

The Power of Data to Advance the SDGs

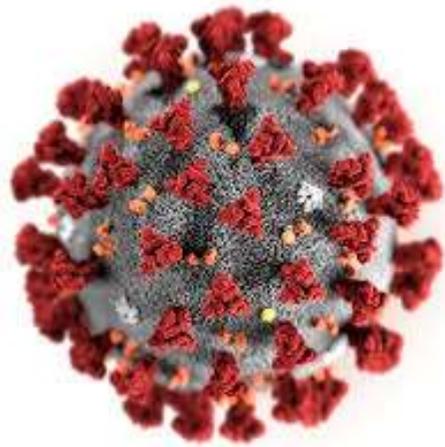
The role of Publishers to support the SDGs and examples from Elsevier

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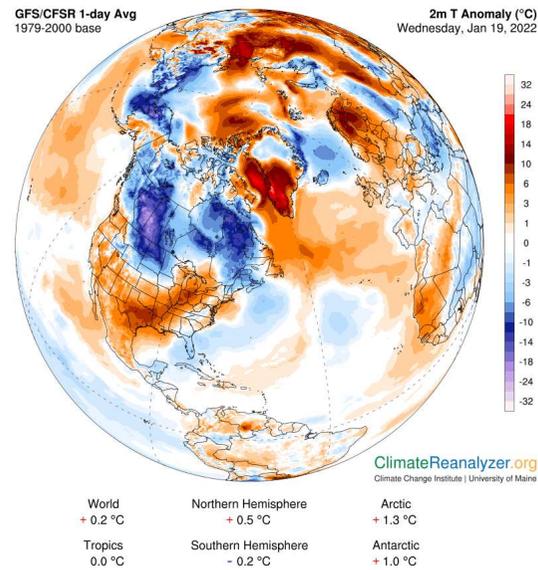


We are at a crucial junction for humanity - *Time to Look Up!*

A global health crisis



A global climate crisis



A global biodiversity crisis



“Listen to the science” – a stronger dialogue is needed.

Agenda

- 1 A brief intro to the SDGs, libraries and publisher roles
- 2 How to measure research on the SDGs
- 3 Three insights from SDG research analysis
 - *The participation of Global South*
 - *Gender aspects in SDG research*
 - *Research towards Net Zero Emissions*

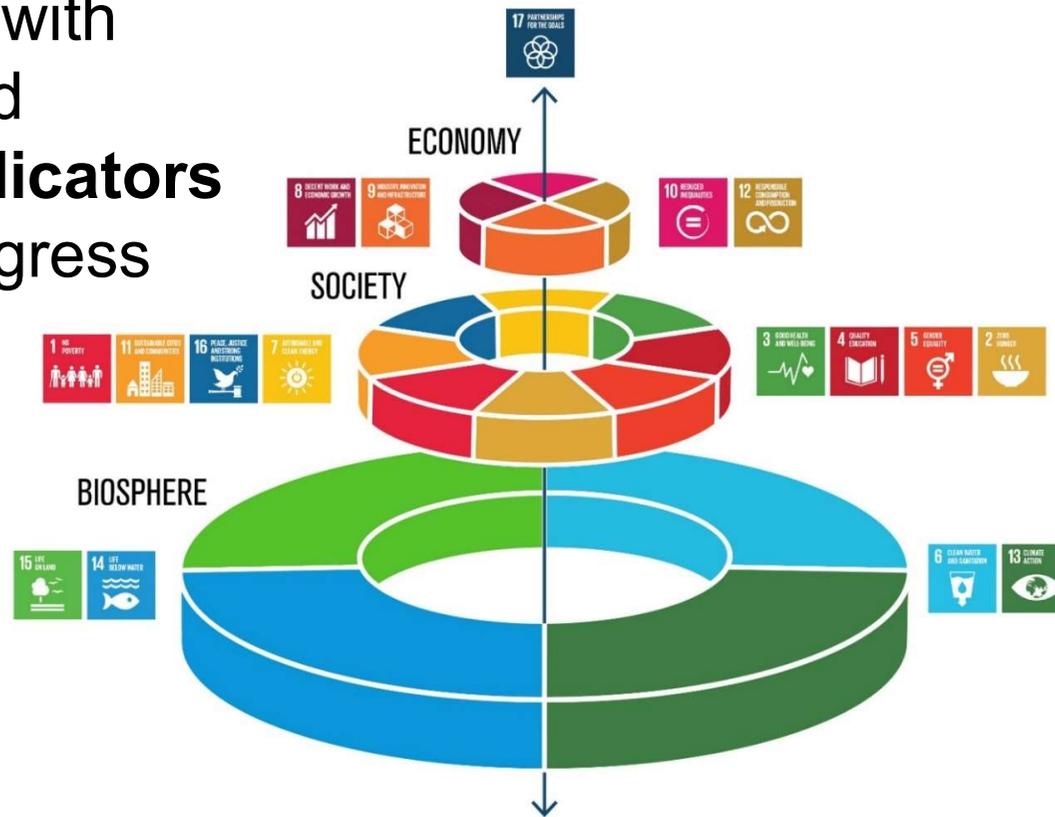
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A brief intro to the SDGs, libraries and publisher roles



