Evidence Informed Policy Making

Parallel Session

Impact Frameworks & Infrastructures

Frank Zwetsloot (Chair)

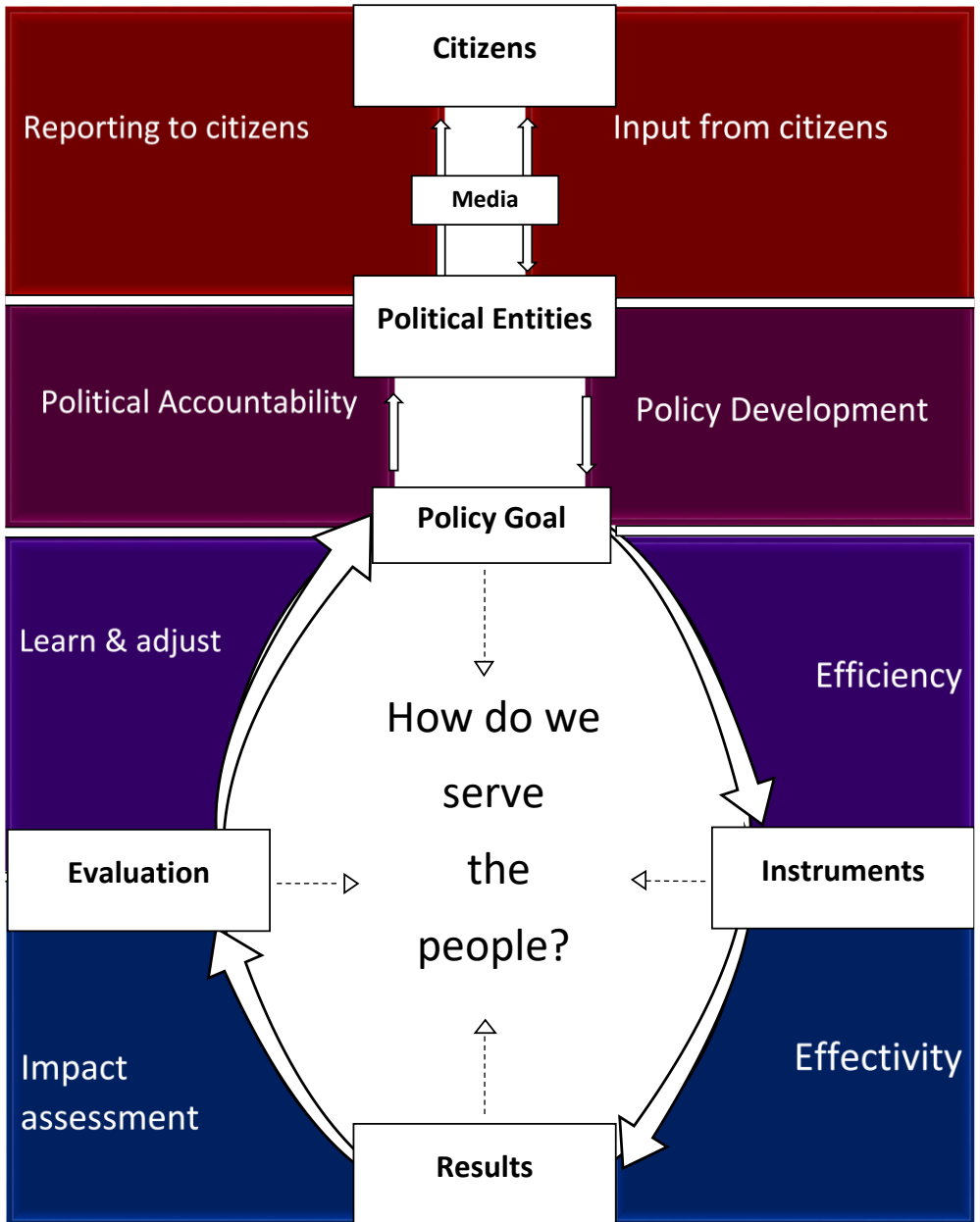
CEO, ScienceWorks & STEPPS, The Netherlands

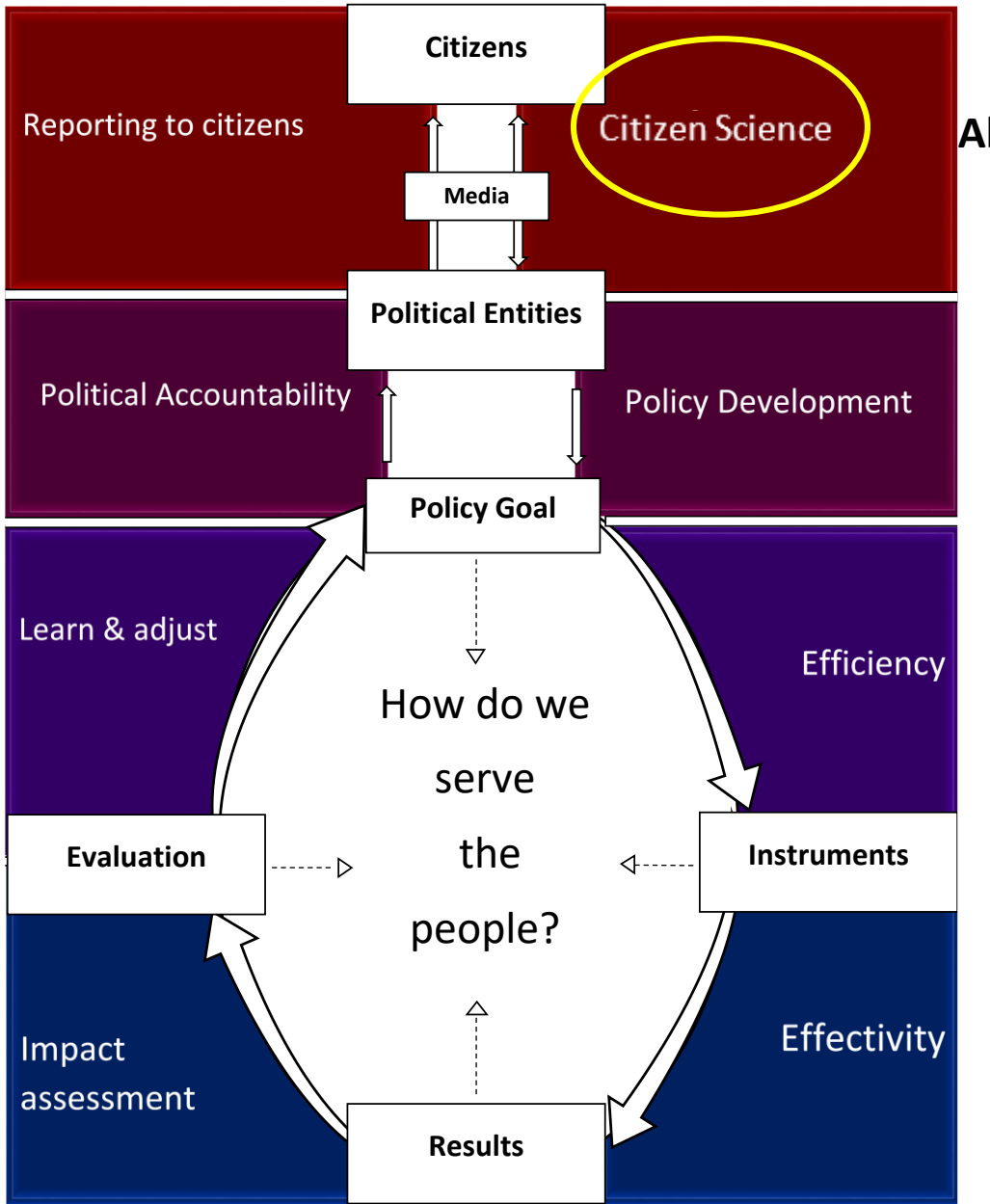
Evidence for Policymakers – some good practices worldwide

