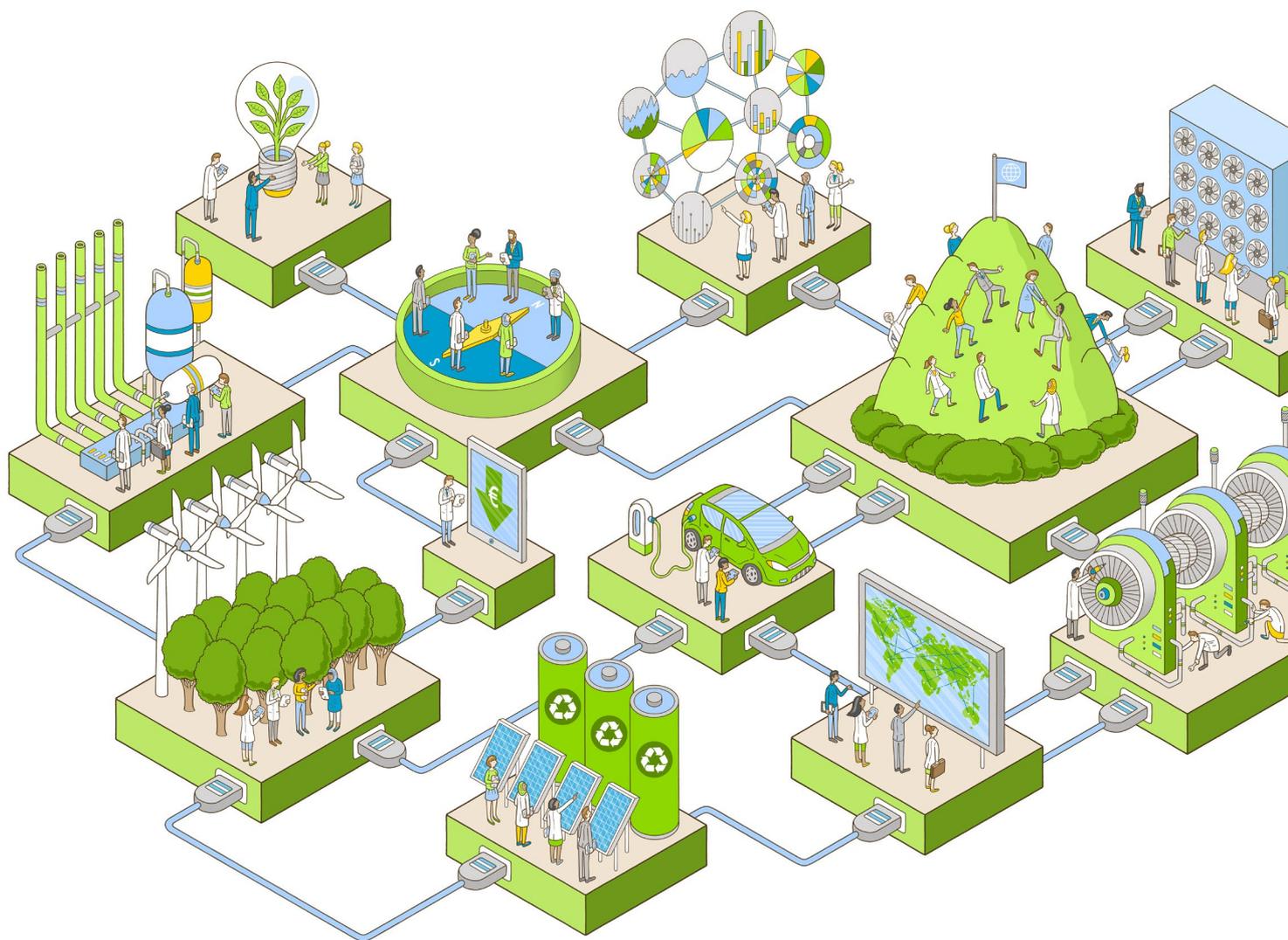


# Elsevier's Climate Action Report

Our journey towards a more sustainable future

2021-2022



ELSEVIER

# Contents

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<b>1. Foreword: Our commitment to taking climate action</b>	<b>3</b>
<b>2. Our highlights</b>	<b>4</b>
<b>3. About Climate Action at Elsevier</b>	<b>6</b>
3.1 RELX and Elsevier's approach to Climate Action	6
3.2 Governance	8
3.3 Meet our Climate Advisory Board	9
<b>4. Being a responsible business</b>	<b>11</b>
4.1 Environmental targets	12
4.2 Net zero targets and carbon emissions	14
4.3 Employee engagement: SUSTAIN and Green teams	19
<b>5. Advancing knowledge and research</b>	<b>20</b>
5.1 Content: Publishing with purpose	21
5.2 Spotlight on science communication	23
5.3 Products: Using data to progress Climate Action	25
<b>6. Partnership for action</b>	<b>26</b>
6.1 The Elsevier Foundation focus on SDG13: Climate Action	27
6.2 Key partnerships and appointments	28
6.3 Climate change related events and webinars	29
6.4 Recognizing outstanding work	30

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# 1 Foreword:

## Our commitment to taking climate action



Stuart Whyman, Managing Director, Academic Researchers and Librarians, and joint Executive Sponsor of Elsevier's Climate Action program

**The call for bold action on climate change is urgent. As our planet continues to warm, scientists have warned that our chances of keeping temperature increases to 1.5 degrees or below are disappearing. As a priority, the world must reach net zero by no later than 2050 – a challenge that will require a rapid reduction in all greenhouse gases. We all have a collective responsibility as nations, organizations and individuals to clean up our energy sources, make our cities and buildings more sustainable and to change our own behaviors.**

As an organization, Elsevier, along with RELX, our parent company, have made it a priority to reduce our environmental footprint through data-driven action for the past 15 years. In 2021, we made a commitment to address climate change and become net zero for all emissions by 2040 at the latest. At the same time, Elsevier launched an ambitious Climate Action program to accelerate our efforts to decarbonize our business and to support the communities we serve to drive change. This report provides highlights of the many contributions made by my colleagues across Elsevier over the past 18 months and outlines our commitment to do more.

Guided by our external Climate Advisory Board, and with the active support of our internal employee network group, SUSTAIN, we are continually reducing our carbon footprint and driving a sustainability mindset across our organisation. For example, we have continued to make our offices more efficient, move applications to the Cloud, eliminate unused resources through better technology infrastructure alignment, and pilot the use of more efficient processors that have 40-80% better efficiency rates. We have engaged our suppliers on the critical importance of working together to reduce our supply chain emissions. We held our first Elsevier Climate Race, with colleagues calculating their own personal carbon footprint and taking 1,500 specific actions to make their everyday lives more sustainable.

