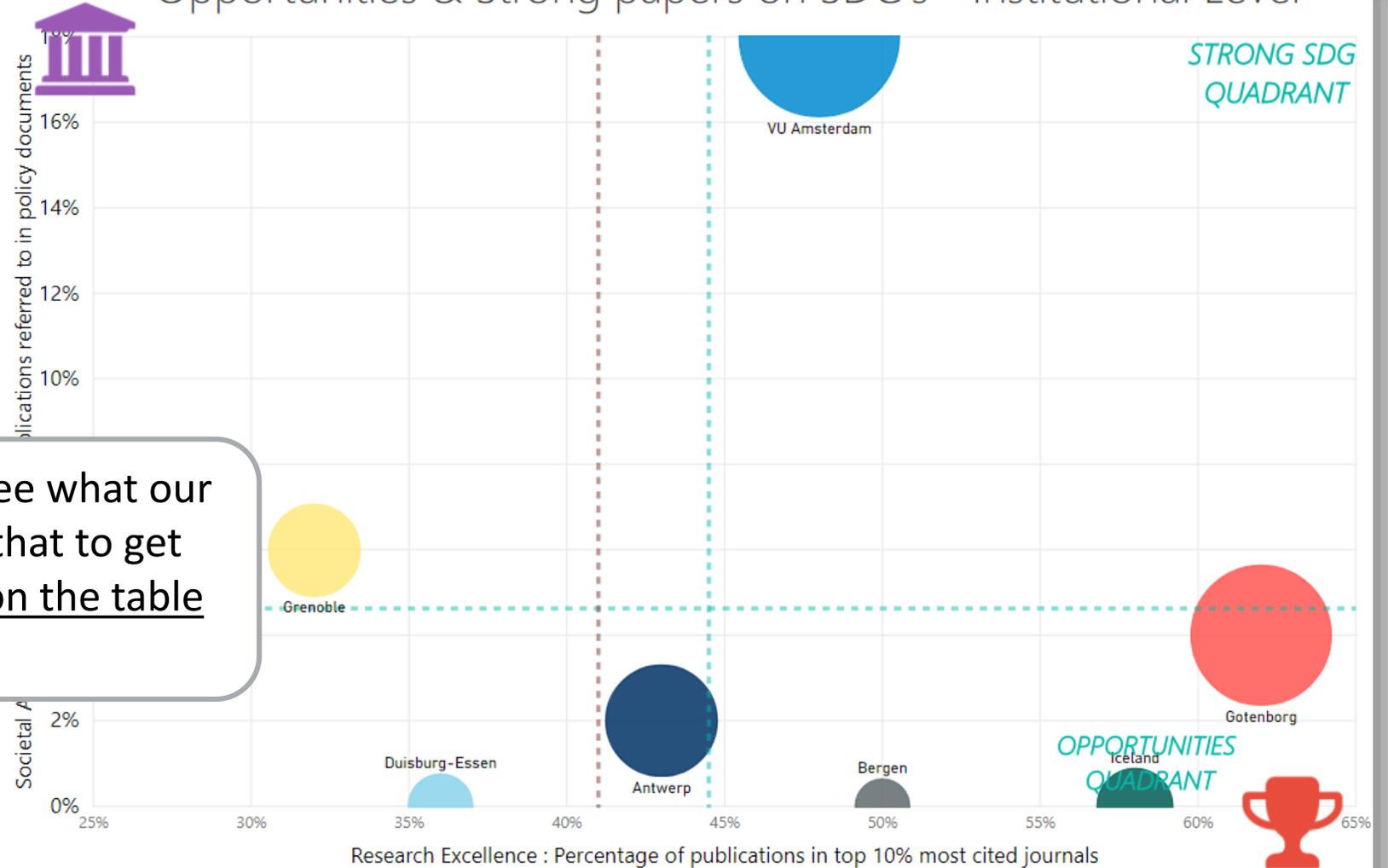
University Public Policy Adviser / Lobbyist

# USER BENEFITS: HOW CAN WE POTENTIALLY USE THIS KIND OF INFORMATION?

Choose your SDG... 