Frank Zwetsloot
Director ScienceWorks

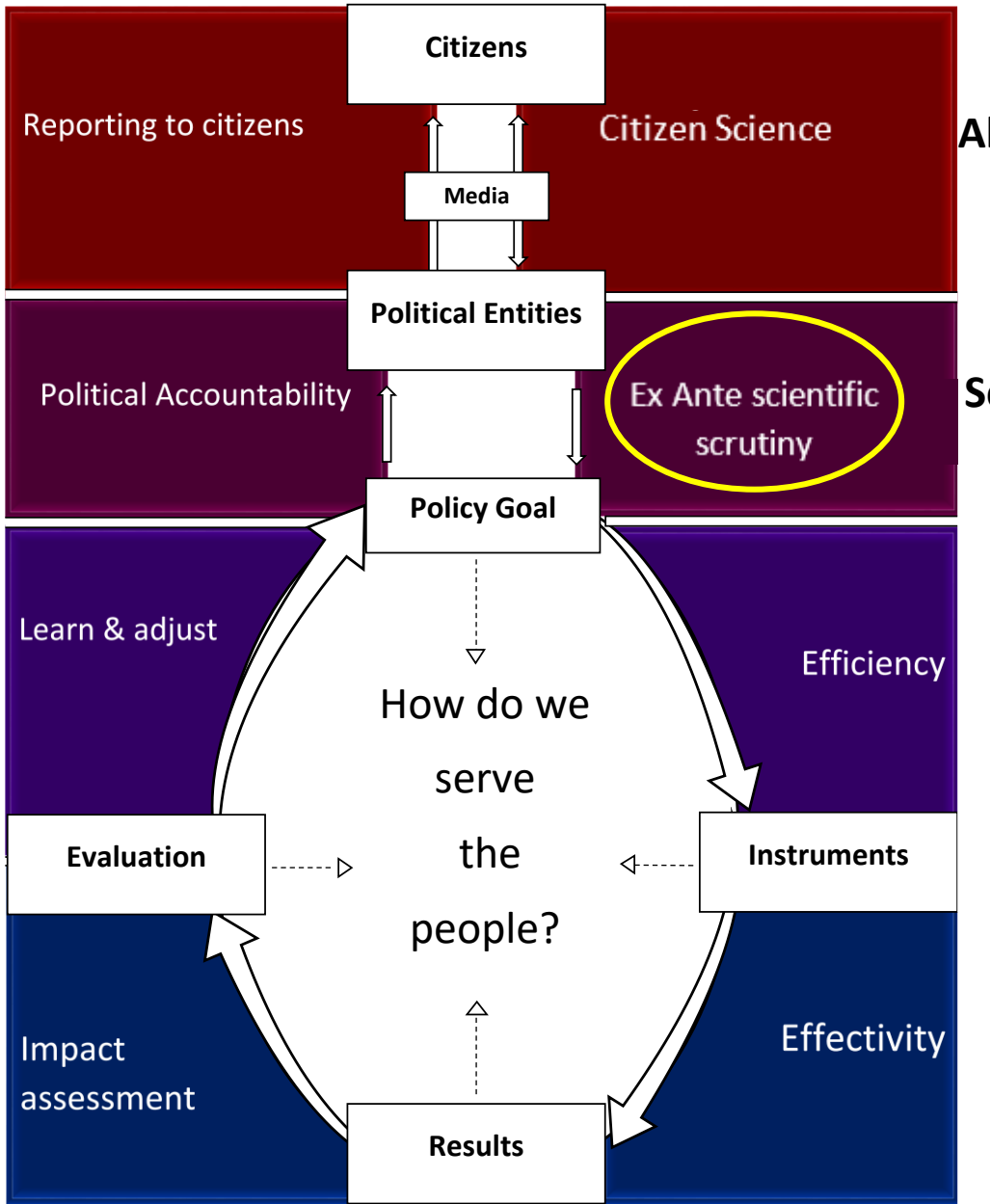
June 20, 2023, Halifax

Here are some good practices for integrating evidence in policy & politics



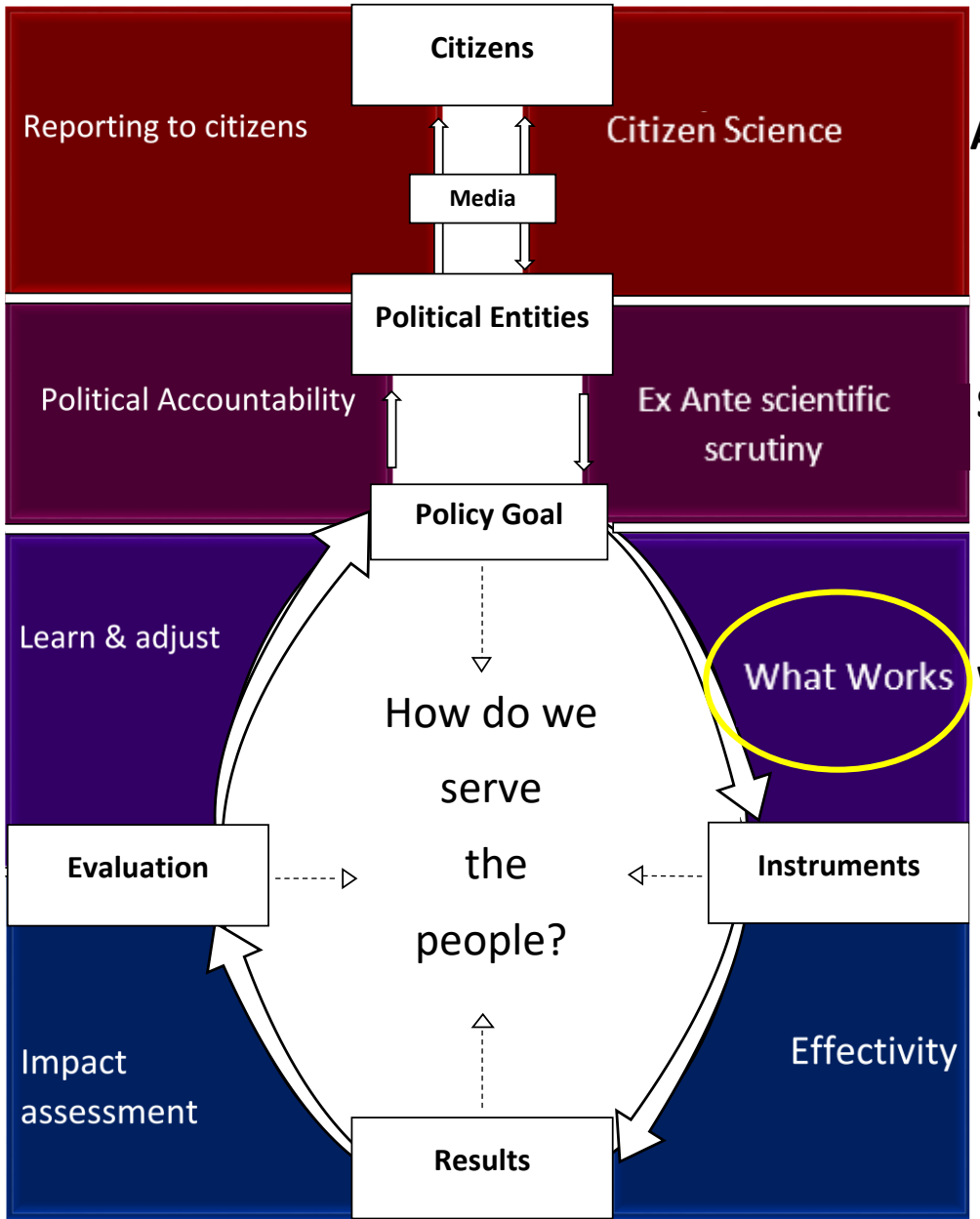


All countries with ‘smart citizens’



All countries with ‘smart citizens’

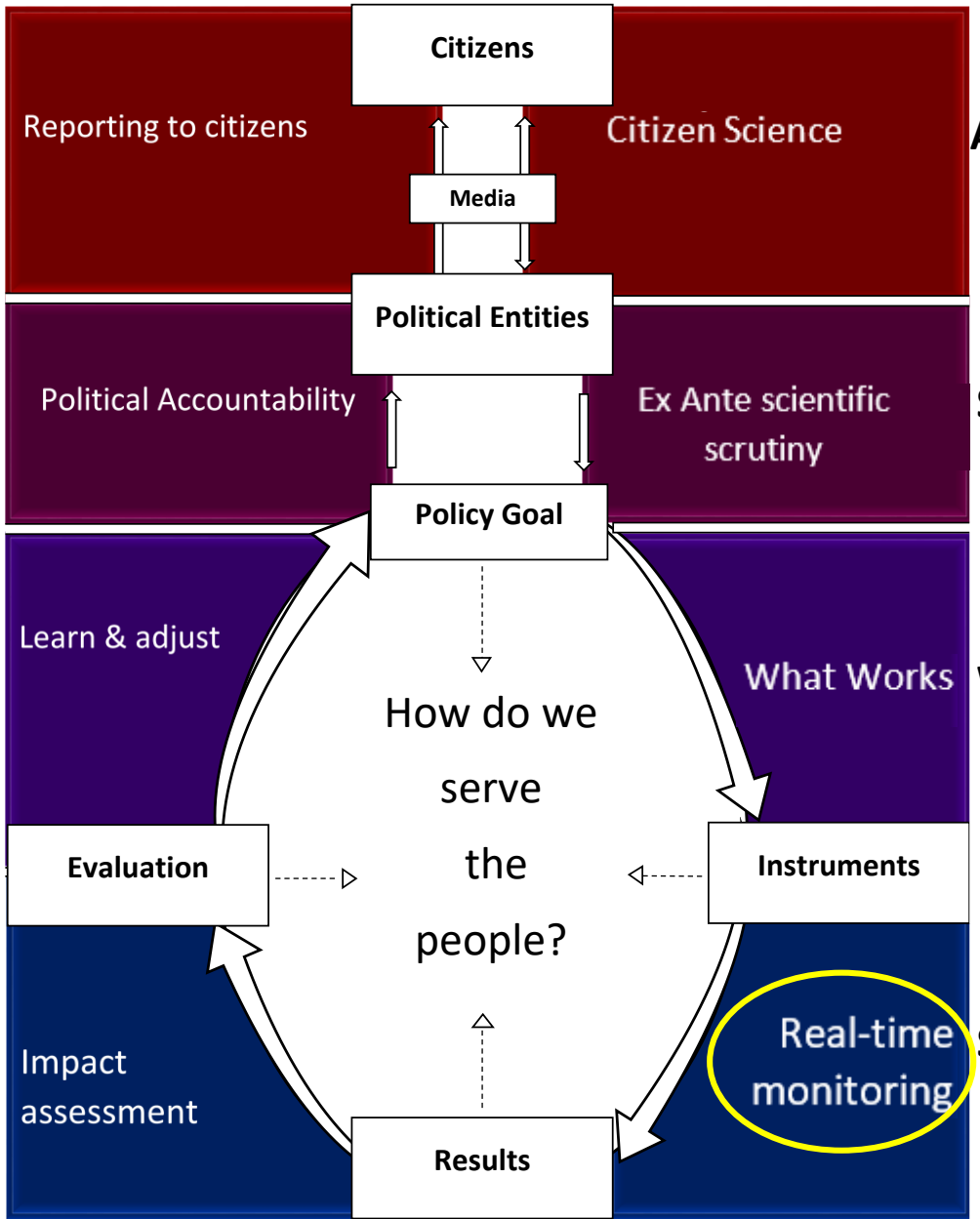
Science Coalition, The Netherlands



All countries with ‘smart citizens’

Science Coalition, The Netherlands

What Works Movement, UK/USA

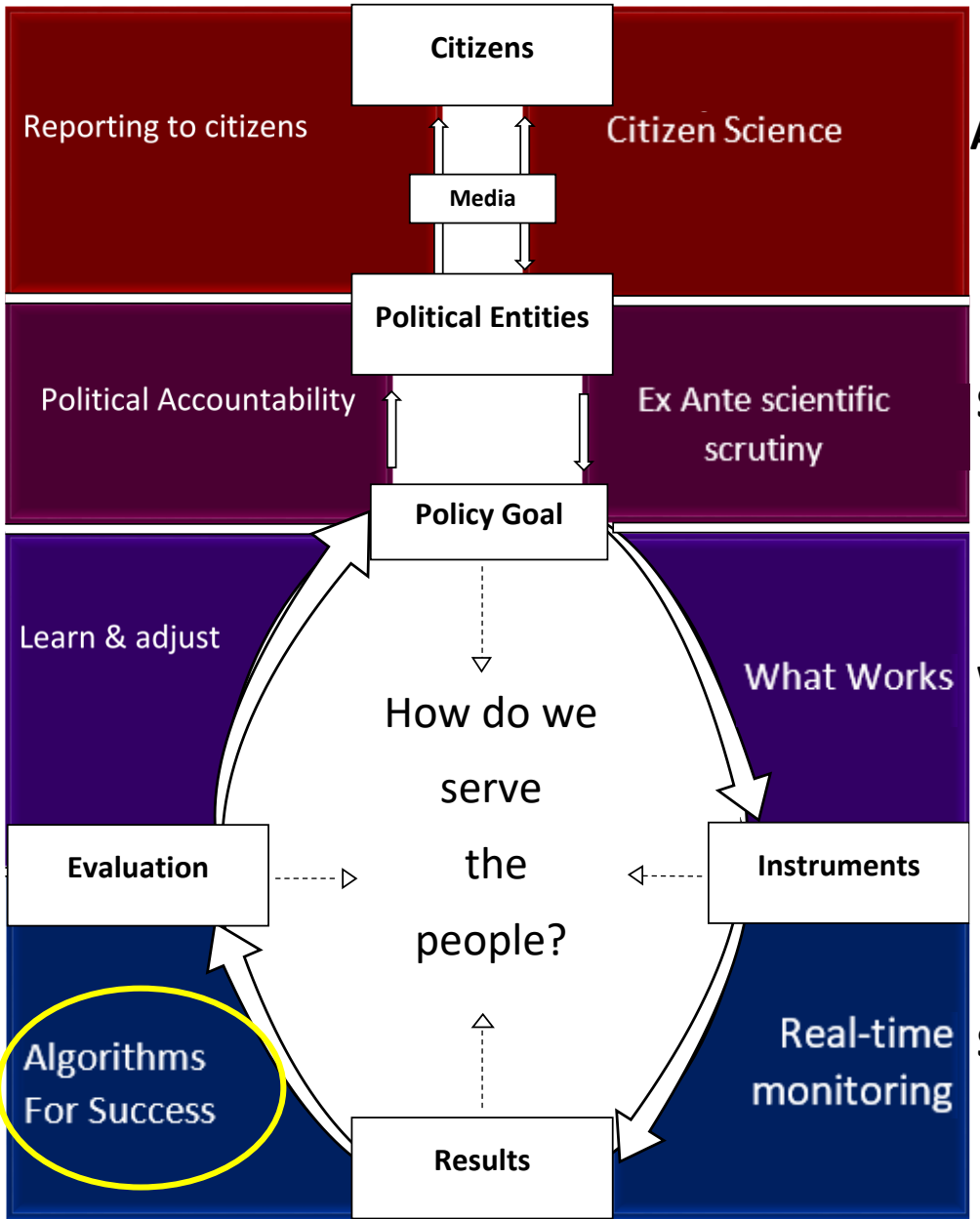


All countries with ‘smart citizens’

Science Coalition, The Netherlands

What Works Movement, UK/USA

Security, Health, Traffic: East-Asia



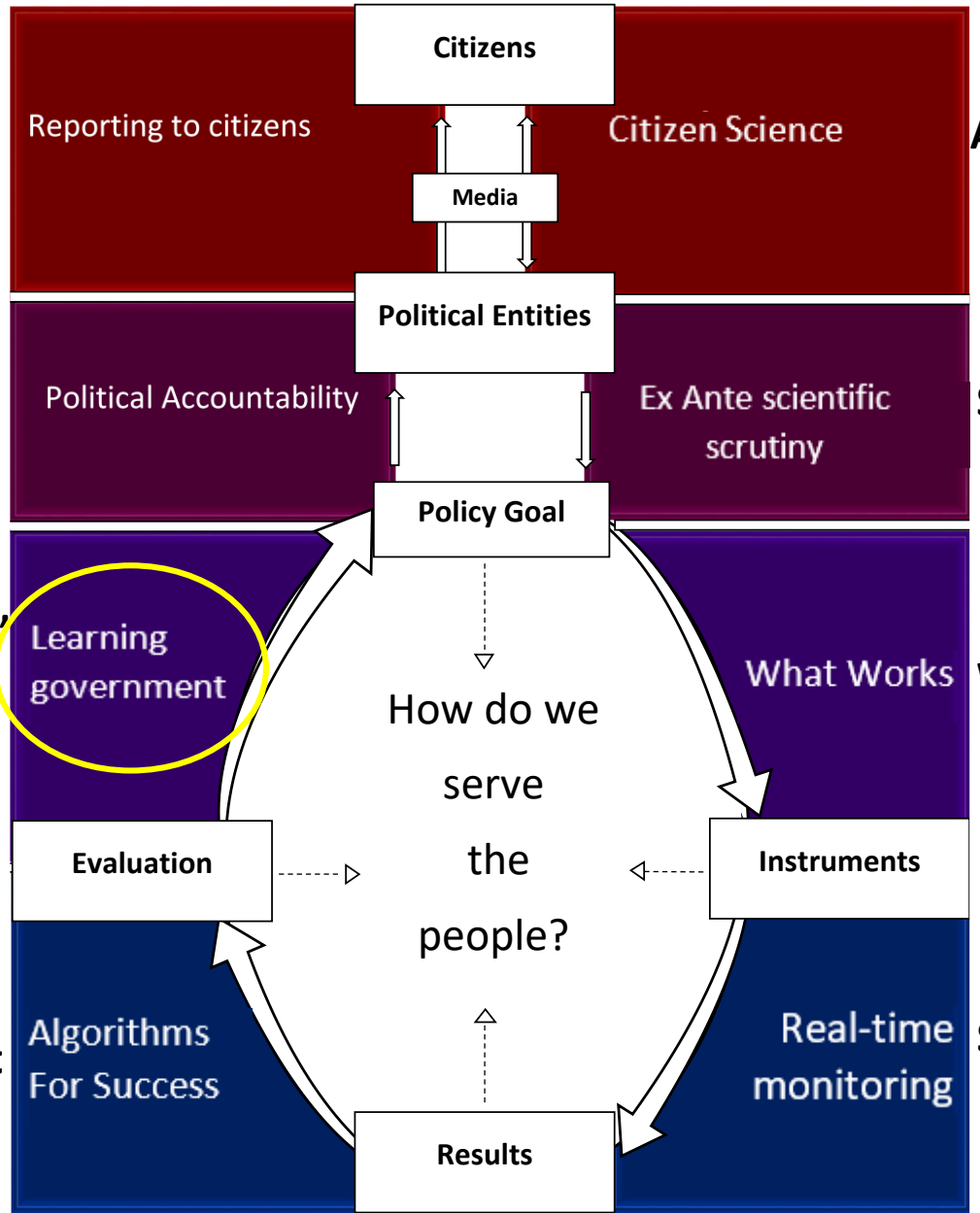
All countries with 'smart citizens'