Science-led solutions will play a critical role in helping to achieve our net zero future. As a global leader in scientific publishing and information analytics company, we also contribute to the advancement of knowledge about climate change and its impacts through our journals, books, and analytical tools that enable data-led insights to support evidence-based action and innovation. In the lead up to COP 27, we published *Pathways to Net Zero: Global South Research in the Transition to Clean Energy*, to help highlight the important role of research in the Global South in the energy transition. The Lancet led a joint Editorial where all 24 journals of the Lancet group joined 250 other health journals in calling for urgent action for Africa and the world. Across our energy journals, we continue to publish research that supports the sustainable development goals, in particular SDG 7: Affordable and Clean Energy, and SDG 13: Climate Action, publishing 20,000 papers every year that support the needed renewable energy transition, and launching new titles to support emerging technology areas. In our books team, we have created an “Energy with Purpose” mission to ensure all newly contracted titles positively contribute to the energy transition.

Whilst these are just some highlights, I hope you will be inspired to see the variety of examples of the collaborations, efforts and passion outlined in this report. I know we can do more, and I look forward to sharing our progress, and any challenges and learnings, each year as we work together for a more sustainable future.

# 2 Our Highlights

In 2021, [Elsevier signed the Climate Pledge](#) to become net zero for all direct and indirect emissions by 2040, at the latest. These are some of the highlights of our climate action journey since then.

## Elsevier as a responsible business



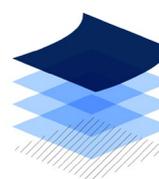
**70% reduction in location-based emissions** since 2010 and integration of 337 supplier's carbon data representing 67% of our total spend. **Read on page 14.**



**27 office locations** held a certification to the ISO 14001:2015 standard for environmental management systems in 2021 and 2022. **Read on page 13.**

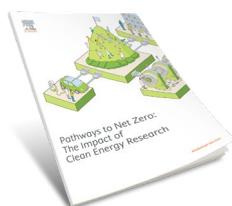


**250 Elsevier colleagues** joined the First Elsevier Climate Race, together taking 1500 specific actions to achieve an estimated saving of 124 tonnes of greenhouse gas emissions. **Read on page 19.**



**Launched Press Zero**, a dedicated project to reduce print copies starting with promotional copies that has already saved around 37,000 copies of journals equivalent to 471 tonnes of greenhouse gas emissions. **Read on page 16.**

## Advancing research and knowledge



In the lead up to COP 27, we published *Pathways to Net Zero: Global South Research in the Transition to Clean Energy*, to help highlight the important role of research in the Global South in the energy transition. **Read on page 25.**



Launched **Energy with Purpose** mission statement in our book portfolio. **Read on page 22.**



Supported 16 international days such as COP 27 and World Earth Day through free access to curated special issues hosted on the RELX SDG Resource Centre. **Read on page 21.**



All 24 Lancet journals joined 250 health journals in issuing an editorial in advance of COP 27 which received global press coverage and an endorsement by the United Nations. **Read on page 22.**

## Partnering for action



1.25m people tuned into the “Net Zero & Beyond” Cell Press and Beijing Municipal Science and Technology Commission online conference. **Read on page 29.**



Chemistry for Climate Action, Elsevier Foundation project received over 1,000 proposals from 70 countries. **Read on page 27.**



Coldbox Store won 20,000 Euros in the Elsevier & international solar energy Society (ISES) renewable Energy Challenge. **Read on page 30.**



**PUBLISHING  
2030 ACCELERATOR**

Launched the Publishing 2030 Accelerator and launched a carbon label prototype during Frankfurt Book Fair. **Read on page 28.**



# 3 About Climate Action at Elsevier

## 3.1 RELX and Elsevier's approach to Climate Action

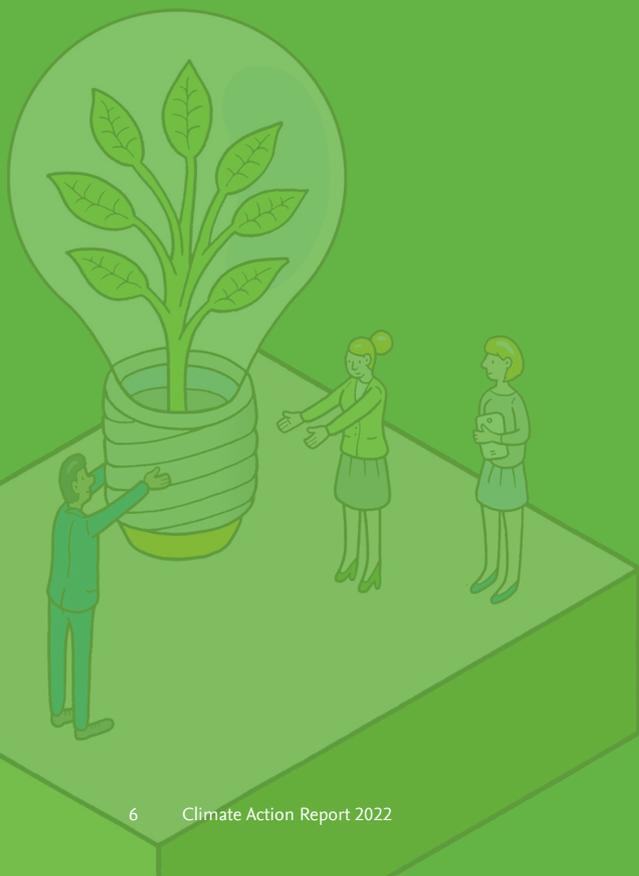
RELX has a long history of addressing the environmental impact of its businesses.



RELX is Elsevier's parent company and a global provider of information-based analytics and decision tools for professional and business customers with over 33,000 employees in four key market segments: risk; scientific, technical and medical; legal; and exhibitions.

The [RELX Global Environmental Policy](#) highlights both RELX and Elsevier's commitment to protecting the environment and supporting the [climate commitments](#) RELX has been working towards for more than 15 years. RELX and Elsevier have wider environmental targets that cover energy, water, paper, and environmental management systems. RELX has also had a science-based aligned target for reducing direct location-based emissions since 2015. In 2022 RELX has worked towards setting a more ambitious science-based target for 2030 for Scope 1, Scope 2 and also Scope 3. This will also cover indirect emissions embedded in the value chain. For more see [page 12](#).

While Elsevier's environmental policy and targets are set at a RELX level, we recognize our responsibility as a leading scientific publisher and data analytics company to drive emission reductions across all areas of our business, content and products. The ambition of the Climate Action program is to identify and put in place the actions that will accelerate progress towards delivering on the RELX targets with a prioritization of climate action.



### Elsevier's commitments: Getting to net zero by 2040

In 2021, RELX and Elsevier signed the [Climate Pledge](#). This holds both organizations accountable in reaching net zero for both direct and indirect emissions by 2040. Leading up to COP26, Elsevier was a founding signatory to [Publishing Declares](#), requiring us to set measurable targets and achieve net zero as soon as possible. As a signatory to the [SDG Publishers Compact](#), we are committed to advocating for climate action within our products and the content we publish.

Over the past 18 months, our initial actions have seen us recognized by our peers as [a company that is doing its part to combat climate change](#). We know we have more work to do. Along this journey, we will share our progress and learnings, and welcome constructive dialogue and ideas.