## Opportunities & Strong papers on SDG's - Institutional Level



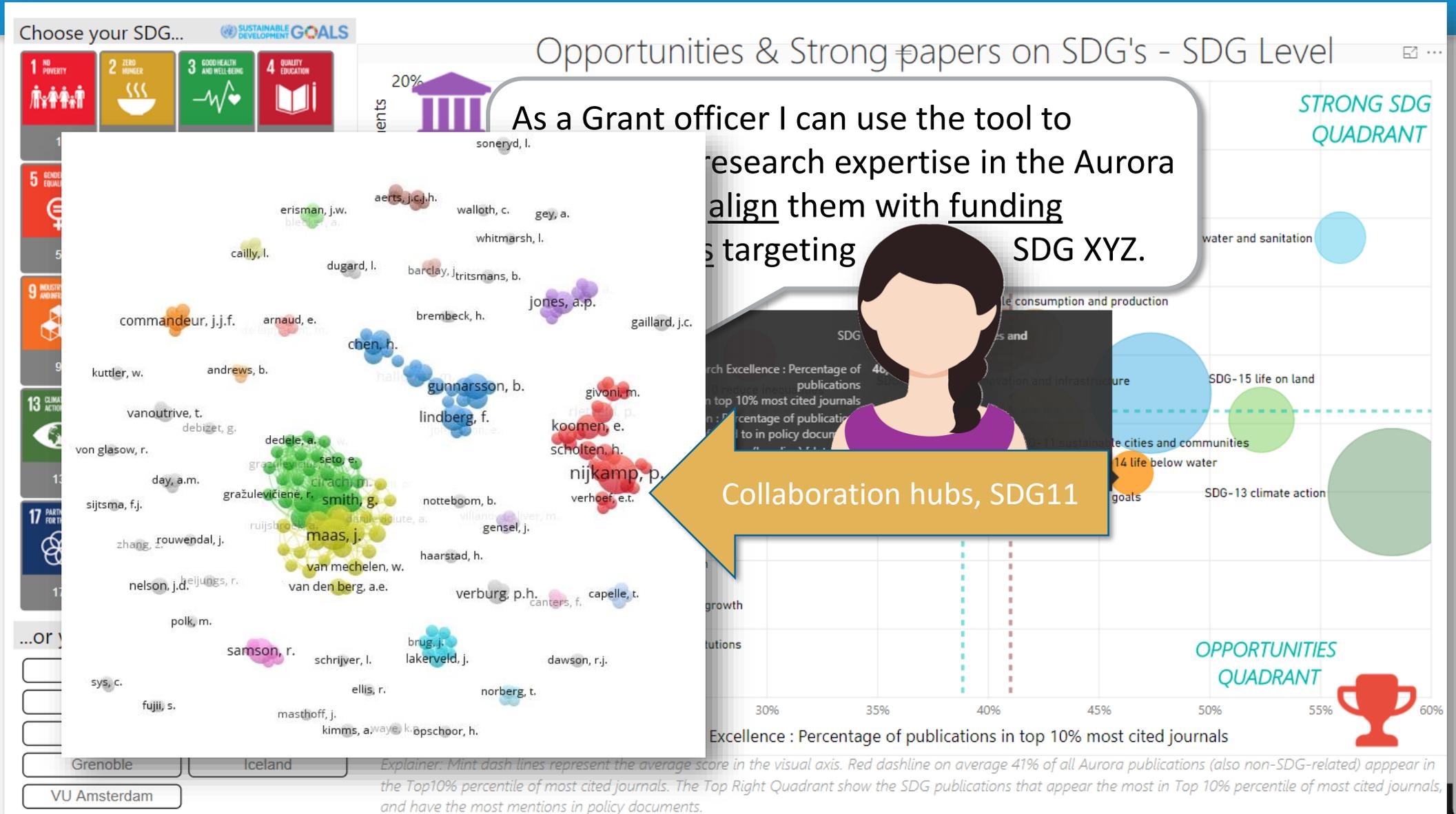
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# USER BENEFITS: HOW CAN WE POTENTIALLY USE THIS KIND OF INFORMATION?



# USER BENEFITS: HOW CAN WE POTENTIALLY USE THIS KIND OF INFORMATION? EXCHANGE KNOWLEDGE ON POLICY OUTREACH

Choose your SDG... 