Science Coalition, The Netherlands

What Works Movement, UK/USA

US Data Coalition: Evidence Act

Security, Health, Traffic: East-Asia



All countries with 'smart citizens'

Science Coalition, The Netherlands

Dutch Operation "Insight into Quality"

What Works Movement, UK/USA

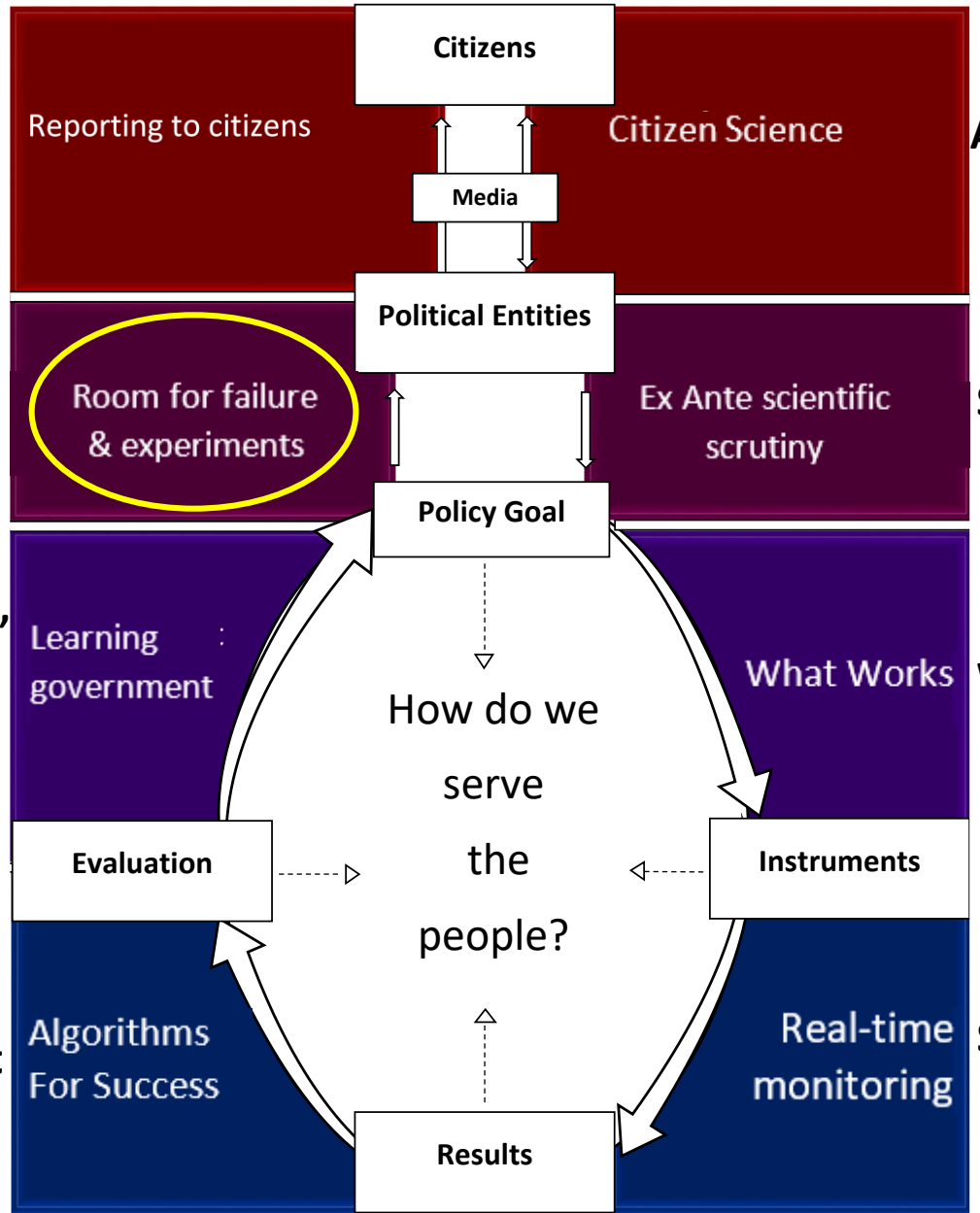
US Data Coalition: Evidence Act

Security, Health, Traffic: East-Asia

Experimental Finland

Dutch Operation “Insight into Quality”

US Data Coalition: Evidence Act



All countries with ‘smart citizens’

Science Coalition, The Netherlands

What Works Movement, UK/USA

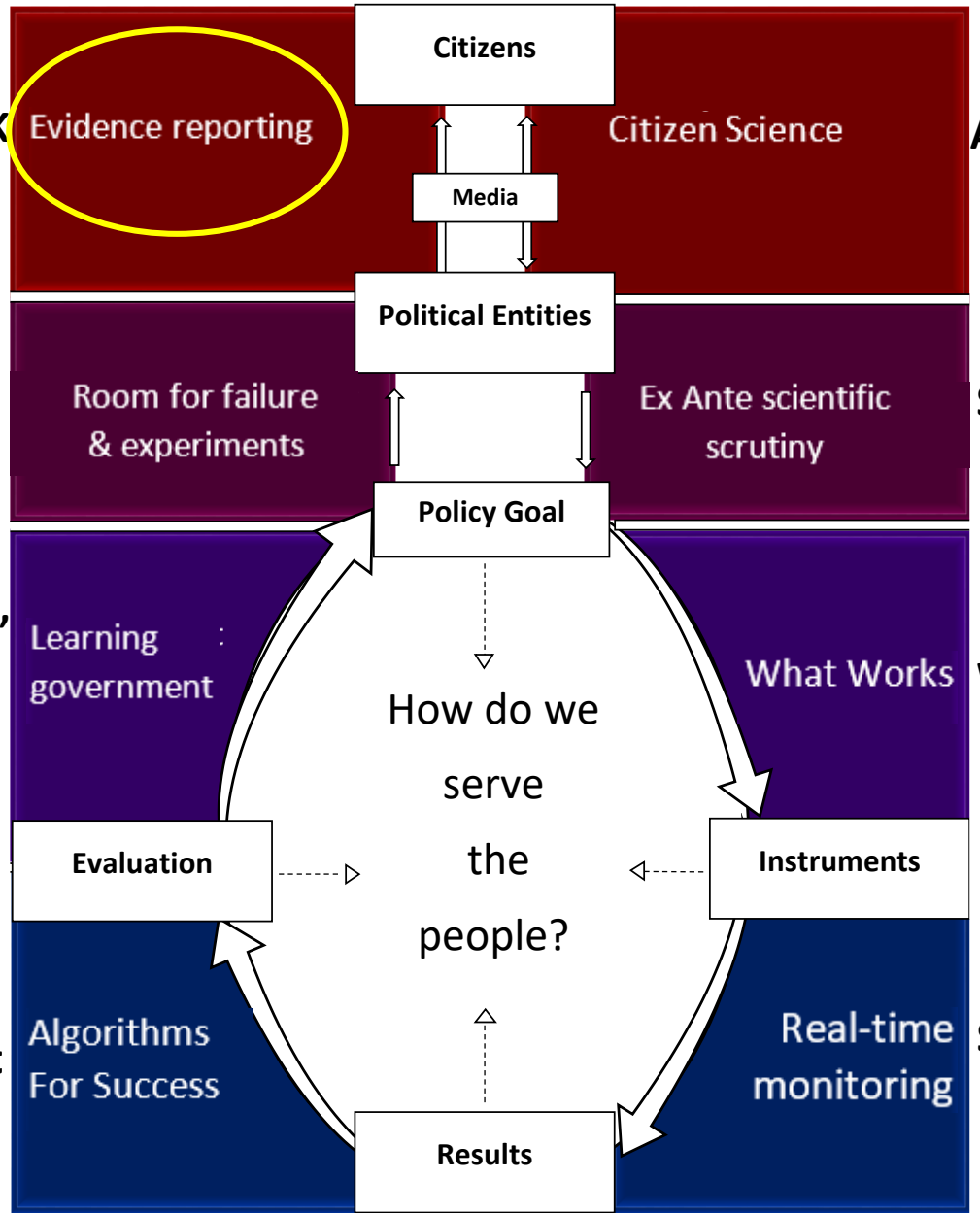
Security, Health, Traffic: East-Asia

Evidence days, Sense about Science, UK

Experimental Finland

Dutch Operation “Insight into Quality”

US Data Coalition: Evidence Act



All countries with ‘smart citizens’

Science Coalition, The Netherlands

What Works Movement, UK/USA

Security, Health, Traffic: East-Asia

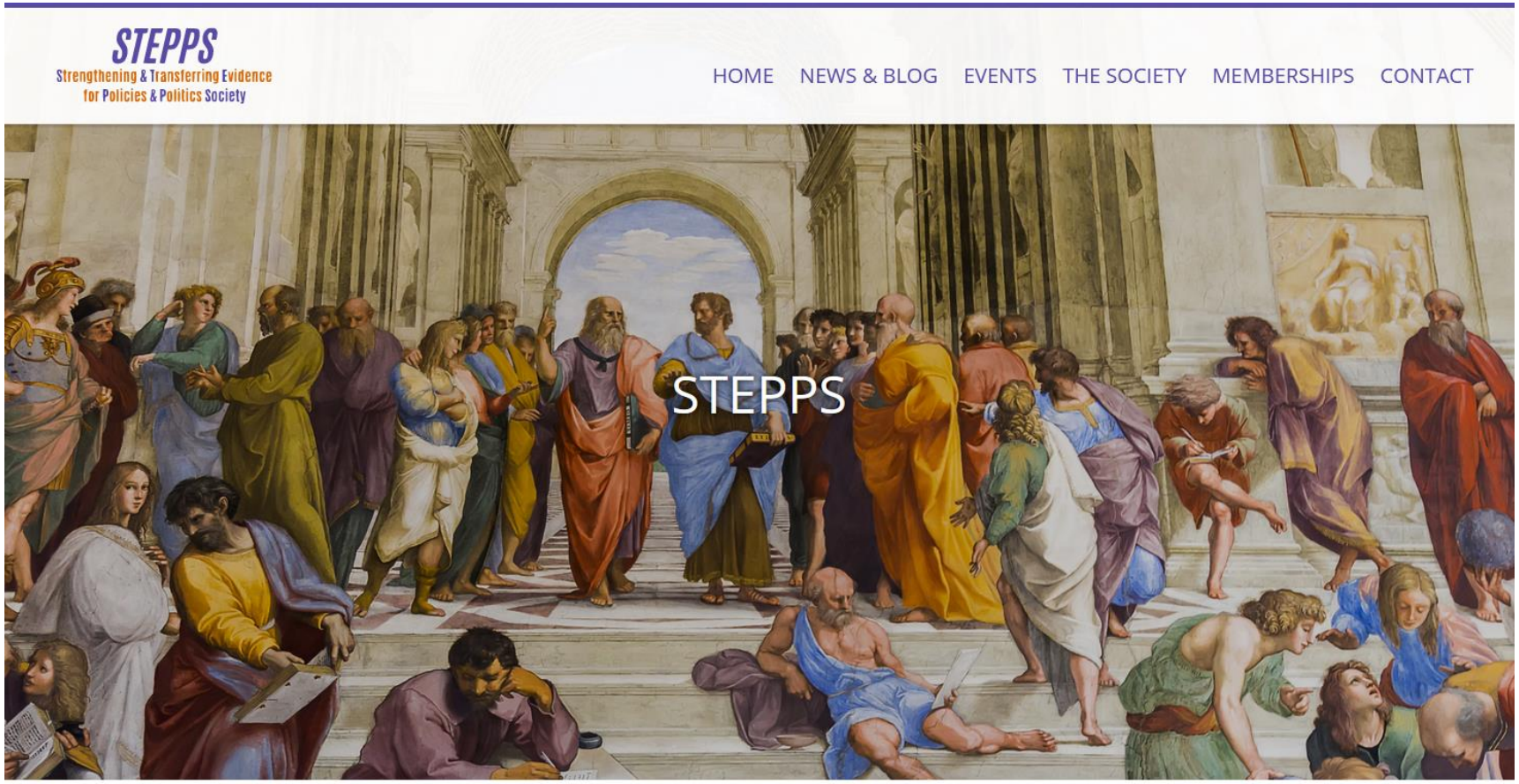
Ambitions

- How can we better connect *the people* to politics through evidence?
- How can we use AI responsibly for better policies?
- Can we create “universal policy effectiveness” through RCT’s?
- How to strengthen the role of science?
- How to achieve a learning government and what does this require?
- Can we be open about the nature of evidence?

In short……..