United Nations Sustainable Development Goals - SDGs

17 SDG Goals with
169 targets and
231 unique indicators
to measure progress



Graphics by Senika Lukramzi/Rozee



<https://www.stockholmresilience.org/research/research-news/2016-06-14-how-food-connects-all-the-sdgs.html>

After 5 years we are not on track to deliver the SDGs



257 years to close the economic gender pay gap



World on course for more than 3-degree increase in global temperatures



 **COVID-19 CAUSES THE FIRST INCREASE**
IN GLOBAL POVERTY IN DECADES

+71 MILLION PEOPLE ARE PUSHED INTO EXTREME POVERTY IN 2020



 **SCHOOL CLOSURES KEPT 90% OF ALL STUDENTS OUT OF SCHOOL**
REVERSING YEARS OF PROGRESS ON EDUCATION



https://sdgintegration.undp.org/sites/default/files/Impact_of_COVID-19_on_the_SDGs.pdf
<https://unstats.un.org/sdgs/report/2020/>

From Goals to Targets..

SUSTAINABLE DEVELOPMENT GOALS



TARGET 4.1 FREE PRIMARY AND SECONDARY EDUCATION

By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.



TARGET 4.2 EQUAL ACCESS TO QUALITY PRE-PRIMARY EDUCATION

By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.



TARGET 4.5 ELIMINATE ALL DISCRIMINATION IN EDUCATION

By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.



TARGET 4.6 UNIVERSAL LITERACY AND NUMERACY

By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.



TARGET 4.7 EDUCATION FOR SUSTAINABLE DEVELOPMENT AND GLOBAL CITIZENSHIP

By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development



TARGET 4.A BUILD AND UPGRADE INCLUSIVE AND SAFE SCHOOLS

Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.



TARGET 4.B EXPAND HIGHER EDUCATION SCHOLARSHIPS FOR DEVELOPING COUNTRIES

By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and



TARGET 4.C INCREASE THE SUPPLY OF QUALIFIED TEACHERS IN DEVELOPING COUNTRIES

By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.

Roles of Libraries to Advance the SDGs



- Libraries provide opportunity for all
 - Libraries empower people for their own self-development
 - Libraries offer access to the world's knowledge
 - Librarians provide expert guidance
 - Libraries are part of a multistakeholder society
 - Libraries must be recognised in development policy frameworks
- IFLA 2013 statement on libraries and development*



<https://www.ifla.org/how-do-libraries-further-development/>

<https://www.ifla.org/publications/ifla-statement-on-libraries-and-development-august-2013/>

Inspiring action through the SDG Publishers Compact

Over 150 publishers and publishing organizations have signed up to contribute to a sustainable future for everybody