[www.elsevier.com/climateaction](http://www.elsevier.com/climateaction)

## Elsevier’s principled approach towards Climate Action

Our principles were established upon signing the Climate Pledge to guide our Climate Action program and include:

**1. Use a science-based evidence approach:** We are committed to prioritizing climate action within our business using a data-driven approach, advised by an external Climate Advisory Board that helps guide our actions and keeps us on track.

**2. Act to reduce Greenhouse Gases emissions and enhance resilience:** Our focus is on reducing emissions, implementing change and embedding a sustainability culture across the company.

**3. Promote a sustainable future:** We recognize our responsibility as a leading publisher and data analytics company to advocate for action, establishing collaborations and partnering with customers, communities and our industry to spark action in line with the scale and urgency of the climate crisis.

<b>Responsible business</b> Reducing emissions to minimize the effects of global warming	<b>Advancing research and knowledge</b> Increasing the understanding of climate change and its impact on our world	<b>Partnering for Action</b> Collaborating and capacity building to enable climate action
The action we take to cut all emissions across our own operations and policies. Includes empowering all colleagues to be sustainable in their everyday actions	To support the dialogue on climate change and its impacts through unique content, data, and products	Helping customers, the research community, policymakers, and the public make critical decisions and take evidence-based action
<p><b>Commitments:</b></p> <ol style="list-style-type: none"> <li>1. Embed a sustainability mindset into our business culture and improve the understanding of climate change via SUSTAIN and Green teams</li> <li>2. Become net zero for all direct and indirect emissions by 2040 at the latest</li> <li>3. Continue our actions that address the wider environmental impact of our office locations</li> <li>4. Work with suppliers to reduce Scope 3 emissions</li> <li>5. Set Elsevier-level science-based targets for emissions in Scope 1, 2 and 3</li> </ol>	<p><b>Commitments:</b></p> <ol style="list-style-type: none"> <li>1. Stimulate and support the scientific dialogue and innovation related to climate action</li> <li>2. Continue to embed climate change content, data and insights into our products and services</li> <li>3. Collaborate and initiate industry projects and initiatives</li> <li>4. Elsevier Foundation to establish projects related to climate action</li> </ol>	<p><b>Commitments:</b></p> <ol style="list-style-type: none"> <li>1. Partner with organizations and provide our data analytics and insights to help inform evidence-based action</li> <li>2. Increase awareness and understanding of climate change in our interactions with stakeholders, such as editors, authors and society partners</li> </ol>

Specific Elsevier Industry Commitments:

RELX Commitments:



## 3.2 Governance

To deliver our commitments we have established an Elsevier Climate Action program.

The strategic direction of the program is set by a steering committee consisting of leaders across the company helping guide our actions and decisions. Additionally, a Climate Advisory Board of distinguished researchers helps advise and develop initial ideas for further consideration.

Our climate program has three dedicated workstreams:

- 1. Emissions reduction program:** Gathering and analyzing data that helps inform strategic decisions enabling us to achieve our net zero ambition by 2040.
- 2. Products and insights:** Understanding how we can use our unique products and services to advocate and advance research and innovation. Identifying where our products and services drive climate action and aligning our product strategy with our net zero ambitions.
- 3. Our culture:** Embedding a sustainability mindset within our company culture. Additionally, our employee network group, SUSTAIN and local Green Teams develop educational resources and activities that bring sustainability to life in all its forms.



## 3.3 Meet our Climate Advisory Board

Elsevier's Climate Advisory Board convenes distinguished experts in the fields of climate research. Joining forces with the research community helps to accelerate action addressing the climate crisis.

### Climate Advisory Board chairs:



“Addressing climate change for an organization like Elsevier is a multi-faceted challenge. It is our responsibility to act not only in terms of our operational emissions but also use our unique content, products, and networks to influence broader action. Having expert guidance to steer our actions, enables us to make higher quality science-based climate-related decisions, focus our initiatives in this critical area and foster understanding of crucial climate change topics both within the communities we support and beyond.”

**Stuart Whyman, Managing Director, Researchers and Librarians**

“Research and innovation are critical if we are to solve the challenges of climate change. Our Climate Advisory Board is a unique opportunity for Elsevier to meet quarterly with experts and hear their views on a wide range of climate-related topics. We appreciate their insights and advice as we progress on our own journey and look forward to further developing this collaboration in the months and years ahead.”

**Peter Harrison, Senior Vice President, Physical Sciences, STM Journals**



### Hear from our advisory board:



**Q. Action on climate will require radical changes in our society, how can we make the “right” choices?**

“While individual choices alone can make only a modest contribution to reducing emissions, assessments have shown that if we provide people with the right infrastructure, technology and information we can all make the right choices. Businesses can stimulate this change.”

**Prof. Joyashree Roy, Asian Institute of Technology (AIT), Thailand**

**Q. What role should publishers be playing in helping the scientific discourse around climate change?**

“Meeting the challenge of climate change requires us all to anticipate our knowledge needs over multiple decades. While we have scenarios on probable system evolutions, they are based on what we know today and not what we might discover. It is important that the scientific dialogue continues so we can ensure that our technology accelerates and supports our global net zero ambitions.”

**Prof. John Loughhead, OBE, UK Government**





**Q. How important is inequality in planning climate action?**

“Inequality and climate change are products of the current anthropocene, pre-occupied with wealth creation and accumulation at the expense of justice and human rights. Vulnerability and exposure to climate risks are often related to multidimensional inequalities that persist in advanced, middle- and low-income countries through exclusion and discrimination in terms of gender, systemic racism, religion, ethnicity, age, income levels, geographical space and so forth.”

**Opha Pauline Dube, University of Botswana**

**Q. Climate change is complex, what should responsible businesses be doing right now?**

“If climate change was easy, we would have solved it by now. Changes must take place in every business and in every sector. Responsible businesses must make changes in what they can control and work together to start reducing emissions overall.”

**Prof, Arnold Tukker, Leiden University**



**Q. How important is it to engage our editors on climate action?**

“Editors are rich sources of ideas and passion. Stimulating their understanding and piloting ideas can ensure the research ecosystem is more innovative and efficient.”

**Hanne Bach, Director of the DCE – Danish Centre for Environment and Energy, Aarhus University**

**Q. How important is it to change our mindsets when it comes to climate action?**

“It is incredibly important to be able to reimagine our world in a net zero context. Every part of our society must change, and it will be confrontational. Success will depend on challenging ourselves, at work and at home, to rethink our established beliefs and habits. This is true of the research community and it is true of the publication process as well.”

**Prof. Gerard Govers, KU Leuven**



# 4 Being a responsible business



“The science is clear – climate change is already happening. It is no longer a problem for the future, and we have challenges to face as a responsible business. Better understanding our carbon footprint and ensuring we take a data-led approach will be critical to our ability to realize our net zero goals. But we shouldn’t forget the need for sustainability to be integrated across every part of our business. Empowering staff to understand climate change and take climate positive steps in their everyday lives is just as important.”

Rachel Martin, Global Director, Sustainability, and co-chair of Elsevier's Climate Action program

## Responsible business commitments

The action we take to cut all emissions across our own operations and policies. This includes empowering all colleagues to be sustainable in their everyday actions.