How can we learn from best practises worldwide and get connected?

www.steppsociety.com



Parallel Session

Evidence Informed Policy Making

Rémi Quirion

President, International Network for Government Science Advance, Canada

Fonds de recherche du Québec

Nature et Technologies • Santé • Société et Culture

Societal Impact of Science 2023 / AESIS

Science advice at various levels of governments

Rémi Quirion, OC, PhD, CQ
Quebec Chief Scientist & President of INGSA
June 20st, 2023

Québec

A unique model: the broad mandate of Québec's Chief Scientist

Québec Chief Scientist's Mandates

Founding member of the International Network for Government Science Advice (INGSA) en 2013

President since september 2021

Over 5,000 members from 130 countries.

International Network for Governmental Science Advice

A unique model: the mandate combines an advisory role on science to the government :

- **To *advise* the Minister of Economy, Innovation and Energy & Québec's government on any matters pertaining to the development of research & science; links with most Ministers;**
- **To promote international research partnerships and science diplomacy (missions with the PM & various ministers); science diplomacy including my role as President of the International Network for Governmental Science Advice (INGSA);**
- **Global scientific collaborations;**
- **To promote scientific literacy & partnerships with the civil society (e.g. Audace, Engagement and Dialogue programs);**

… and CEO of the three research funds (FRQNT, FRQS, FRQSC):

- **To support basic research in all fields & to develop intersectoral research linked to major societal challenges (demographic changes and the aging of the population; sustainable development and climate change; creativity and entrepreneurship; and more recently, the 'Science and Society'-focused issues (disinformation, democracy, etc.). Challenges related to the United Nations Sustainable Development Goals (SDGs);**
- **To promote careers in research (trainees at all levels).**

Fonds de Recherche du Québec's (FRQ) vision : To support excellence & creativity in research taking into account SDGs & EDI in an open science model.

Advising the Minister… & Government

Advising the Minister of Economy, Innovation and Energy on the development of research, science and innovation. Collaborations with several other ministries including Premier's office… Since 2011, 4 Prime Ministers from 3 parties; 8 Ministers. *RESILIENCE & TRUST*

- **Active participation in parliamentary committees (e.g. Access to Administrative Data, Economy & Labour, University of the Future, Climate changes, Covid-19 pandemic…).**
- **Consultation with ministries regarding the strategic plans of the Fonds de recherche du Québec.**
- **Involvement in Québec's international policy; data access and AI-digital strategy; SQRI; innovation districts.**
- **Mandates from Ministers: Report on the future of universities (2020-implementation underway); access to health data with the director of the Office of Innovation; strategy toward the successful mitigation of CO2; Adaptation to Climate changes….**

Science, politics & government

We must encourage our governments and elected officials to take into account research and scientific expertise, whatever the sector, in decision-making. The pandemic as an "accelerator".

- **Scientific expertise is not the only component of political decision-making, but must nevertheless be better considered.**
- **Support for Science and Policy programs and training workshops with policy makers & elected officials.**
- **And of course, the “general public”.**

Research, evidence and public policy: sometimes it works, sometimes it doesn't!

Ban live bait fish to control the proliferation of grass carp: the MFFP follows the recommendations of the researchers. Impact on sport fishing and tourism.

Displacement of woodland caribou in the Val-D'Or region: government and university experts recommend a logging road as an alternative route (2016-2017). Proposal rejected!

Scientists in residence: promoting scientific expertise & advice in our government.

The *Forum sciences et politiques du Québec* (Forum SPQ) is a community of practice at the interface between science and public policy in Quebec, bringing together people from public administration, politics, research and innovation. It has over 800 members.

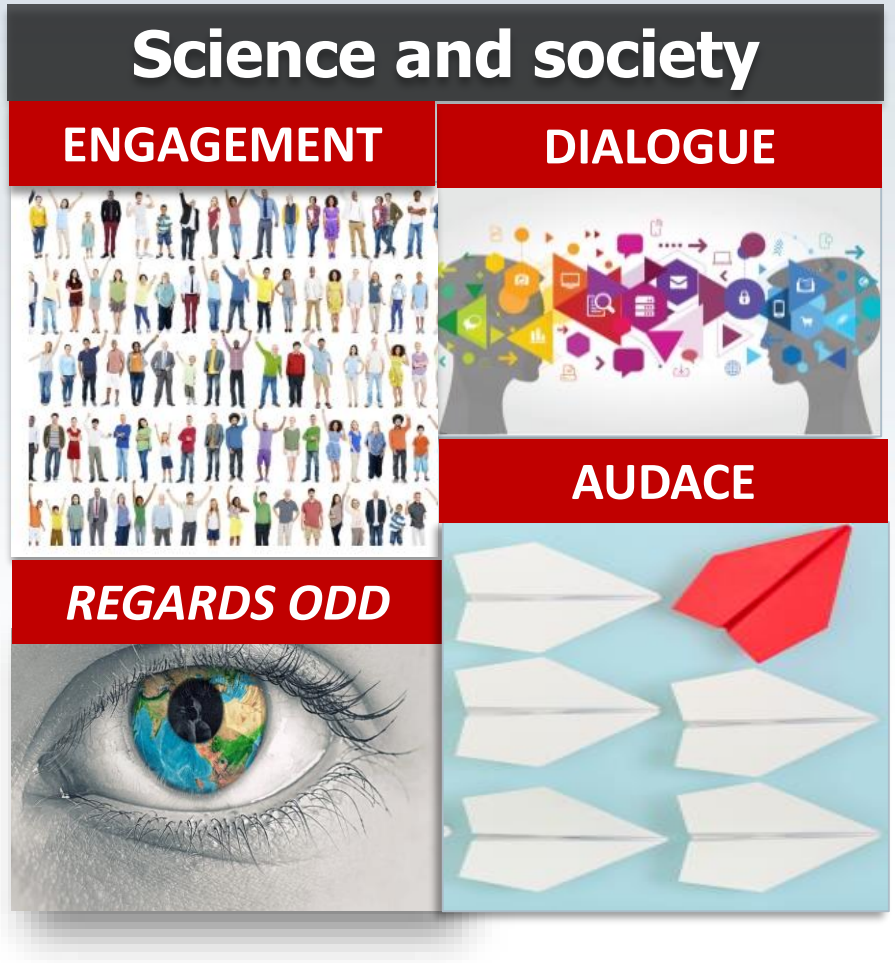
- **Program for scientists in residence in ministries (2-year internships).**
- **Studies concerning the use of scientific information by civil servants.**

Promote scientific diplomacy by setting up internships for scientist in residence in Québec offices abroad: contribute to Québec's positioning at the international level, to the link between the Québec university network and that of the host country.

- **Doctoral students from all research sectors.**
- **Conclusive experience with the first cohort: two doctoral students in pure sciences (!) in London and Munich…**
- **Four scientists in residence in post (South Korea, Japan, Morocco and UNESCO) and preparation of another call for applications (United States, Germany and Belgium).**

Gabrielle Simard (PhD in physics from McGill University) in Munich. Jean-Christian Lemay (PhD in chemistry at Laval University) in London.

And what about our fellow citizens? How to involve them in these processes?



Scientific advice for better public policies: we must involve citizens if we want them to adhere to the decisions of elected officials. At the same time, we must increase scientific literacy, which is the best antidote against the misinformation that threatens our democracies. Some FRQ programs :

- **ENGAGEMENT program for participatory science : allows a contribution of the population to research, to exploit collective intelligence and to bring citizens closer to science and research.**
- **DIALOGUE program to encourage interaction between science and society (reseachers and students).**
- **REGARDS ODD program: digital communication projects by small student teams aimed at young people.**
- **AUDACE program aims to do research differently, increase inter-order, interdisciplinary and inter-sector synergies to meet societal challenges.**

CEO of the Fonds de recherche du Québec

CEO of the Fonds de recherche du Québec (FRQ)

Québec Research Funds (FRQ)

- **In their respective fields, the FRQ promote collaborative basic and translational research & the training of the next generation;**
- **They facilitate partnerships at all levels in Québec, Canada (especially with the federal councils) and at the international level.**

80% **of our budget aims to support excellence in basic, non-targeted research programs.**

For the first time in our history, three exceptional women as Scientific Directors…

Open science, the SDG & EDI: major priorities.

Québec strategy for research and investment in innovation 2022-2027(SQRI²)

$7.5 billion over five years, including $1.2 billion for FRQ (13% increase!)

Five axes to promote the innovation cycle (research-innovation-commercialization) throughout Quebec: 1) Excel in research; 2) Create an environment conducive to innovation; 3) Commercializing the innovation; 4) Develop talents and scientific culture; 5) Focus on sectors of the future.

- **Improvement of FRQ basic credits ($70M over five years).**
- **Support for the FRQ to meet four major societal challenges.**
- **Science and Society Challenge: fight against misinformation, science and policy interface in Quebec, etc.**

Key FRQ Research Programs

In our three most recent strategic plans (2022-2025):

- **UN Sustainable Development Goals (SDG);**
- **Principles of Equity, Diversity and Inclusion (EDI);**
- **Open Science;**
- **Disinformation and Development of critical thinking;**
- **Collaborations between Scientists and government (PDF-Scientists in Residence—2y).**

Publicly-funded research

- **Should benefit society, and sustainable development is a major concern.**
- **Basic research is essential to discover novel means to reach the ambitious goals of the SDG.**
- **The way forward to a better and sustainable future for all.**

From Global to Local Governments: Different Needs & Science Advice should be properly adapted

Scientific expertise, research results and evidence help our elected officials and governments make decisions: from global to local.

Develop initiatives to encourage members of the scientific community to get involved in parliamentary and all levels of governments.

Capacity building on research & science advice internationally with the International Network for Governmental Science Advice (INGSA; co-founder & President since Sept 2021).

International Network for Governmental Science Advice (INGSA)

International Network for Governmental Science Advice (INGSA)

INGSA is a collaborative platform bringing together various national and international science advisory organizations to facilitate dialogue with policy makers, elected officials & scientists & science advice organizations. Capacity building and research in the science of science advice. Science diplomacy.

Founding member of INGSA in 2013, and president since September 2021. Over 5,000 members in 130 countries! It's free — I invite you all to join.

Mandates

- **Strengthen individual and institutional capacities in science policy interfaces. Simulation workshops all over the world.**
- **Generate and share practice-oriented knowledge. Last INGSA international congress in Montreal and virtually (September 2021).**
- **Convene and strengthen communities of practice in science advice and science diplomacy. Our Chapters as key components.**

My priorities as President of INGSA

Organizational capacity building

The governance and consolidation of the organization, including the strengthening of our human resources and finances. Election of an international board (3 VPs-England, Ethiopia, Chile). Strategic plan 2022-2025.

Cultural & linguistic diversity for effective scientific advice

The influence of cultural and linguistic context on the practice of scientific advice. Creation of an international French-speaking network in scientific advice. *Focus of future European chapter. Funding research projects on this topic (INCLUSIVE project; Claire Craig, Oxford).*

Science advice at the local (cities) level

The exercise of scientific advice at different levels of government – globally, nationally, regionally and locally, including citizen participation. Chief Scientists appointed in cities (Victoriaville, Longueuil, Nicolet….UMQ). *Future North American chapter –Trio of cities in Canada, USA, Mexico).*

Promoting science diplomacy…and key to continue to built capacity in efficient science advice globally.

Current INGSA chapters

Three chapters: Africa, Asia, Latin America & the Caribbean.

Associated working groups include Foreign Ministries Science & Technology Advice Network (FMSTAN).

New: Réseau Francophone International en Conseil Scientifique (RIFCS)… Key: create a network & capacity building. Impact of culture & language in French speaking regions (NA, Europe, Africa).

A New chapter under development:
Scientific advice & expertise for proximity governments

North American Chapter (INGSA) to focus on science advice at local, city levels. Ongoing work towards a pilot project to assess the status of science advice at the city/local level, identify the needs for such a network and establish its structure & governance.

- **Organization of a workshops in the margin of international events (the latest during the first International Cities Summit of the Americas in Denver (24 to 28 April 2023); a session on scientific advice to cities during the AAAS Conference in Washington (March 2023; earlier sessions in Seattle).**

Learning from Quebec:
Development of initiatives on scientific advice in cities.

- **Establishment of chief scientist or scientific advisor positions in cities: Victoriaville since February 2023; Longueuil, Laval, Nicolet, Gatineau to come, and the Union of Quebec Municipalities.**
- **Survey on data use by Québec cities. They see the benefits of collecting data and producing dashboards, but they don't all have the resources to do so.**

Concluding remarks

Critically important to promote science advice to governments… from local (cities) to global (international organizations) levels.