<https://www.un.org/sustainabledevelopment/sdg-publishers-compact/>

Sustainable Development Goals at RELX/Elsevier



THE ELSEVIER FOUNDATION



2

How to measure research on the SDGs

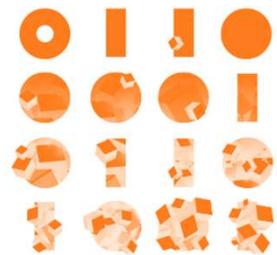


Using data to drive action on the UN SDGs



Pathways to Net Zero: The Impact of Clean Energy Research

New report 2021 Oct 28 release



Artificial Intelligence:
How knowledge is created,
transferred, and used

Trends in China, Europe,
and the United States

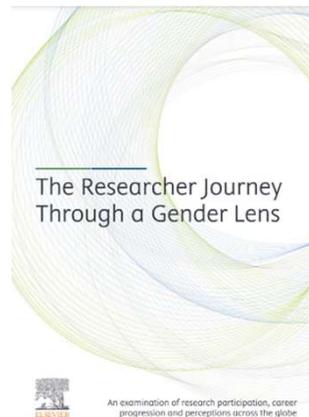


The Power of Data
to Advance the SDGs

Mapping research for the Sustainable Development Goals



RELX Group
SDG Resource Centre



Analytical Services

A recipe to match publications to SDGs

A large bibliometric data base

Scopus®

Collaborate on search queries



+



Learn with the community



+

SciVal

The Power of Data
to Advance the SDGs
Mapping research for the Sustainable Development Goals