### Commitments:

1. Embed a sustainability mindset into our business culture and improve the understanding of climate change via SUSTAIN and Green teams
2. Become net zero for all direct and indirect emissions by 2040 at the latest
3. Continue our actions that address the wider environmental impact of our office locations
4. Work with suppliers to reduce Scope 3 emissions
5. Set a Scope 3 emissions reduction target and validate all carbon emission targets by the Science Based Targets initiative (SBTi)



# 4.1 Environmental targets

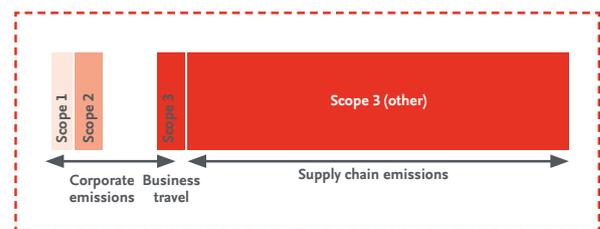
Since 2010, RELX has been working to reduce the environmental impact in important areas such as waste, paper and energy use. These are vital, but RELX prioritizes climate action. [RELX environmental targets](#), including targets relating to climate change, are reported in the [RELX Corporate Responsibility report](#) and [RELX website](#). To improve and increase the reporting of climate-related financial information, RELX has [disclosed further climate information](#) in the 2021 Corporate Responsibility report (Page 86), consistent with the recommendations of the Taskforce on Climate-related Financial Disclosure (TCFD). An overview of RELX targets and progress is provided below.

## How do you report on emissions?

The Greenhouse Gas Protocol provides businesses and organizations accounting and reporting standards for emissions. They divide emissions into three categories called scopes.

- **Scope 1:** Direct emissions from business operations and locations. Includes company vehicles and facilities
- **Scope 2:** Indirect emissions from the generation of purchased energy. Includes energy used in offices for lighting, cooling, and heating
- **Scope 3:** Indirect emissions within the value chain. Includes upstream activities like business travel and commuting, but also downstream activities like the end of life for a product.

For most businesses, the majority of their emissions lie embedded in the supply chain, requiring collaboration and data sharing across the entire value chain.



## 2021 Environmental Performance

	Absolute performance			Intensity ratio (absolute/£m revenue)		
	2021	variance	2020	2021	variance	2020
Scope 1 (direct emissions) tCO2e	5,226	16%	4,516	0.72	14%	0.64
Scope 2 (location-based emissions) tCO2e	43,445	-18%	53,131	6.00	-20%	7.47
Scope 2 (market-based emissions) tCO2e	7,715	-28%	10,773	1.07	-30%	1.52
Total energy (MWh)	117,161	-12%	133,238	16.17	-14%	18.74
Water (m <sup>3</sup> )	175,372	-19%	215,858	24.21	-20%	30.36
Waste sent to landfill (t)*	107	-38%	173	0.01	-39%	0.02
Production paper (t)	40,970	13%	36,259	5.65	11%	5.10

\*From reporting location only, excluding estimated data

Actual environmental data covers approximately 79% of our occupied floor space based on electricity reporting. Where we are unable to obtain reliable data, for example from small serviced offices, we estimate energy consumption, water usage and waste based on actual data from our portfolio. In this way, our reported data covers all operations, for which we have operational control, for a 12 month period, December 2020 to November 2021.

Scope 2 (location based) emissions are calculated using grid average carbon emissions factors for all electricity sources.

Scope 2 (market based) emissions are calculated using supplier-specific carbon emissions factors (where available) for renewable energy purchases.

The COVID -19 pandemic continued to affect many of our environmental performance metrics in 2021. For example, many of our locations experienced reduced occupancy and there was a significant decrease in business-related travel.

The data in the table covers all of RELX and includes Elsevier alongside other business units

## Case study: Elsevier’s headquarters in Amsterdam

At our Amsterdam head office, a collaboration between our facilities team and local Green Team shows how small changes are making a big impact. In 2021 and 2022, our headquarters achieved 10 RELX environmental standards, the highest score for a RELX office and the Amsterdam office received an energy rating A. Highlights include:



Installed 1623 LED lights saving 66% of carbon emissions per year on lighting



Saved 80% on energy use by replacing cooling machines in our server room and replacing UPS back up batteries



Use 100% biodegradable Halo green cups to reduce plastic by 270,000 plastic cups and unbleached tea bags



Installed 18 electrical charging poles for cars and bikes, six dedicated to Elsevier staff and 12 in the bicycle shed. LED sensor lights have also been installed in the parking garage.



Throughout 2021 and 2022 RELX held certification to the ISO 14001:2015 standard for environmental management systems in 27 locations. In 2023, RELX will move to a group certification.

# 4.2 Net zero targets and carbon emissions

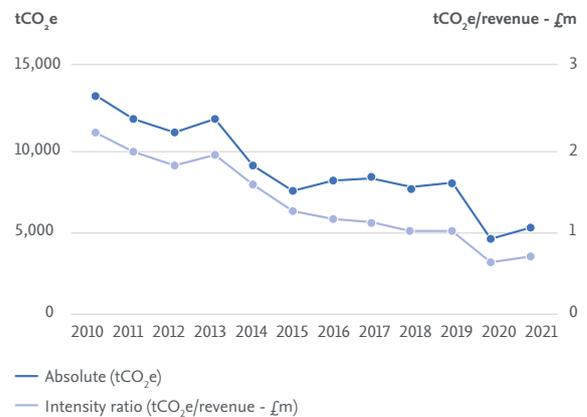
Since 2015, RELX has had a science-based aligned target to reduce direct emissions by 46% for Scope 1 and Scope 2 by 2025. In 2022 RELX has worked towards setting a more ambitious science-based target for 2030 for Scope 1, Scope 2 and also Scope 3. To help with this, RELX has developed an in-house reporting tool, called the RELX CO2 Hub. To date, we have incorporated 377 suppliers' carbon data, representing 67% of RELX total spend.

To achieve these stated targets, RELX will follow a carbon action hierarchy that states that we aim to first, reduce our carbon emissions; second, to purchase increasing amounts of our green tariff energy as availability improves in global markets where we operate; third, to purchase certified renewable energy certificates where necessary; and finally, to purchase high quality, verified offsets for the remainder.

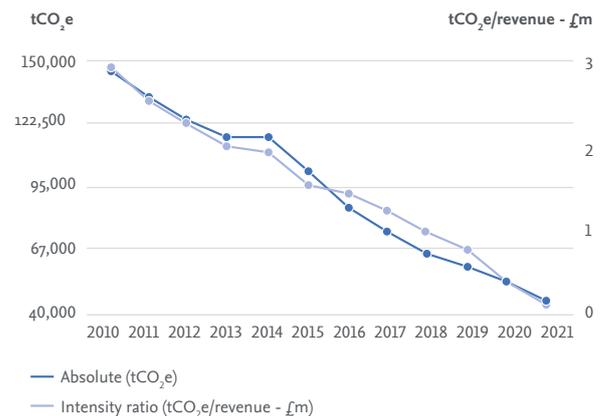
To date, RELX, has achieved a 70% reduction since 2010 for Scope 1, Scope 2 and air travel (i.e just one part of Scope 3 total emissions). While the primary focus has been to reduce emissions, RELX has offset residual emissions in some categories as part of its work to achieve net zero by 2040. In 2020 and 2021, RELX supported verified REDD+ carbon sequestration projects in Kenya, Papa New Guinea and Brazil.