- **Elected officials and high level policy makers should be enticed to acquire basic knowledge about the scientific method & sciences. Science advisors of all types should help .**
- **Critically important for scientists & the scientific community to have a much better knowledge of the functioning of the government. Most are rather naïve in that regard. A role for science advisors of all types here as well.**
- **INGSA as a mean for chief scientists, scientific advisors, academia to exchange on best practices, constraints, capacity building & success stories.**
- **Work in close collaborations with citizens. Take their opinions & ideas into account. Truly integrate them into a science-government-citizen's dynamic. 'A golden triangle'.**

Merci!

remi.quirion@frq.gouv.qc.ca

www.scientifique-en-chef.gouv.qc.ca

@SciChefQC

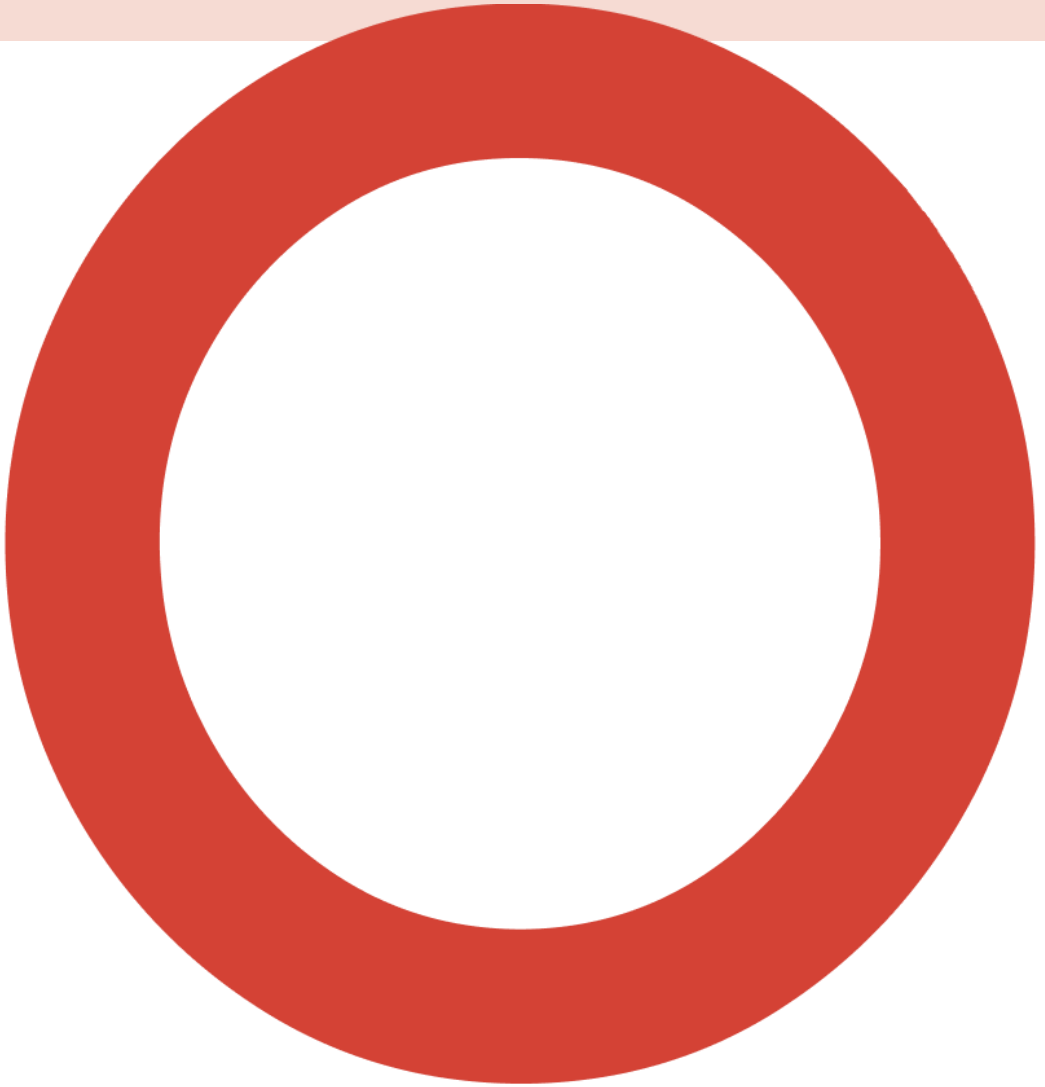
Parallel Session

Evidence Informed Policy Making

Euan Adie

CEO, Overton, United Kingdom

Evidence Informed Policy Making – following the data



Euan Adie (euan@overton.io)

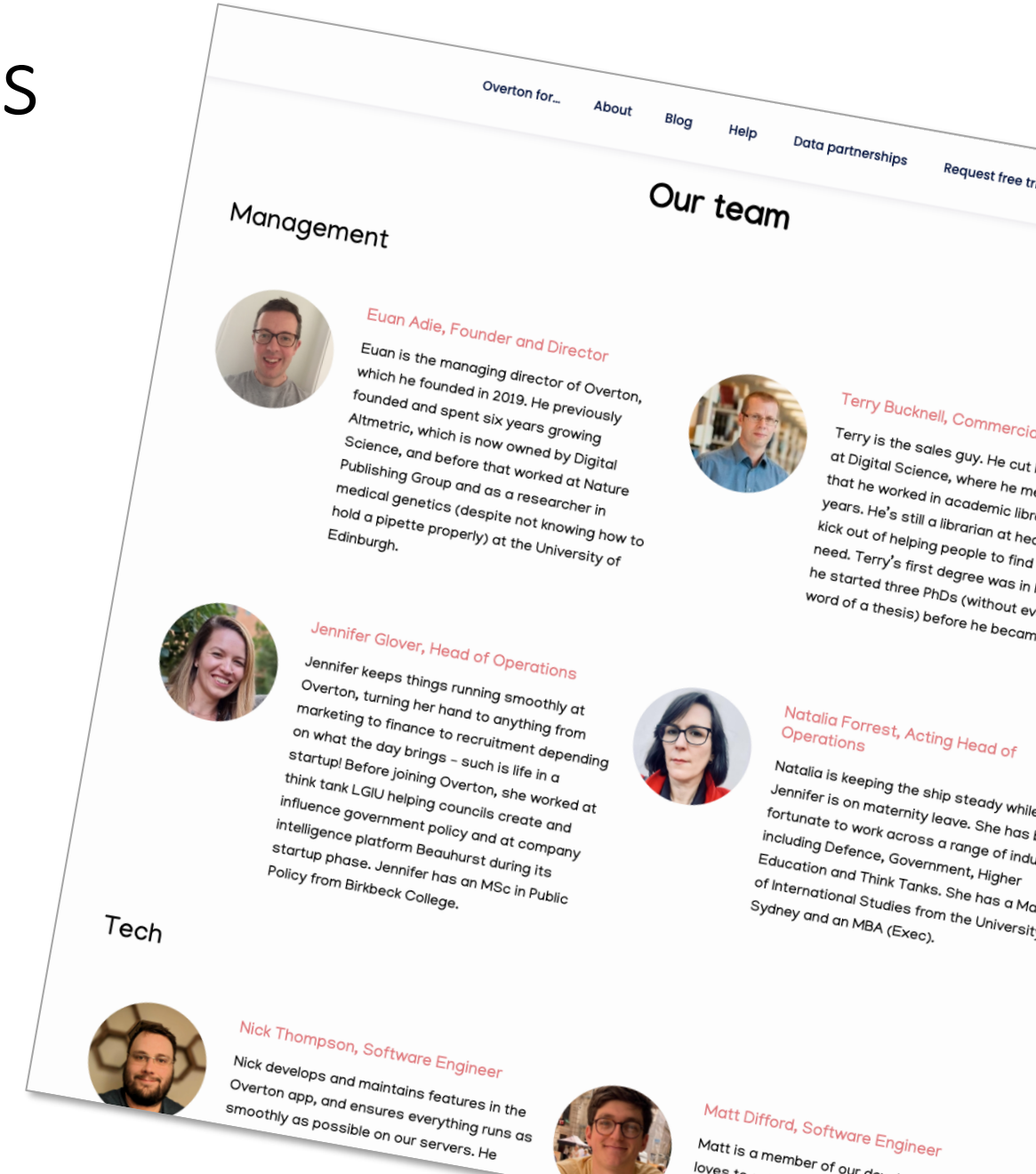
AESIS Societal Impact of Science Conference, 20th June 2023

This presentation will cover…

- The Overton database (briefly)
- What can we tell from the data?
- How are we trying to improve things?

Overton staff backgrounds

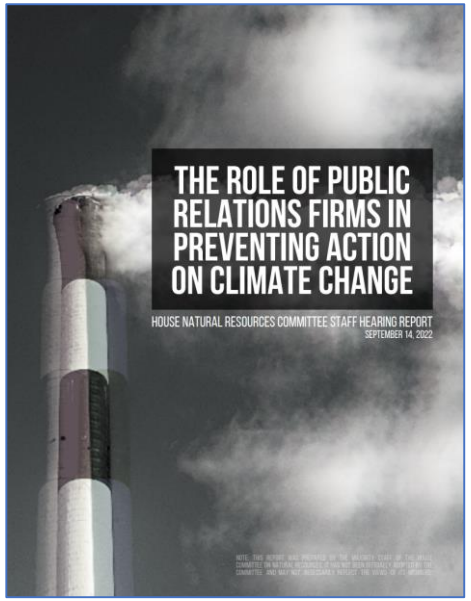
- Research impact & researcher support (Calgary, LSE)
- Bibliometrics & altmetrics (Dimensions, altmetric.com)
- Academic / policy engagement (Imperial, Nottingham)
- Think tanks, IGOs & government (Local Government Information Unit, IISS, EU Commission)



NSW
Department of Planning, Industry and Environment
NSW Waste and Sustainable Materials Strategy 2041
Stage 1: 2021–2027
dpie.nsw.gov.au

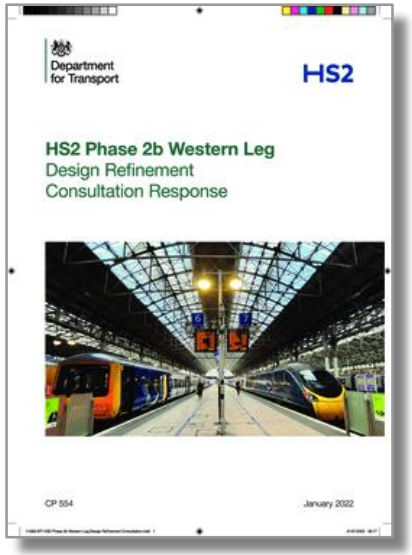
MANAGING THE DEVELOPMENT OF DIGITAL MARKETPLACES IN ASIA
ADB

AFFORDABLE HOUSING STRATEGY 2020–2030

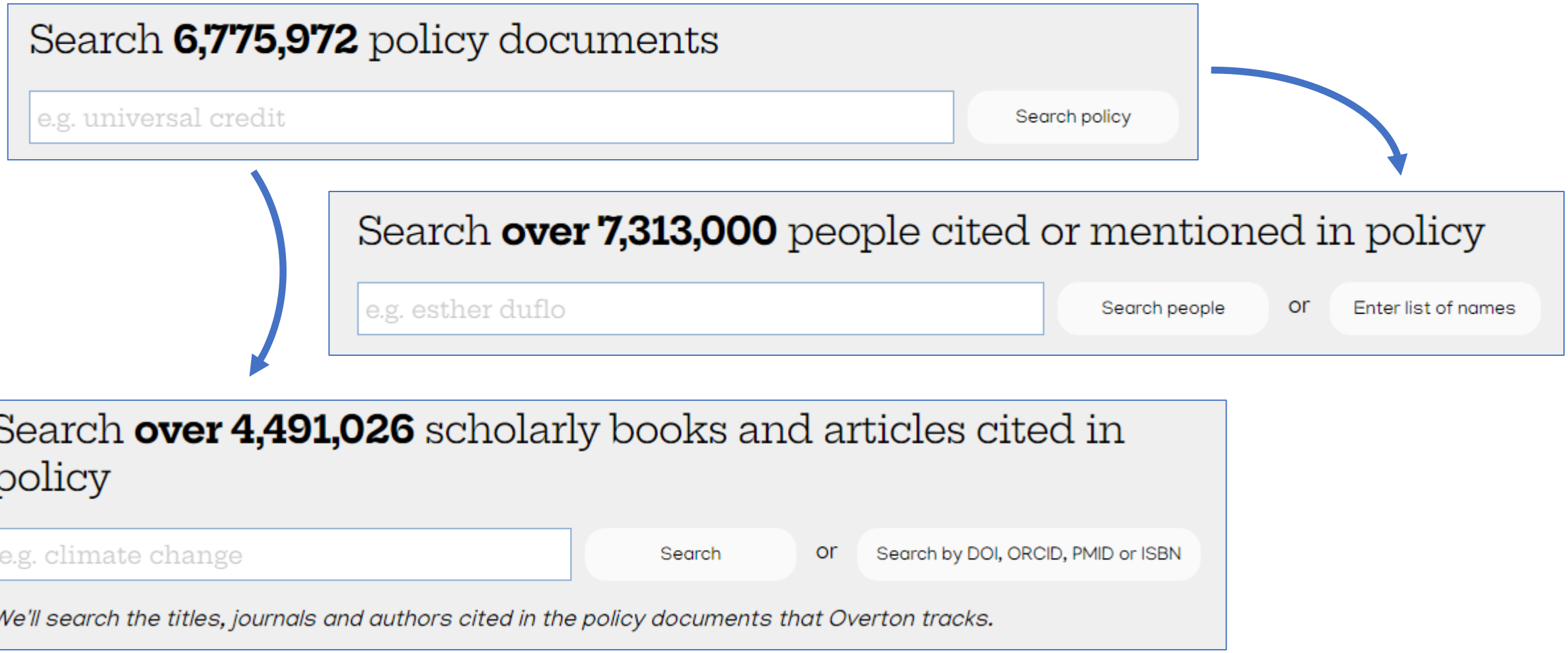

THE ROLE OF PUBLIC RELATIONS FIRMS IN PREVENTING ACTION ON CLIMATE CHANGE
HOUSE NATURAL RESOURCES COMMITTEE STAFF HEARING REPORT
SEPTEMBER 14, 2022