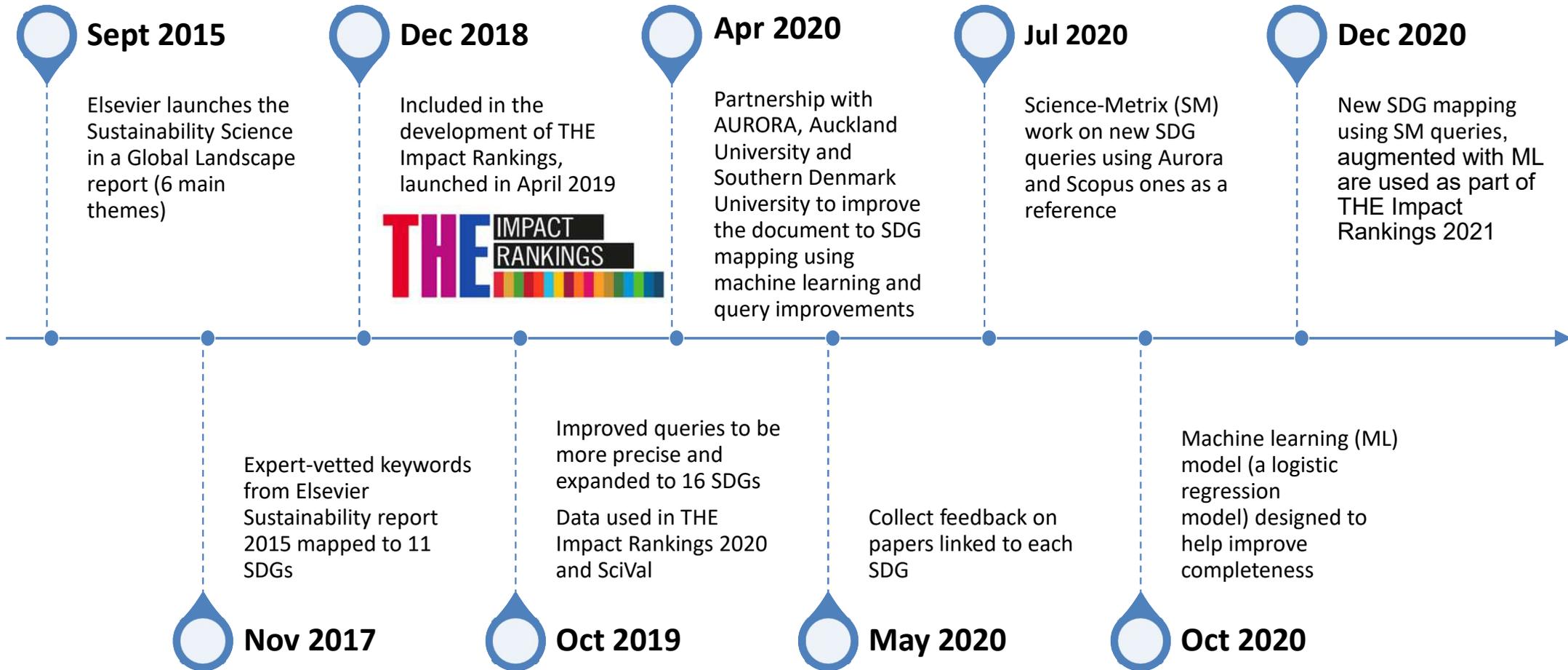


- Note that there are different SDG queries used in the literature
- Note that not all relevant literature is covered (e.g. policy documents/gray literature)
- Note that search queries are subject to review and are being refined



<https://www.elsevier.com/about/partnerships/sdg-research-mapping-initiative>

Development of the SDG queries



<https://www.elsevier.com/about/partnerships/sdg-research-mapping-initiative>

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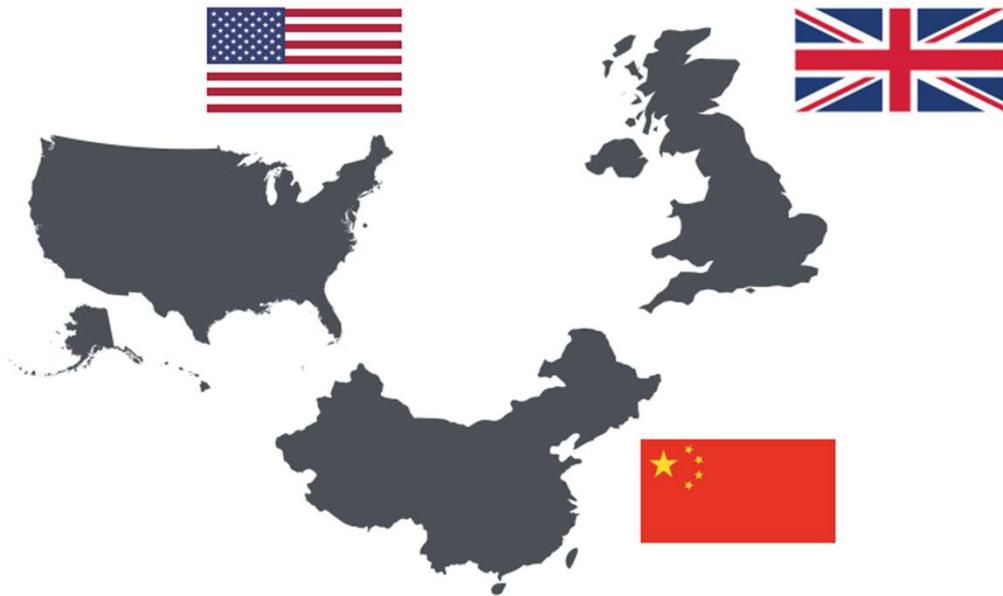
Three insights from SDG research analysis

- *The participation of Global South*
- *Gender aspects in SDG research*
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Two key data from our analysis

The three largest countries by academic output



A Global North-South divide in research



[The Power of Data to Advance the SDGs](#)