The coronavirus pandemic led to continued decreases in carbon emissions over the last two years with many RELX and Elsevier colleagues working from home for much of the year and limited business travel. In 2021, RELX experienced a slight increase of 16% in Scope 1 emissions due to increased company car use increased from the low levels during the early phase of the pandemic. Continual improvements in office locations helped balance this with a 16% decrease in emissions associated with our buildings. Since 2010 car fleet emissions have decreased by 63%, and overall, we have reduced total Scope 1 emissions by 60% in this period. RELX targets and actions are reported in the [RELX Corporate Responsible Report \(page 71\)](#).

## 2021 Climate Change Performance Scope 1 (Direct) Emissions



## Scope 2 (Location-based) Emissions



## Mapping Elsevier's emission profile

Elsevier's Climate Action program supports the RELX Scope 1 and Scope 2 science-based aligned targets. Elsevier recognizes our responsibility to drive emission reductions across all areas of our business operations, including suppliers. Within the Climate Action Program's emissions reduction workstream, we have gathered an initial analysis of our total carbon footprint, with available data and industry averages. This first assessment has enabled us to identify areas where we can take immediate action. To do this we made assumptions as defined below:

- We have taken a holistic approach to evaluating our products' emissions across the entire supply chain, going beyond just looking at direct suppliers. The preliminary assessment was designed to identify the main sources and categories of emissions.
- Due to the complexities of assessing end-of-life, we have excluded this from our initial analysis and are working with the BIC Green Supply Chain Committee on a key project to better understand the end of life emissions.
- For areas where we didn't have specific publishing industry data, we worked with an external industry database, [CEDA](#), to provide the average emissions estimations for Scope 3, as many suppliers' data was not yet available. RELX and Elsevier are already working to replace these initial averages with a dedicated program that is integrating emission reporting into the RELX procurement and sourcing processes.
- Whilst we recognize there are assumptions in the methodology, the urgent need for action on climate requires us to use the best available data, rather than waiting until we have a perfect view. The initial analysis provides a sufficient starting point to begin generating new emission reduction projects.

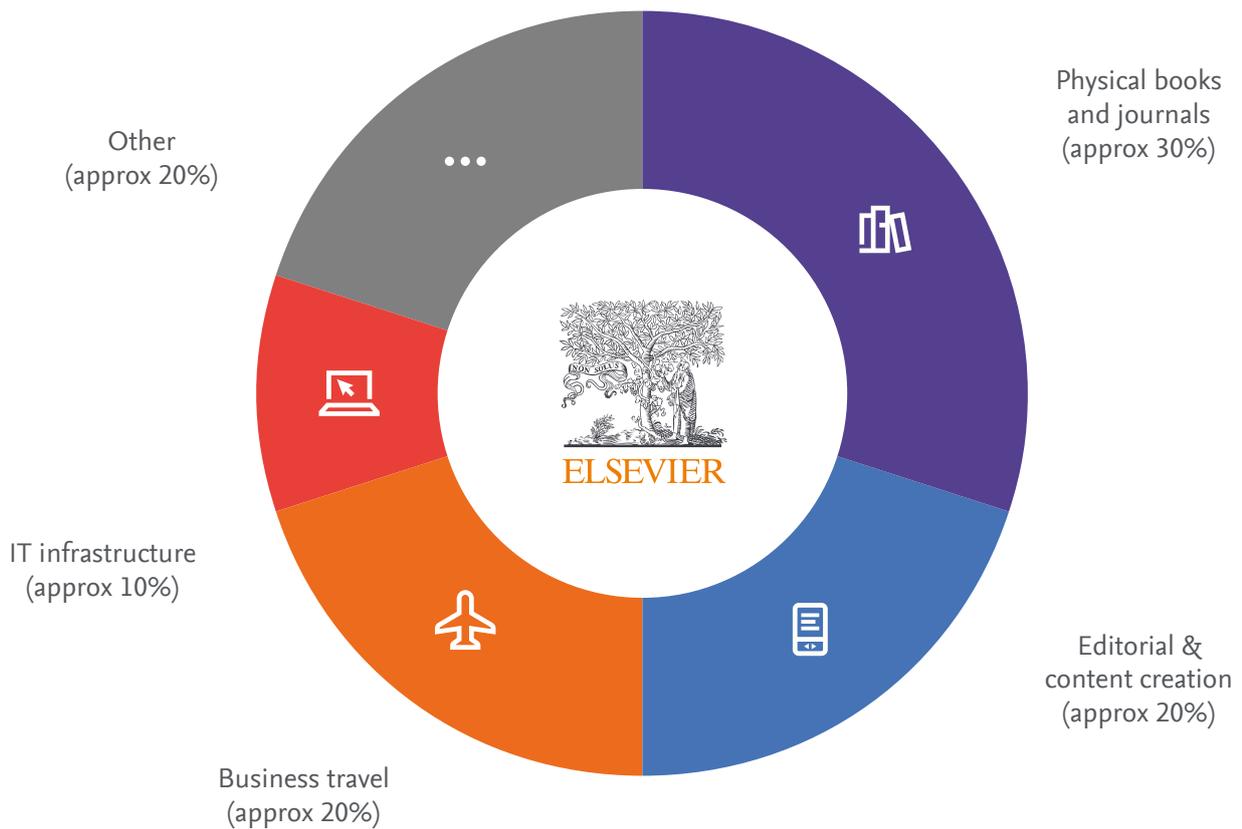


David van Rossem, Vice President and lead of the emissions reduction workstream

“Carbon reduction is an immense challenge and the commitment to become net zero by 2040 means we know what has to be done. The real challenge lies with making it happen. I am proud of Elsevier's strong commitment and look forward to collaborating across our supply chain to make net zero a reality.”

**David van Rossem, Vice President and lead of the emissions reduction workstream**

## Estimated carbon emissions profile



\* Preliminary emission categories cover Scope 1, Scope 2 and preliminary estimates for Scope 3 with the exclusion of end-of-life

## What did we learn? Our key challenges

### 1. Physical books and journals

We believe the largest part of Elsevier’s emissions profile is physical journals and books (approx. 30%). Within our journal portfolio, we have reduced print and paper usage over the last 10 years. We have moved to digital where possible, used different fonts and layouts, stopped supplying complementary print copies at events, implemented print on demand in most locations and reduced the need to ship and warehouse copies. However, this analysis shows that across our 2,665 journals, there are still changes that can be made. Within our books portfolio, we have

also optimized our processes, offering e-only titles, and reducing paper weight from 60lbs to 45lbs.