## Opportunities & Strong papers on SDG's - Institutional Level

100%  
16%  
14%  
12%  
10%

stitutions referred to in policy documents



VU Amsterdam

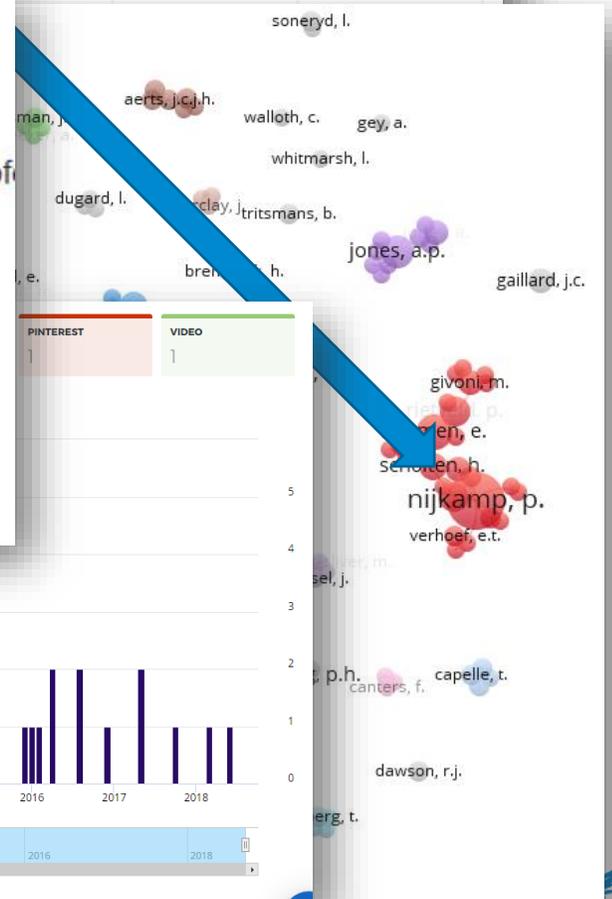
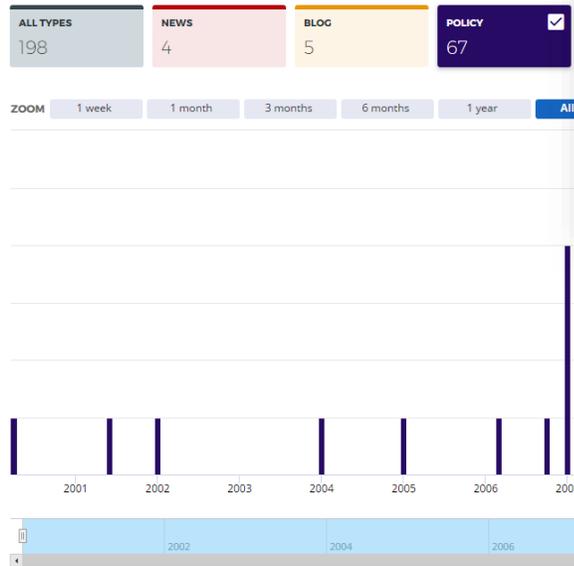
**STRONG SDG QUADRANT**

**PROF. DR. P. NIJKAMP**

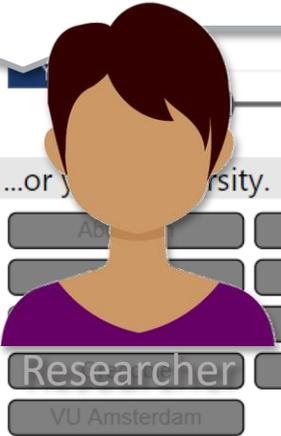


Position Prof

**BRIEF RESUME**



“As a researcher I can use this to quickly find Partners for collaboration in SDG XYZ”