Menu
ADVERTISING ASSOCIATION
CODE OF CONDUCT – RENEW 2022
RENEW 2022
Meeting

Social and Economic Conditions of Student Life in Europe
EUROSTUDENT VII Synopsis of Indicators 2018–2021
DZHW
wbv


Department for Transport
HS2
HS2 Phase 2b Western Leg
Design Refinement
Consultation Response
CP 554
January 2022

Overton is a large database of policy documents & the people and papers they are connected to



Overton

START | SEARCH | BROWSE DATA | ADMIN | HELP

Documents connected to University of Ottawa

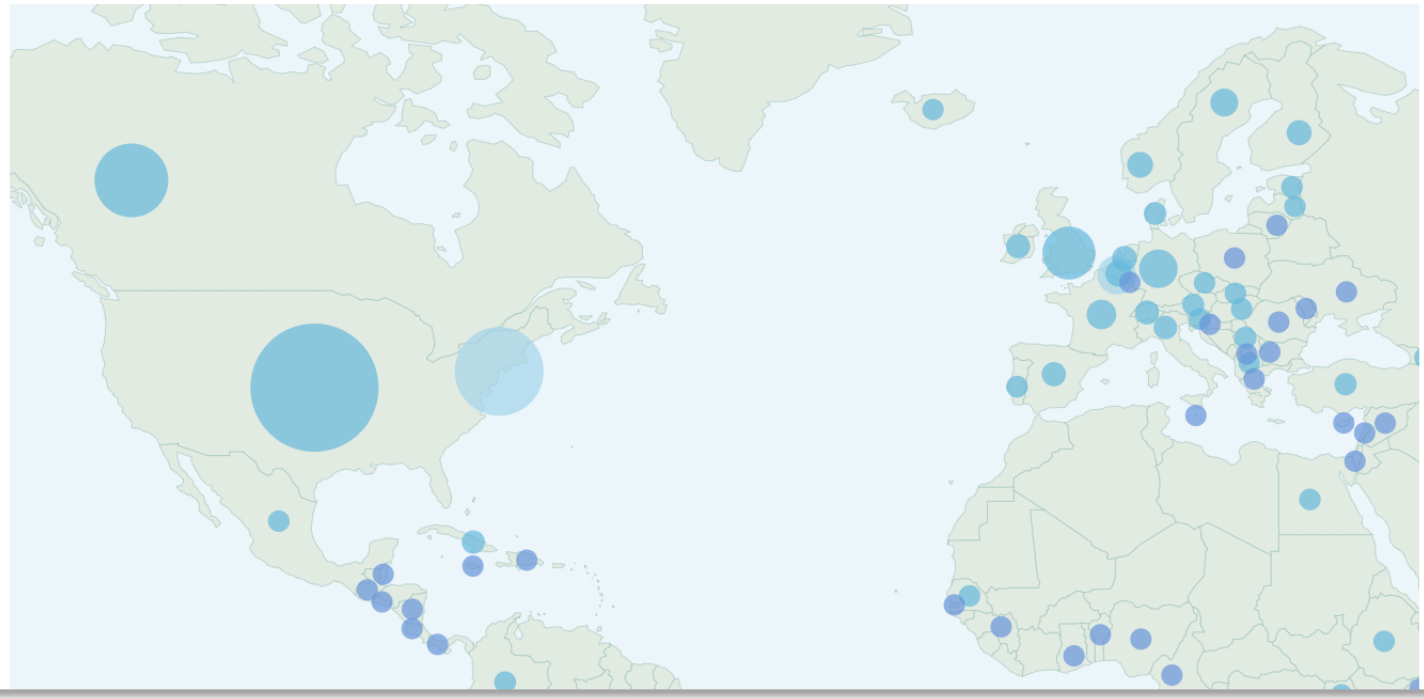
Summary report for 23,670 policy documents from 913 different sources

Click to show search filters

See underlying documents

Export

Document count	Countries	Sources
23,670	104	913



Overton START SEARCH BROWSE DATA ADMIN HELP

Policy document

The Chasm Widens:

Canadian Centre for Policy Alternatives on May 25th 2023 Publication

Income inequality is getting worse in Manitoba: the market income of the bottom 20 percent of Manitoba families declined while the top 20 percent of Manitoba families received greater income increases

ECONOMIC INEQUALITY TAX MINIMUM WAGE

Tag this Download PDF

Cause-specific mortality by occupational skill level in Canada: a 16-year follow-up study

M Tjepkema et al. (2013) Chronic Diseases and Injuries in Canada

Author from **University of Ottawa** is **Richard Wilkins**

> In an attempt to quantify the impact of income on health, a report funded by the PUBLIC Health Agency of Canada estimated that from 1991 to 2006, at least 40,000 premature deaths in Canada each year were due to income inequality (Raphael & Bryant, 2014; Tjepkema et al., 2013).

On page 5

Tjepkema, M., Wilkins, R., Long, A. 2013. Cause-specific mortality by income adequacy in Canada: A 16-year follow-up study. Health Reports, 247, 1422.

On page 17

Overton START SEARCH BROWSE DATA ADMIN HELP

Policy document

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Policy document

Hansard Transcript 2023-Apr-17

Hansard Ontario on April 17th 2023 Transcript

LANDLORD BRADFORD BYPASS LANDLORD AND TENANT BOARD

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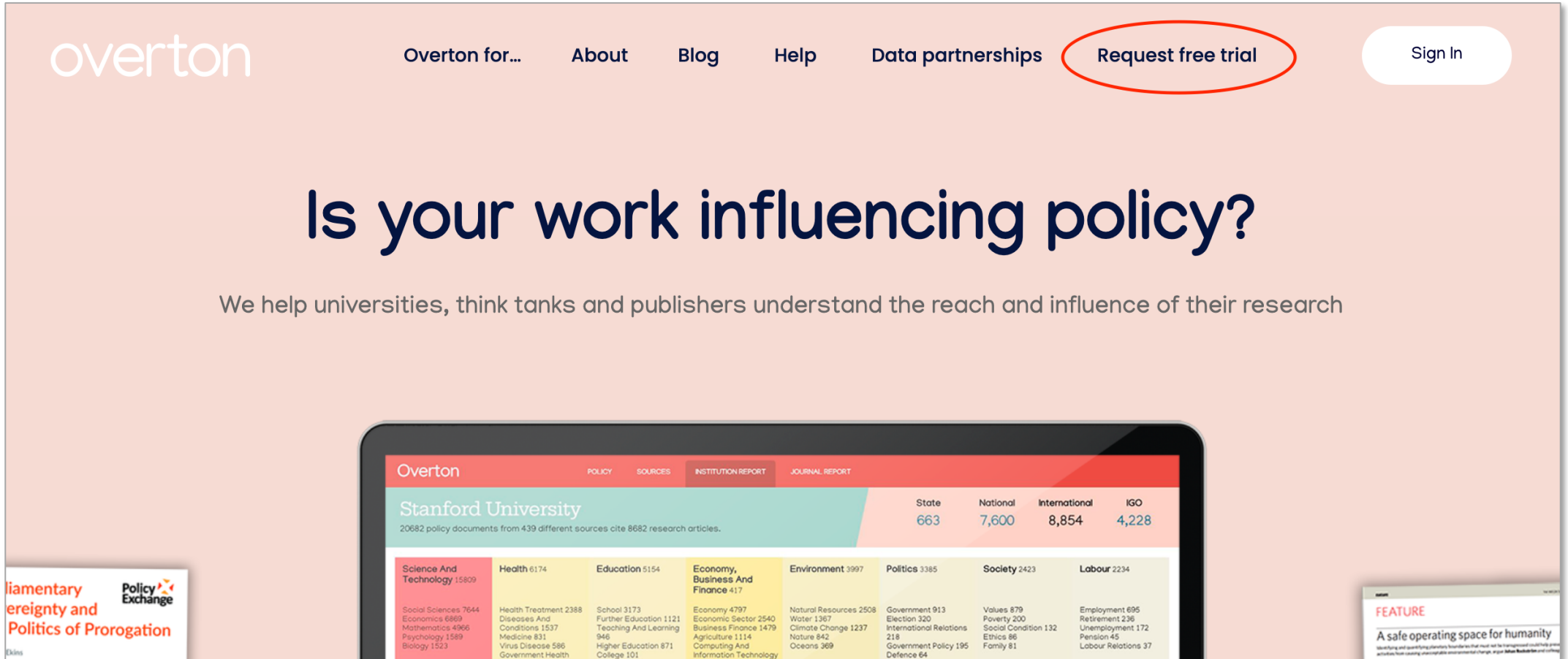
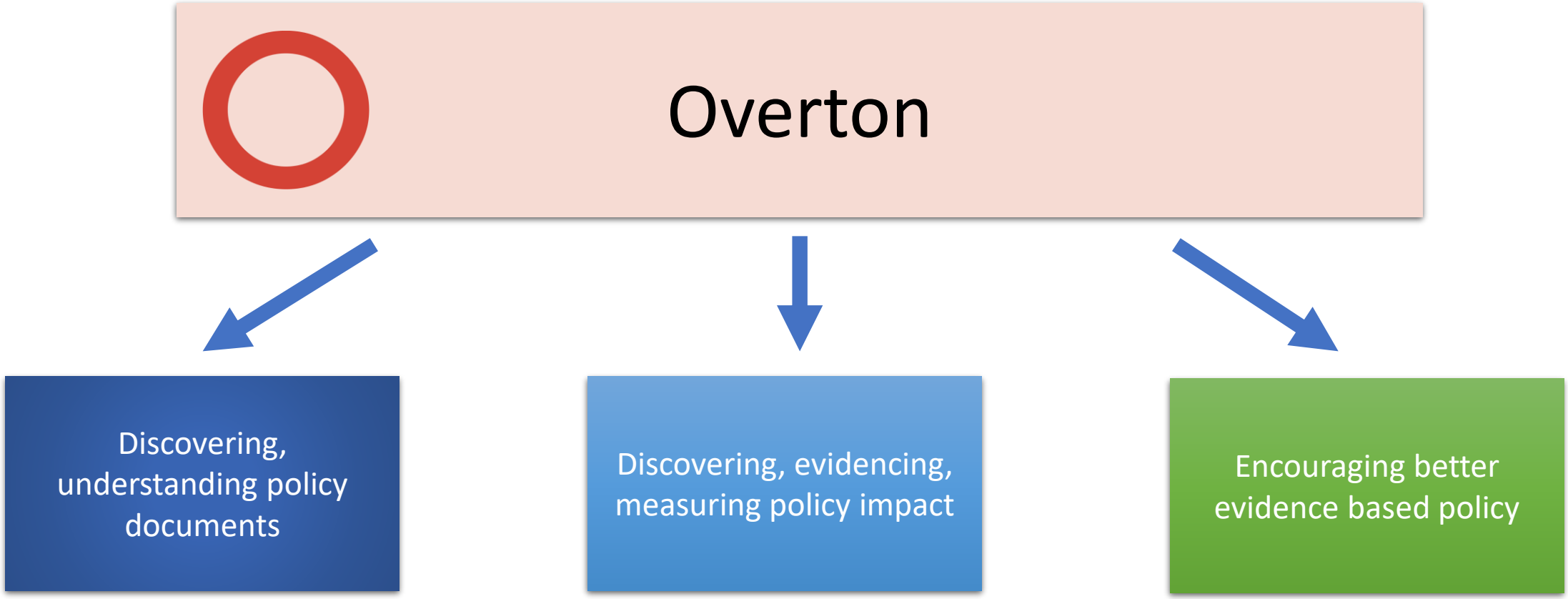
Carolyn Whitzman at University of Ottawa
This name and affiliation were mentioned in this document.

The research that I have, which comes from the great *Carolyn Whitzman*, the housing professor at the University of Ottawa, shows us that for every one unit of affordable housing—"affordable" defined by the Canada Mortgage and Housing Corp.—that is being built in Canada right now, we are losing seven. When large real estate investment trusts swoop into a community, buy up a property that a landlord has not maintained effectively— in some cases, for decades— and turfs them out on the street, it's called a renoviction, and it's one of the things that my friends in government are talking about addressing with this bill. But it's one thing to increase fines on individuals or companies—$100,000 for individuals; $500,000 for companies. That's negative liberty. That's one thing. But where's the positive liberty? Where's the support you give people? It's through rental protection bylaws.