Emissions associated with our digital products, such as Science Direct and Scopus, are included in the infrastructure category. Based on the initial analysis, the two biggest emissions within the IT infrastructure category are hosting and technology services. We believe that digital emissions from our products make up a relatively small amount of the total footprint (approx. 2%), which can be mainly attributed to Elsevier applications, such as ScienceDirect, moving to the Cloud.

### New initiative: Press Zero

In 2022, Elsevier launched *Press Zero*, a centralized project to reduce print by working with editors, authors and society partners to save emissions. In the first phase, the team addressed areas such as promotional copies, which can have significant print runs and where digital alternatives already exist. Since its launch, the project has stopped the print of around 37,000 copies of journals saving an estimated 471,000 tonnes CO<sub>2</sub>e.

### New initiative: Better infrastructure alignment and pilot

In 2022, we moved two additional applications to the Cloud and continue to eliminate unused resources through better infrastructure alignment across Elsevier. We also piloted the use of more efficient processors that are estimated to have between 40-80% better efficiency rates.

## 2. Editorial and content creation:

We believe the next largest category in Elsevier’s carbon footprint relates to editorial and content creation (approx. 20%). The challenge in this emissions category lies in quantifying the activities undertaken by editors, reviewers and authors throughout the peer review process. Unlike other emissions that utilize estimated spend with a supplier, content creation and editorial processes represent activities. There is no current industry wide method to quantify the amount of time an editor takes working on a journal or a reviewer on peer review. Our ambition is to set a Scope 3 emissions reduction target specifically for Elsevier that will require us to understand how we can collect accurate data around these processes.

### New: Establishing the carbon footprint of a book and journal

- In 2022, we created and implemented an editor survey to better understand the time spent on editor processes and activities.
- Elsevier has been collaborating with DIMPACT, a project to develop a methodology to report on the emissions associated with the workflow products of e-journals and e-books.
- Elsevier is leading in a “Publishing 2030 Accelerator”, an action group testing the feasibility of ideas that included the launch of a prototype for a carbon label for print books.
- Elsevier also contributes to the many industry sustainability and climate committees aiming to address the challenges around climate action and the supply chain. **See page 27.**

## 3. Other categories: Business travel, facilities, homeworking and other aspects of work

The other remaining categories relate to our work processes, including elements such as employee business travel and working from home. For some areas, such as business travel, we have detailed data enabling us to set clear targets. Elsewhere, we are still assessing our emissions as we start to identify how best to collect reliable data.

- **Air travel:** Elsevier’s pre-pandemic business air travel accounted for 63% of our total Scope 1, 2 and business travel combined. In 2021, we introduced our first climate target to reduce air travel by 50%, saving 10,000 tons of CO<sub>2</sub>e emissions annually. The target has now been integrated into our monthly reporting cycles and is tracked through the RELX CO<sub>2</sub> Hub. In 2022, we continue to achieve our travel targets, due in part to the ongoing travel restrictions associated with pandemic, whilst continuing to develop a business culture that supports our responsible travel ambitions.
- **Staff commuting:** Another integral part of Scope 3 is how employees commute to work – an area where we are now gathering data. For employees using a company car, hybrid and electric cars are the default option and we are working to facilitate electric commuting. Many office locations such as Oxford and Amsterdam have installed dedicated electric charging poles. For example, in our Amsterdam office, we have installed 6 dedicated RELX electric charging poles, in combination with 12 electric bicycle charging stations.
- **Impact of our virtual footprint:** Like many organizations, we experienced a dramatic increase in video conferencing during COVID-19. We are working to include these emissions into our Scope 3 reporting. Through RELX, Elsevier is working with [DIMPACT](#) and Microsoft to establish a new methodology to capture emissions through the use of Zoom and MS Teams to include in future calculations.
- **The supply chain and supplier engagement:** Elsevier works with more than 18,000 suppliers – each at a different stage in their own sustainability journey. In 2021, we conducted qualitative interviews with key suppliers to better understand the drivers and progress around climate action. We have now integrated 377 RELX suppliers’ Scope 1 and 2 emissions into our dedicated in-house reporting tool RELX CO<sub>2</sub>.hub representing 63% of our total spend. We have also hosted two Supplier Climate webinars, to engage with our suppliers across the globe, open the dialogue, and find a pathway towards net zero together.

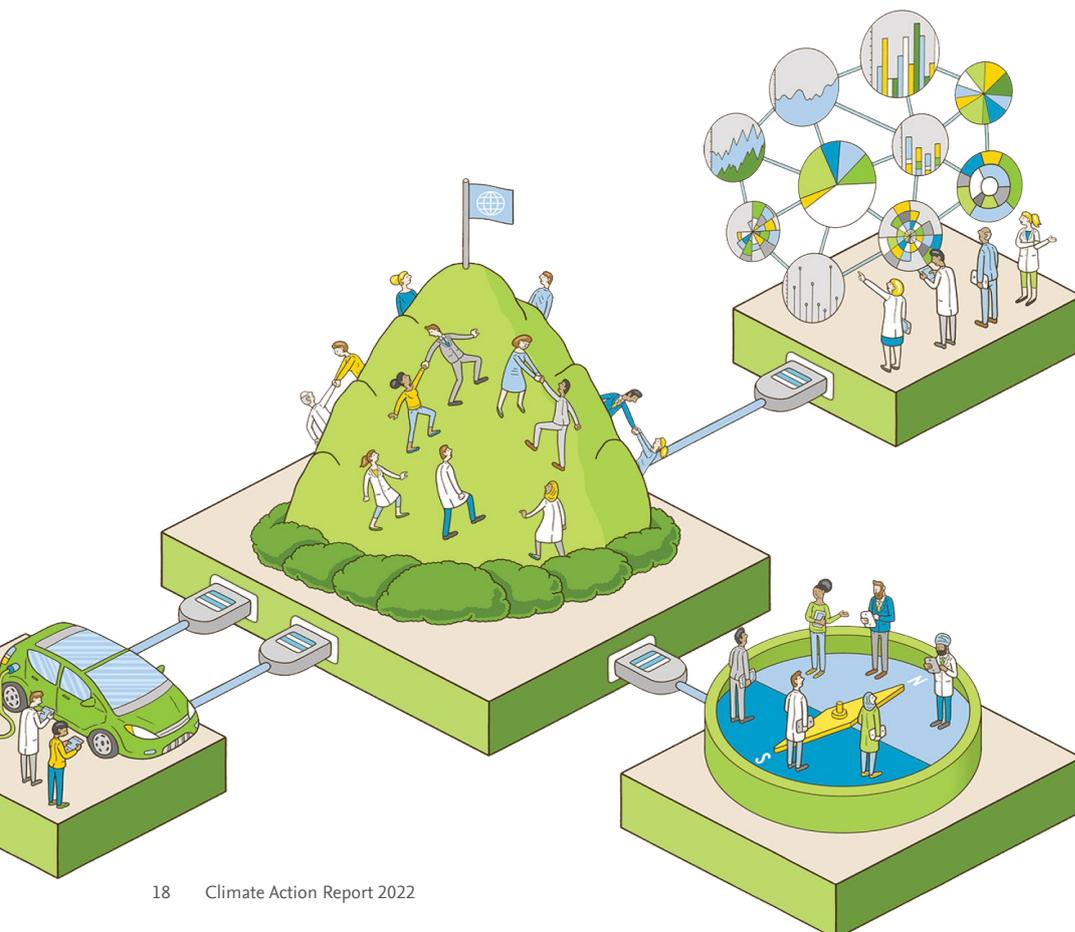


### Supporting the switch to electric

In 2022, we have introduced the Electric Vehicle Scheme for all eligible RELX UK employees, helping them order a new electric company car, funded through a salary sacrifice arrangement. This joins similar schemes already in place for electric bikes.