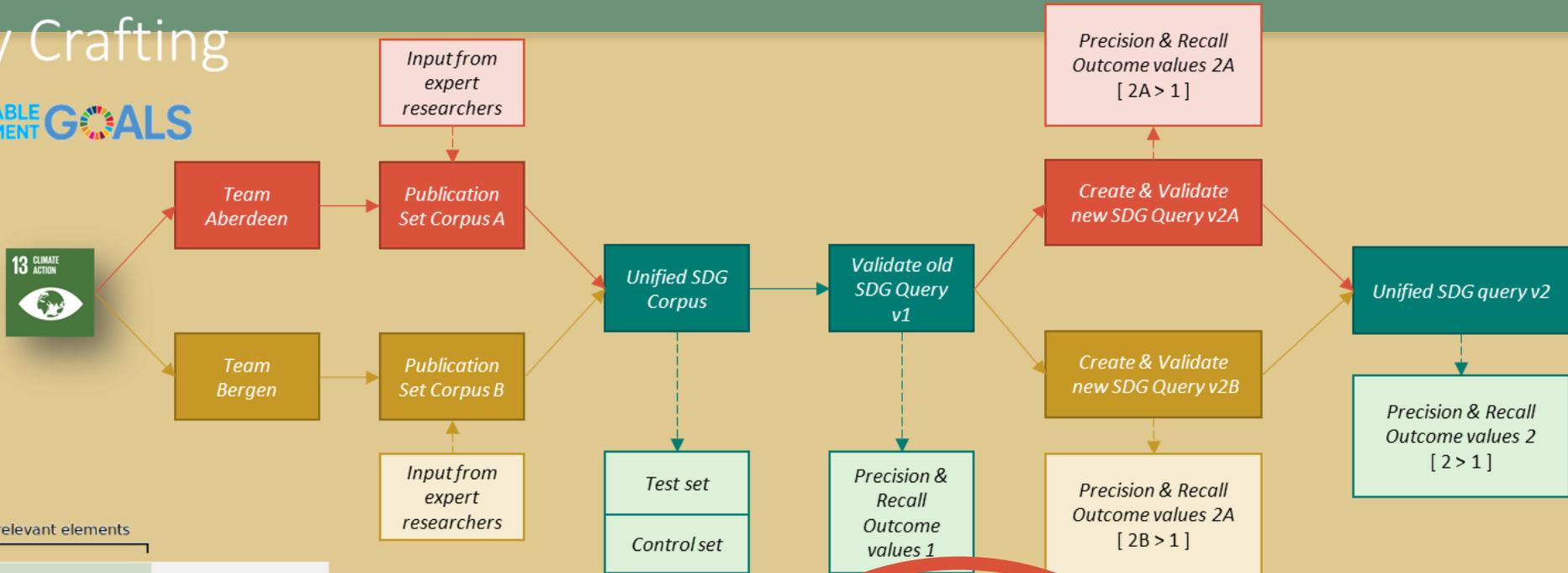
and have the most mentions in policy documents.

# MODEL IMPROVEMENTS, INCREASE DATA QUALITY

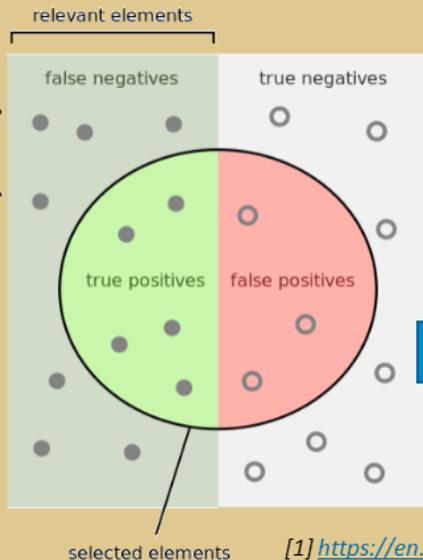
## Query Crafting



Design of a Query Vaidation Process



Measuring the validation of a search query

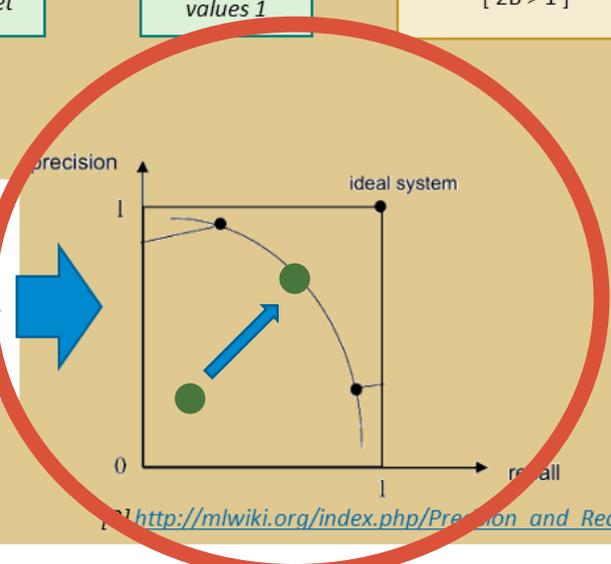


How many selected items are relevant?  

$$\text{Precision} = \frac{\text{true positives}}{\text{true positives} + \text{false positives}}$$

How many relevant items are selected?  

$$\text{Recall} = \frac{\text{true positives}}{\text{true positives} + \text{false negatives}}$$