On page 48 (or quick view this section)

We want to make the evidence that goes into policy transparent

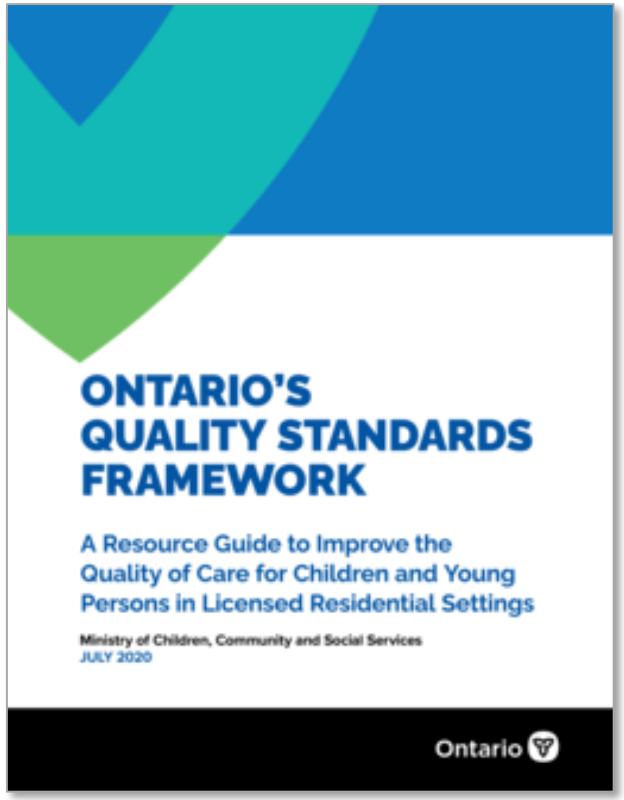



Overton
Discovering, understanding policy documents
Discovering, evidencing, measuring policy impact
Encouraging better evidence based policy

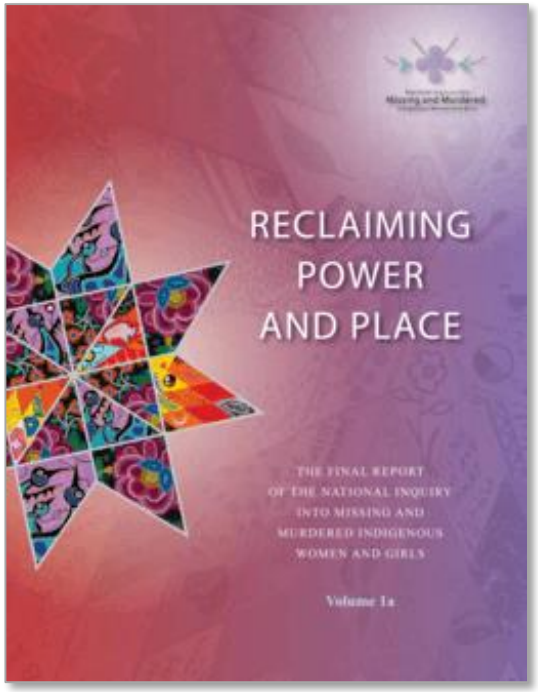
What can we tell from the data?

Direct relationships do exist

is cited by



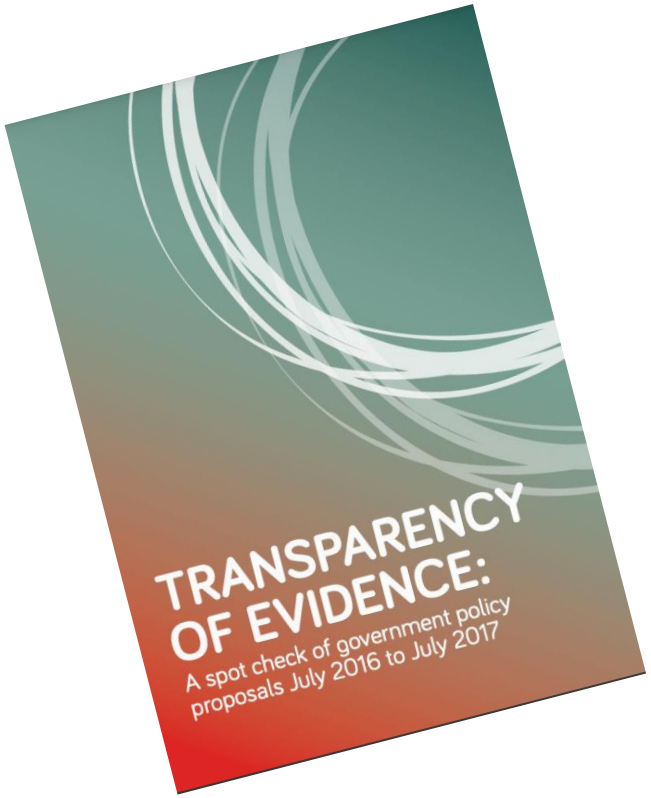
But usually knowledge brokers are critical



cites

Translation / broker step

cites



Alliance for Useful Evidence

INSTITUTE FOR GOVERNMENT

SENSE about SCIENCE

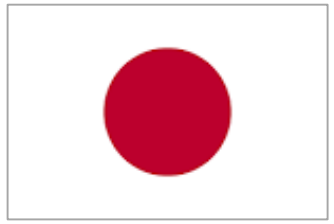
Evidence for Democracy

Scholars

Policymakers

Governments tend to cite local

In policy from…



The three most cited universities are…

University of Tokyo Kyoto University Harvard	Harvard Stanford University of Washington	UBC University of Toronto University of Washington	University of Sao Paolo University of Brasilia University of Minas Gerais

Source: Overton.io database, April 2023

How are we trying to improve things?

Learning Agenda Questions

Explore the U.S. Government's evidence priorities

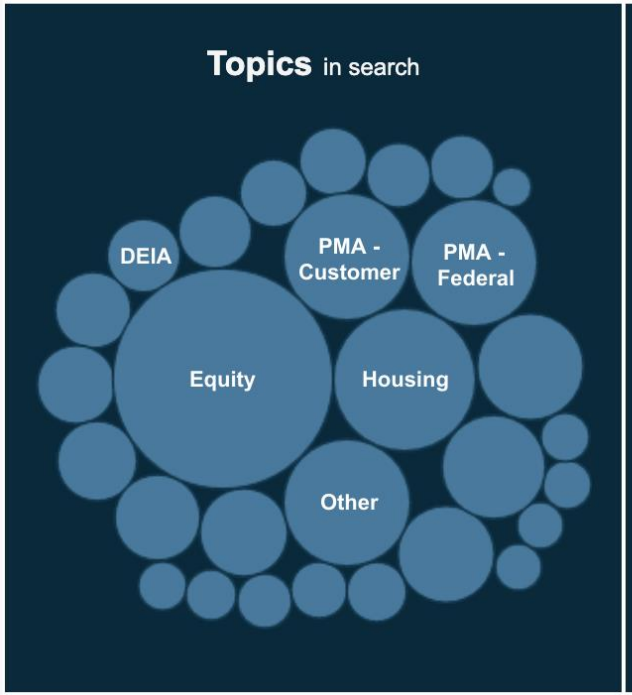
Search by keyword

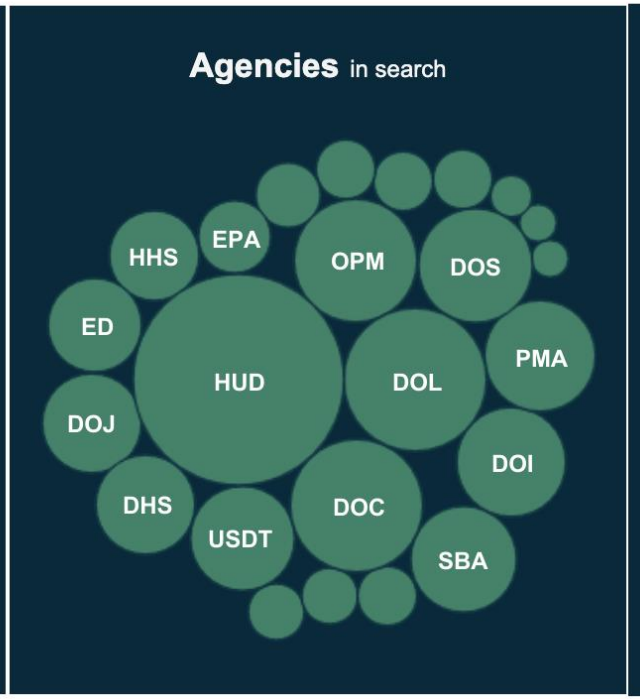
By **Topic**

- (•) All
- ( ) Climate Change
- ( ) Criminal Justice
- ( ) Cybersecurity
- ( ) Data Related
- ( ) DEIA
- ( ) Disaster Response & Recovery
- ( ) Economic Development
- ( ) Education

★★★ **648** results ★★★

These evidence priorities match your search





① **Discover**
Use the explore panel or click a bubble to filter results
(Re-click to deselect)

② **Curate**
Hover on a result to *Add to Your List* ✪

③ **Save**
View and export your list to explore further

VIEW YOUR LIST

DHS

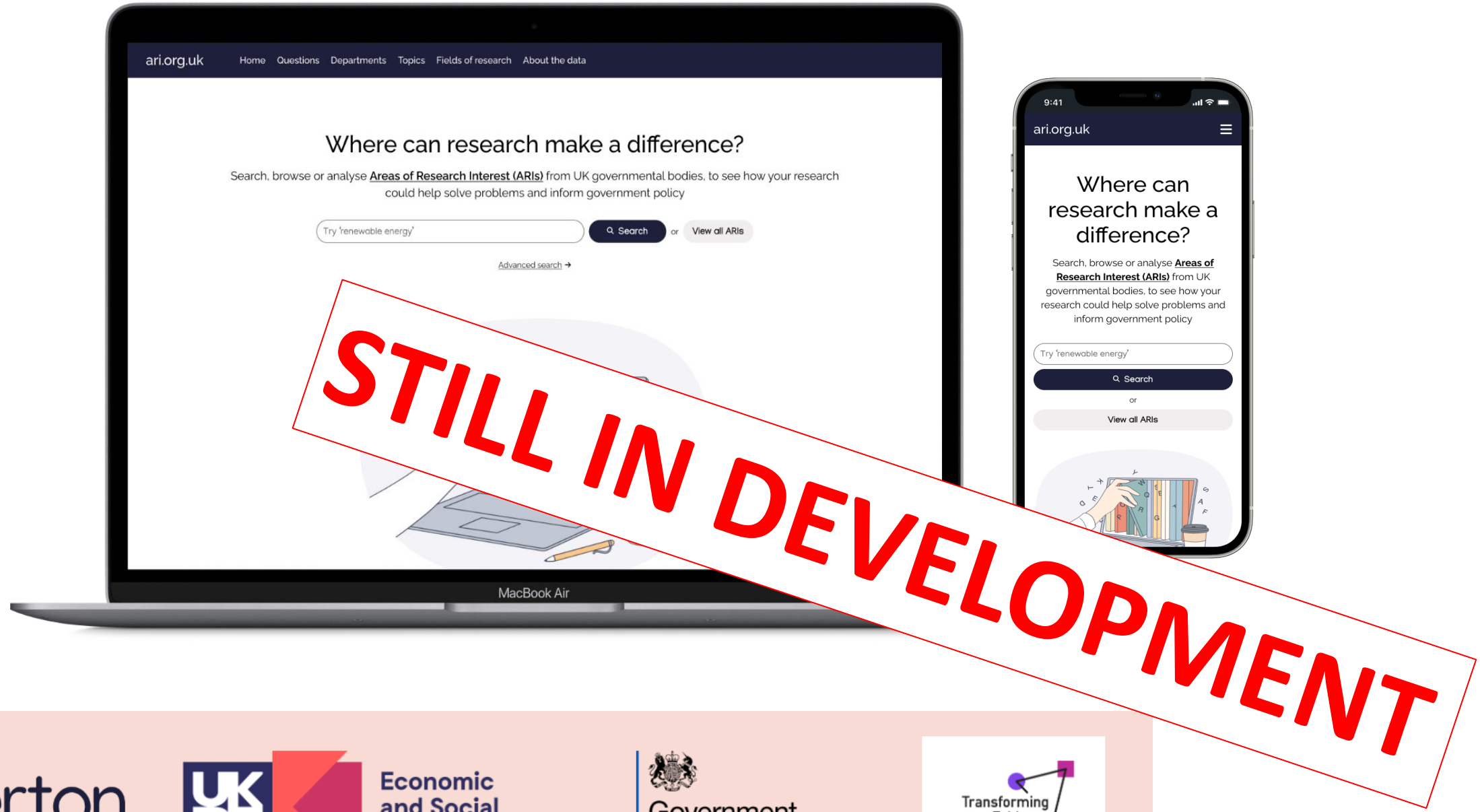
Do all subgroups of the target population participate in and perceive value and utility of national convenings as mechanisms of information exchange about security and risk resilience? What gaps and unmet needs, if any, exist?

DHS

Does level of Independent Test Agent (ITA) support throughout the acquisition lifecycle correlate with the adequacy of an acquisition program's test and evaluation outputs (operational effectiveness, suitability, and resilience)?