## Summary of actions for 2022:

<p><b>All emissions</b></p>	<ul style="list-style-type: none"> <li>RELX has submitted a Scope 3 emissions reduction target and will validate all carbon emission targets by the Science Based Targets initiative (SBTi)</li> </ul>
<p><b>Physical books and Journals</b></p>	<ul style="list-style-type: none"> <li>Elsevier launched Press Zero, a centralized project to reduce print by working with editors, authors and society partners to save emissions on print journals and saved an estimated 471,000 tonnes CO<sub>2</sub>e</li> <li>Elsevier co-founded the Publishing 2030 Accelerator and launched an industry-wide carbon label prototype for print books during Frankfurt Book Fair</li> </ul>
<p><b>Infrastructure</b></p>	<ul style="list-style-type: none"> <li>Elsevier moved two applications to the Cloud, eliminating unused resources through better infrastructure alignment (saving an estimated 15% of energy on hosting emissions)</li> <li>Elsevier piloted the use of more energy efficient processors (saving an estimated energy use of between 40%-80%)</li> </ul>
<p><b>Editorial and content creation</b></p>	<ul style="list-style-type: none"> <li>Created and deployed an editor survey to help improve peer review emission calculations</li> <li>Continued to collaborate with DIMPACT to establish a methodology and data gathering process to better understand emissions for digital books</li> </ul>
<p><b>Other categories</b></p>	<ul style="list-style-type: none"> <li><b>Travel:</b> Achieved business travel targets for 2022, keeping flight emissions below 50% from our 2019 baseline. We continued to develop a robust reporting framework and culture that supports responsible travel</li> <li><b>Commuting:</b> Included commuting calculations into the RELX CO<sub>2</sub> Hub and launched a UK electric vehicle program to incentivize electric travel</li> <li><b>Virtual footprint:</b> Integrated the impact of video-meetings into the RELX CO<sub>2</sub> Hub</li> <li><b>Suppliers:</b> - Engaged with Elsevier suppliers in a dedicated kick off meeting for our supplier climate program and integrated data from 337 RELX suppliers into the carbon reporting tool, RELX CO<sub>2</sub> hub - Worked with industry associations to align and share best practice on reducing emissions with various presentations and sharing of experience.</li> </ul>



## 4.3 Employee engagement: SUSTAIN and Green teams

Our ability to collectively address the complex climate change challenge requires both bold action and a series of small changes, that enable everyone at Elsevier to lead a more sustainable lifestyle. This is why Elsevier’s Climate Action program established SUSTAIN, our employee network group. SUSTAIN’s goal is to empower all Elsevier colleagues to embed sustainability in their daily lives both at work and at home.

### Employee actions in 2021 & 2022



**SUSTAIN Festival**  
Let's advance the Goals together!

Changing the world through one sustainable decision at a time – the mission of Sustain

**SUSTAIN Festival:**  
SUSTAIN provides the tools and resources to empower and educate everyone at Elsevier. In 2021, the team created a week-long festival exploring these topics in greater detail. One highlight was an interactive cooking session by LA based chef Alejandra Schrader. She joined us from her LA kitchen to share recipes and tips on going low carbon and minimizing food waste.

[Enjoy a recipe from EATS cook club here.](#)



**ELSEVIER CLIMATE RACE**

**Elsevier’s climate race – Inspiring real action:**  
In March 2022, SUSTAIN organized the first Elsevier Climate Race – involving 250 colleagues competing to make improvements towards a sustainable lifestyle. Together, 1500 specific actions were achieved saving 124 tonnes of greenhouse gas annually.



**Local action:**  
Elsevier’s local offices have Green teams helping to create action within their local communities. In February 2022, Elsevier and RELX colleagues planted the first trees with our charity partner [Trees for All](#) in the newly-founded “Elsevier Forest” in Overijssel in the Netherlands. Thanks to employee donations, the Trees for All initiative plants trees in the Netherlands and also in the Kibale National Park in Uganda, which suffers from deforestation.



# 5 Advancing knowledge and research



Laura Hassink,  
Managing Director Journals

“The efforts of researchers have made a huge impact in our understanding of climate change. Despite this investment, the scientific evidence and the stark warnings, climate research has largely been ignored. Therefore, as well as advancing our understanding of climate change, science must also fight to make itself heard. Ensuring that research is communicated effectively, grounded in real world examples, and acted upon by the right people, is one of the greatest challenges those working in climate research are facing. Our job is to support scholarly communication not only in topics such as climate change, but also where climate intersects in areas such as health, food production and clean energy.”

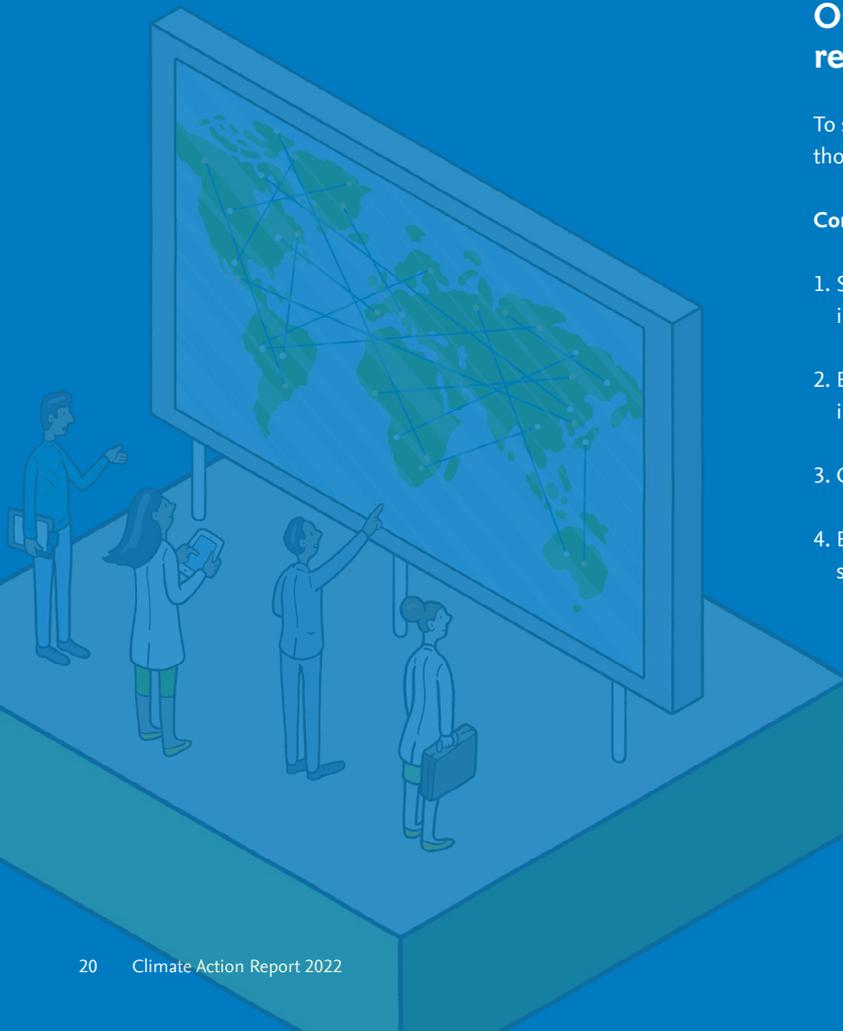
Laura Hassink, Managing Director Journals.