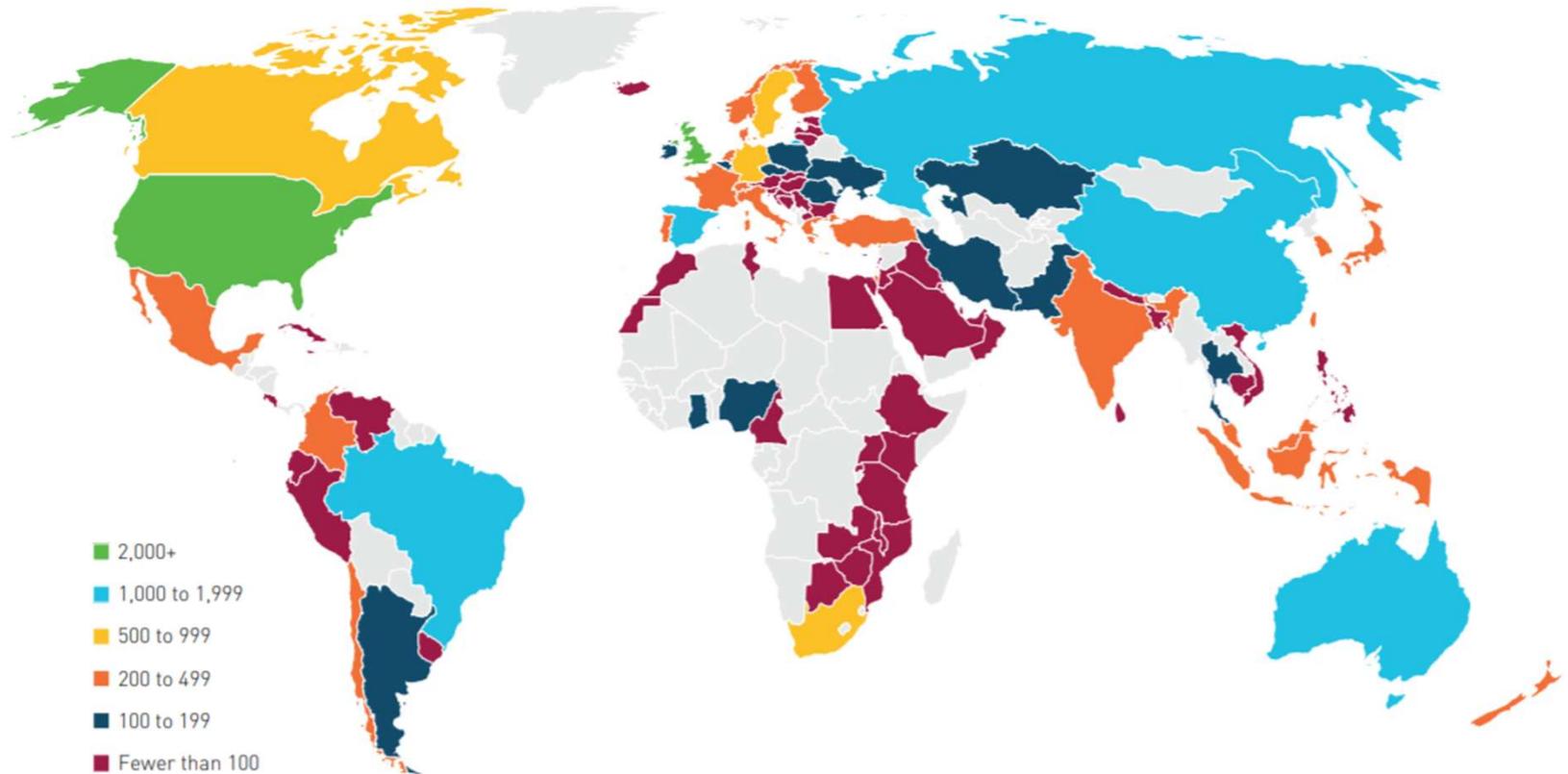
A divided world on SDG 4 research

70.9%

Publications from
high-income locations

0.5%

Publications from
low-income locations



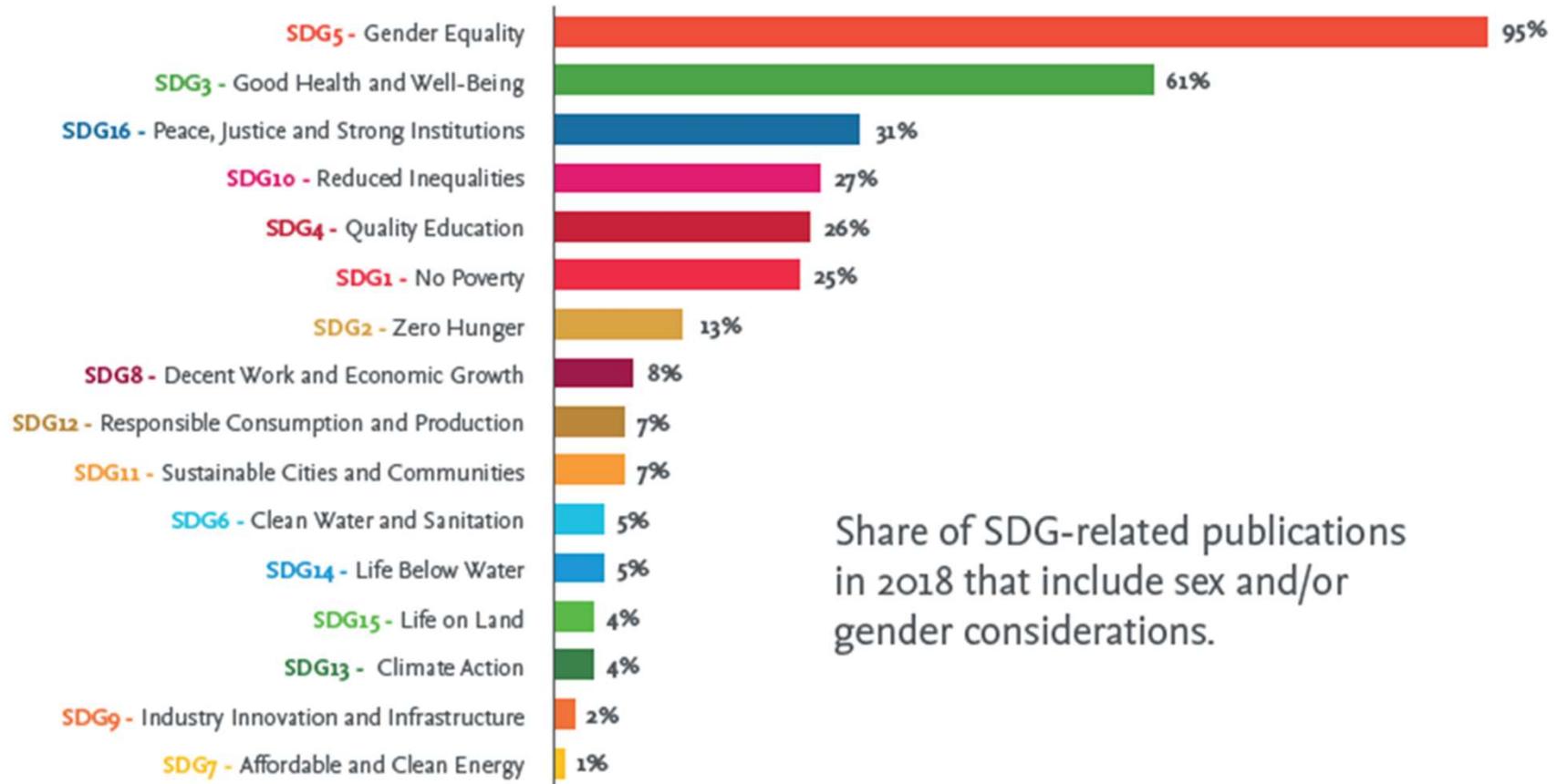
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Three insights from SDG research analysis

- *The participation of Global South*
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Sustainability Research through a Gender Lens



Study from the International Center for the Study of Research: Herbert, Rachel and Falk-Krzesinski, Holly J. and Plume, Andrew, Sustainability Through a Gender Lens: The Extent to Which Research on UN Sustainable Development Goals (SDGs) Includes Sex and Gender Consideration (September 8, 2020). Available at SSRN: <https://ssrn.com/abstract=3689205>