DHS

How accurate were DHS's estimates of the benefits and costs in the regulatory impact analysis for the regulation, "Standards to Prevent, Detect, and Respond to Sexual Abuse and Assault in Confinement Facilities"?



overton

UKRI Economic and Social Research Council

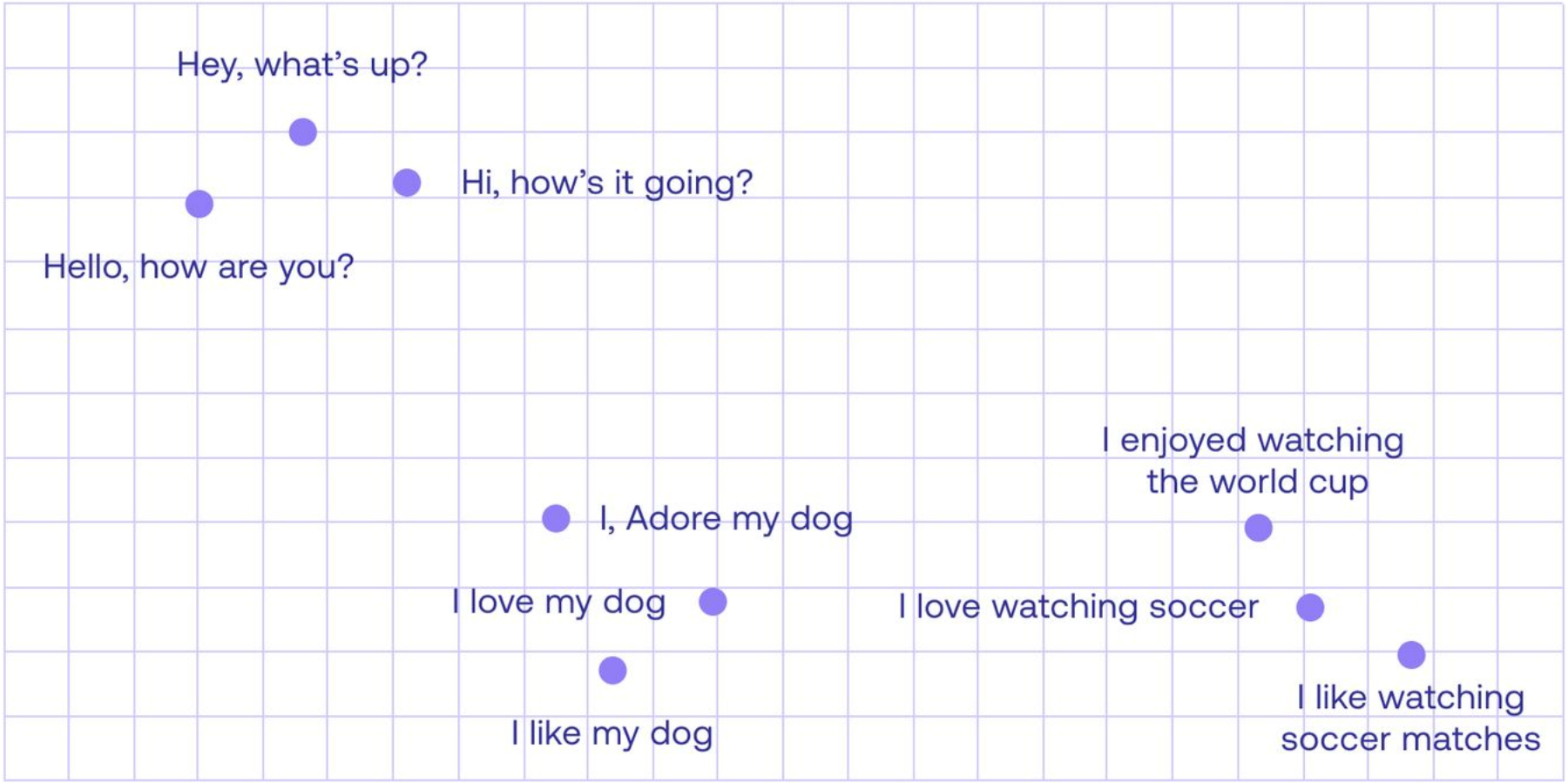
Government Office for Science

Transforming Evidence for policy and practice

Goals

- Help policymakers find experts directly & through existing networks
- Make government research priorities more visible to funders, brokers
- Help researchers be in the right place at the right time, talking to the right people

Large language models & “embeddings”



We fine tune off the shelf models – relating language from policy documents with the academic language in the research we can see they cite in Overton

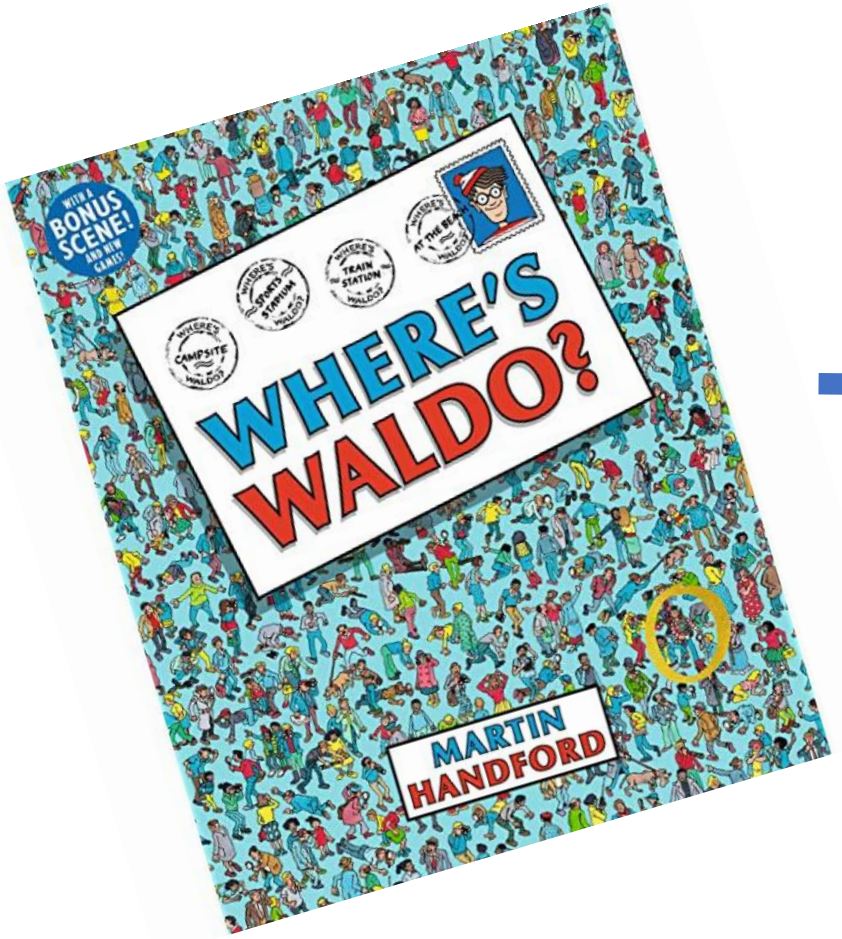
POTATO

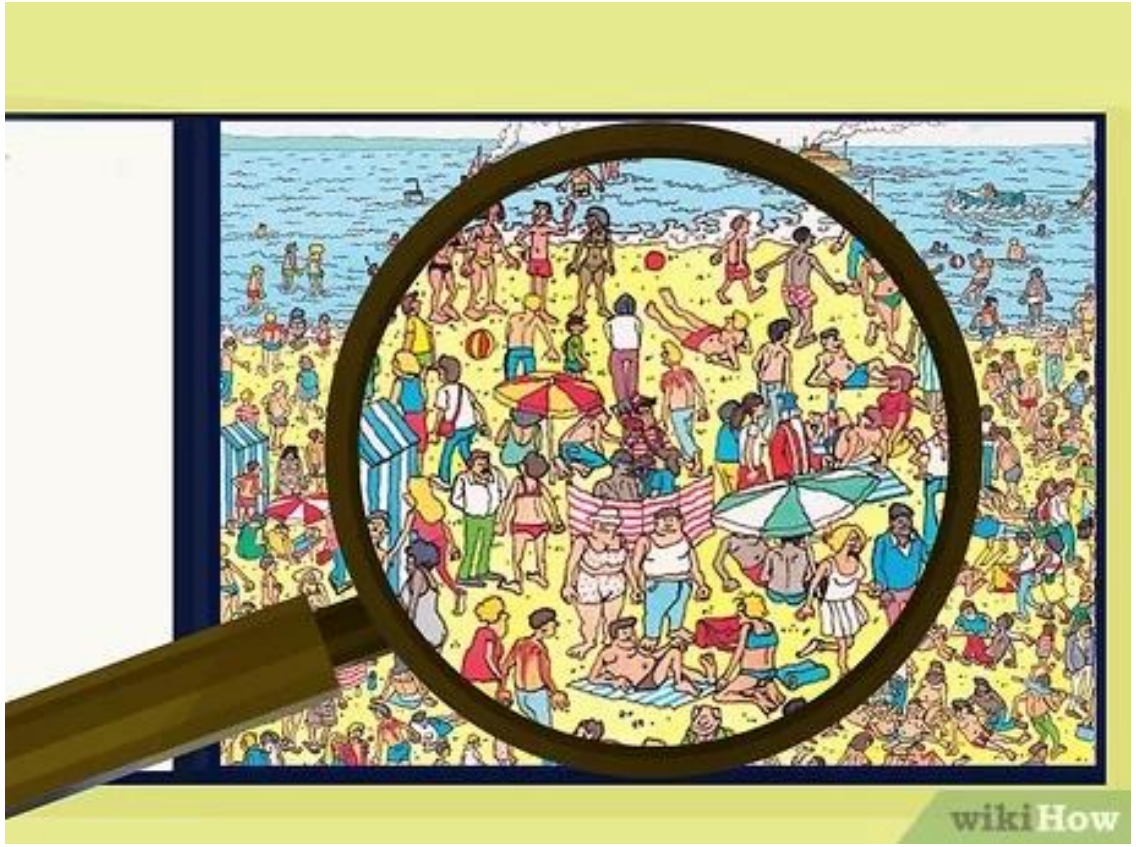
Education Act
Identification, Placement and Review Committees
Special Education Programs
SEN

POTAHTO

School age children and adolescents with autism spectrum disorders
Factors associated with foster carer well-being
Treating adolescents with social anxiety disorder
Non-pharmacological treatments for ADHD

Makes relevant research priorities easier for academics to find





Automatically match questions with existing projects, funders and experts

What are the environmental and other local impacts of significant amounts of new renewable generation capacity being built in the UK?

Department for Business, Environment & Industrial Strategy

Natural Environment and Offshore Wind (NEOW)

The project focuses on understanding the environmental impacts of offshore wind expansion, which is a form of renewable generation capacity in the UK.

Dr Agota Mockute

University of Hull

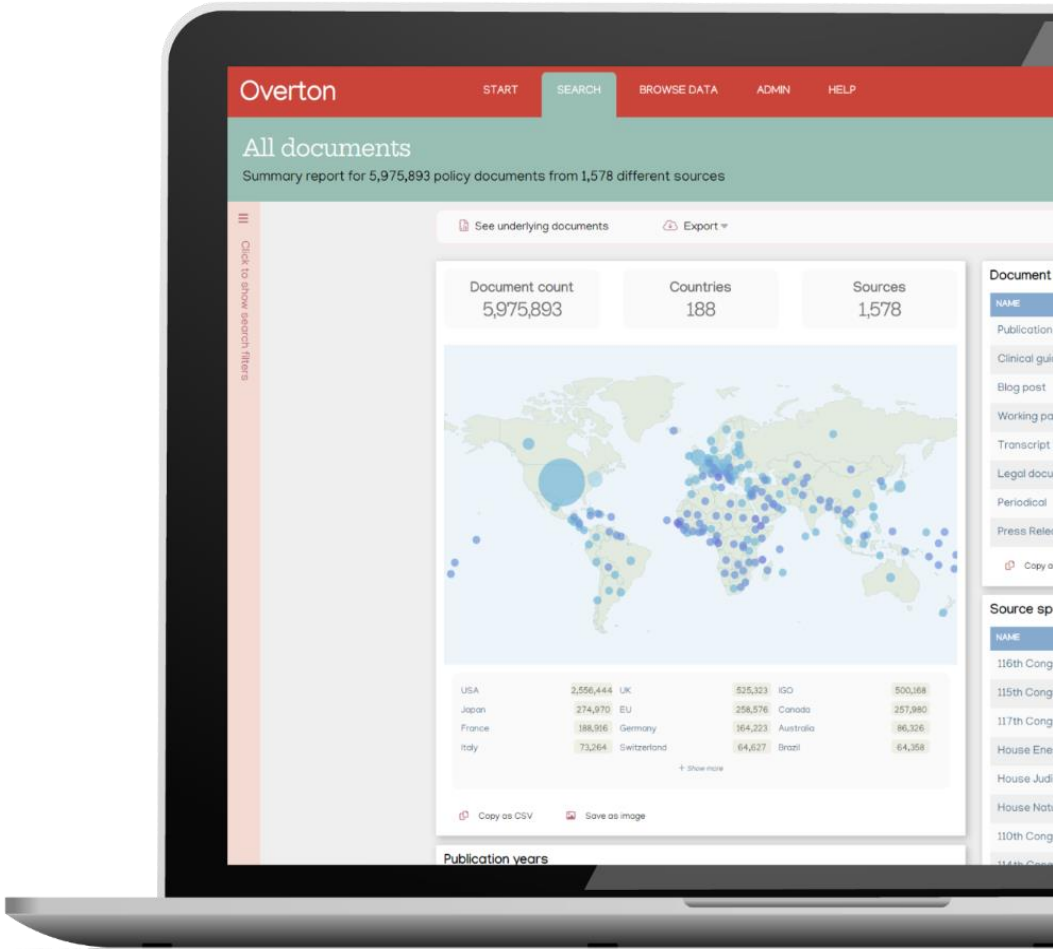
Next steps

- Finishing, launching UK site & releasing open data
- Looking at research questions from a wider set of organizations and countries
- Finding, working with new partners – on both supply and demand side of evidence for policy

Thank you!

https://www.overton.io

euan@overton.io



Recommendation

“Let scientists create skills to better integrate citizen needs into their government science advice.”