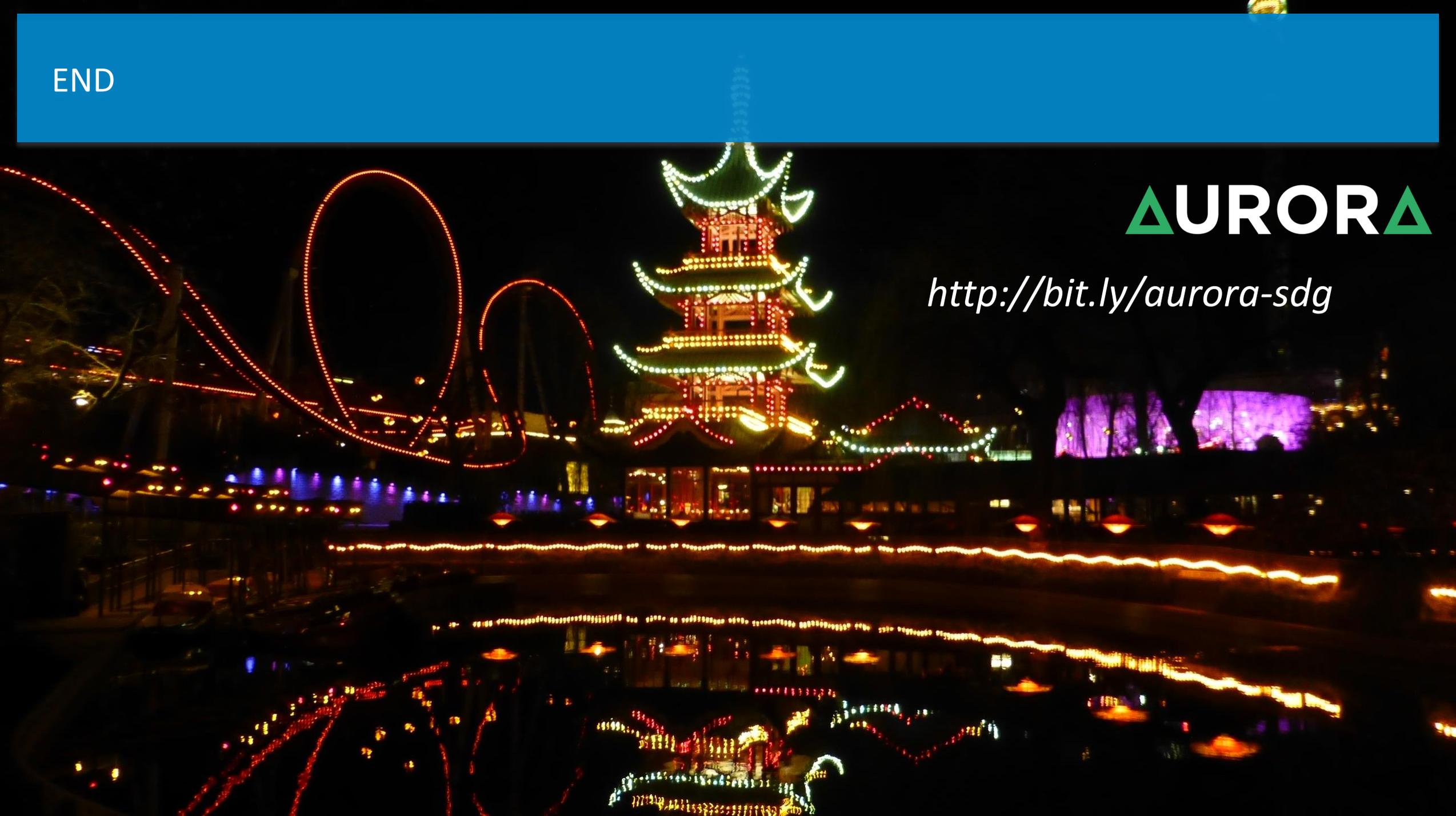
[1] [https://en.wikipedia.org/wiki/Precision\\_and\\_recall](https://en.wikipedia.org/wiki/Precision_and_recall)

[2] [http://mlwiki.org/index.php/Precision\\_and\\_Recall](http://mlwiki.org/index.php/Precision_and_Recall)

END

**AURORA**

<http://bit.ly/aurora-sdg>



A decorative background at the top of the slide featuring a network diagram with red and black nodes connected by lines, set against a light red gradient.

# Impact of Social Sciences & Humanities

4-5 October 2018, Copenhagen

## Institutional Assessment

### Panel discussion & Q&A

*Tim Wilson (Chair)*

*Claire Donovan*

*Maurice Vanderfeesten*



# Impact of Social Sciences & Humanities

4-5 October 2018, Copenhagen

## Institutional Assessment

Chair: Tim Wilson

*Executive Director at Social Sciences and Humanities Research Council, Canada*

*Type your recommendation here*



# Impact of Social Sciences & Humanities

4-5 October 2018, Copenhagen

## Next up:

15.00-15.30 Break

15.30-17.15 Plenary Closing

Lumbye Hall