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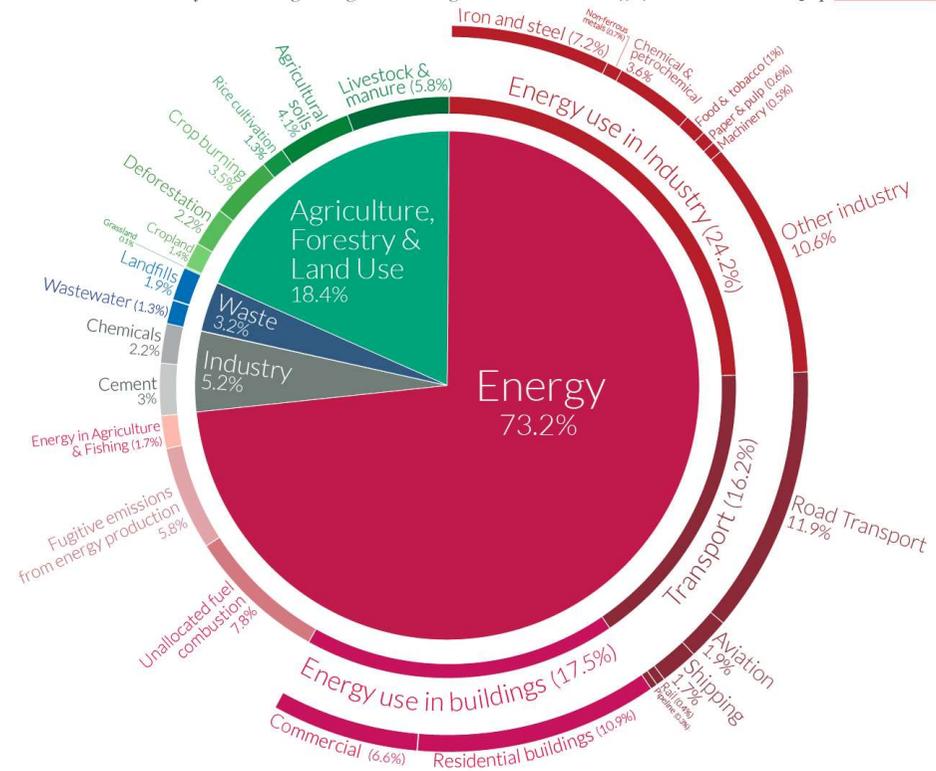
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Global Greenhouse Gas Emission by Sector

Global greenhouse gas emissions by sector  This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.



OurWorldinData.org – Research and data to make progress against the world's largest problems.
 Source: Climate Watch, the World Resources Institute (2020). Licensed under CC-BY by the author Hannah Ritchie (2020).



<https://ourworldindata.org/emissions-by-sector>

Pathways to Net Zero: The Impact of Clean Energy Research



+ Energy Filter on



Download the report here:



<https://www.elsevier.com/connect/net-zero-report>

Net Zero Energy Research is growing, with China in the lead



- Net Zero Energy publications grew from **1%** global publications in 2001 to **5%** in 2020
- Mainland China accounted for **24%** of all Net Zero Energy publications during 2001-2020
- The USA is second with **17.2%**
- India is third with **6.4%**
- Germany is fourth with **5.9%**
- Japan is fifth with **5.4%**

Summary and a Question

- Library and publishing community have a key role to support the SDGs
- Understanding the research landscape on SDGs supports policy

Question: How can our work support your work?

Feel free to contact!



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Appendix II: Relevant background information links

[SDG Publishers Compact - the United Nations](#)

This Compact is designed to inspire action among publishers. Launched in collaboration with the International Publishers Association.

[Partnerships to achieve the Sustainable Development Goals](#)

[RELX SDG Resource Centre](#): In June 2017, RELX Group, Elsevier's parent company launched the SDG Resource Centre: a free, interactive education platform curating content related to sustainability research. The Resource Centre houses articles, videos, interviews, webinars and discussion groups on science, law, business and events. Content is grouped according to the SDGs it addresses. RELX group is a member of UN Global Compact.

[Sustainability Science Hub: Using data to drive action on the UN SDGs](#)

Free access to analytical reports, data sets, tools and other resources for sustainable development

[Sustainability Through a Gender Lens: The Extent to Which Research on UN Sustainable Development Goals \(SDGs\) Includes Sex and Gender Consideration](#)

[Climate Action - Elsevier](#)

We support the global efforts to mitigate climate change through the rapid reduction of our own direct and indirect greenhouse gas emissions.

[Report: How can research help the world hit net zero by 2050?](#)

Explore emerging trends and opportunities to maximize the impact of clean-energy research in "Pathways to Net Zero" report