## Our advancing knowledge and research commitments

To support the dialogue on climate change and its impacts through unique content, data, and products

### Commitments:

1. Stimulate and support the scientific dialogue and innovation related to climate action
2. Embed climate change content, data and insights into our products and services
3. Collaborate and initiate industry projects and initiatives
4. Establish projects funded by the Elsevier Foundation specifically relating to climate action



## 5.1 Content: Science & Research that drives progress

The drive to curb carbon emissions is essential to securing the future of our planet. For the past 40 years, the contribution from the scientific community to helping our understanding of climate change has been astounding. We know in detail what climate change is, we know that human activity is the cause, and what the effects will be for our planet and society. Yet, the world remains off track to meet our net zero goals.

At Elsevier, we believe that we must support the scientific dialogue that will drive innovation in all parts of the globe and inform evidence-based policy and action. Our role is to support this debate through the content, data and insights generated in our products, journals, and books about climate change and intersecting topics such as health, agriculture, mitigation, and adaptation.

Elsevier has developed a strong and growing portfolio of journals supporting climate change research, sustainability, and renewable energy that includes flagship titles such as *Joule*, *One Earth* and *Lancet Planetary Health*.

- We have seen research on net zero energy grow from 1% of the total global output in 2001, increasing to 5% in 2020. At Elsevier, all of our energy journals are focused on supporting the Sustainable Development Goals SDG 7: Affordable and Clean Energy and SDG 13: Climate Action, publishing over 20,000 research papers each year in support of a clean and just energy transition. Between 2021 and 2022, we have continued to support new and emerging research areas launching 20 new journals into this growing area, including *DeCarbon*, *Solar Compass* (in association with International Solar Alliance), *Carbon Capture and Storage* (in association with the Institution of Chemical Engineers), *Sustainable Chemistry for Climate Action*, *Eco-Environment & Health*, *Tetrahedron Green Chem* and *Green Energy & Resources*.
- Special issues and reports published in our journals stimulate timely discussions. Examples in 2022 included [CO<sub>2</sub> Capture and Chemistry](#), published in *Current Opinion in Green and Sustainable Chemistry*, and special collections available in flagship titles, that include topics such as [Energy policy and analysis](#) from *Joule* and [Valuing water](#) available in *One Earth*.
- In our books team, we continue to publish a number of high-profile essential titles that in 2022 included the one-stop resource, [Comprehensive Renewable Energy](#), that gives an overview of all renewable energy technologies, written by a diverse set of authors and practitioners to ensure the knowledge is applicable to a large audience. Additionally, several new books series were launched focused on topic areas of Sustainable Polymers, Bioenergy, and Carbon Capture and Storage.
- Elsevier organizes over [50 important conferences](#) each year, offering a forum for scholarly exchange of cutting-edge research. In 2022, many included dedicated sessions on sustainability and we are looking forward to events such as *EcoSummit 2023* focused on adapting to changing land and seascapes and the *International Conferences on Algal Biomass Biofuels and Bioproducts* that focuses on all areas of algal research.
- We continue to support major annual climate and sustainability events such as COP27 and World Earth Day, through free to access, curated special issues hosted on the RELX SDG Resource Centre, showcasing key research that is driving energy transition and sustainable development, and bringing together book chapters, journal articles, and podcast discussions with experts and authors. In 2022, 16 of these special issues were produced.



## The Lancet leads the call for emergency action on health and climate

The Lancet, the premier medical journal, has been at the forefront of advocating for climate action given the associated health risks of climate change. In 2021, The Lancet led a joint editorial calling for emergency action and repeated this call in 2022 ahead of COP 27, where all 24 journals of the Lancet group joined 250 health journals in issuing an Editorial in advance of COP27: [COP27 Climate Change Conference: urgent action needed for Africa and the world](#) which received global press coverage and

an endorsement by the United Nations. This advocacy is built on the evidence provided through the landmark [Lancet Countdown](#). This annual report's 44 indicators expose an unabated rise in the negative health impacts of climate change and the current health consequences of a delayed and inconsistent response of countries around the globe. The 2022 findings were presented in two sessions during the COP 27 program.

### Case study: Clean energy: Can we move faster?

The decarbonization of the energy sector is critical to achieving net zero goals, requiring not only technology, but social and policy changes that will affect every sector. Whilst experts accept that fossil fuels will continue to be a part of the transition and a net zero energy future, at Elsevier we have been looking at ways to ensure our journals, books and products are best placed to help accelerate action.

#### Publishing science and research

Over the past year we have been working closely with editors and authors in our energy journals and books to increase the focus on renewable energy and to support a just transition. Actions include:

- Implementation of the “Energy with Purpose” mission within our books team, which is a commitment, launched in 2021, to only commission new content that supports and advances the energy transition and reduction of CO2 emissions. With 75% of our energy books focused on renewable, nuclear, and smart grid, the teams have been working with editors to ensure compliance for new titles, whilst also reviewing all previously contracted titles. We expect all books to align with the mission by 2024.
- After conducting a full review of our hydrocarbon energy journal portfolio of six titles, we have updated their aims and scope, calling explicitly for research related to Sustainable Development Goal 7: Affordable and Clean Energy. We have also taken the decision to close [Upstream Oil and Gas Technology](#), with the last issue expected in September 2023. The focus for this portfolio remains on publishing research to achieve a net zero future with topics such as emissions reduction, carbon capture and storage and utilization.
- Additionally, we are actively recruiting editorial board members for our journals who specialize in specific renewable technology areas and to ensure better global south representation. In 2023, we will also seek to introduce a new environmental statement for submitting authors to attach in their cover letters.

- We supported 16 major annual sustainability and clean energy events with free collections of book chapters, journal articles, and podcast discussions with experts and authors available on the RELX SDG Resource Centre. Additionally, Elsevier organizes academic conferences that in 2022 included the International Conference on Energy Research and Social Science that gives an important forum for discussion of cutting-edge research.

#### Driving renewable R&D solutions

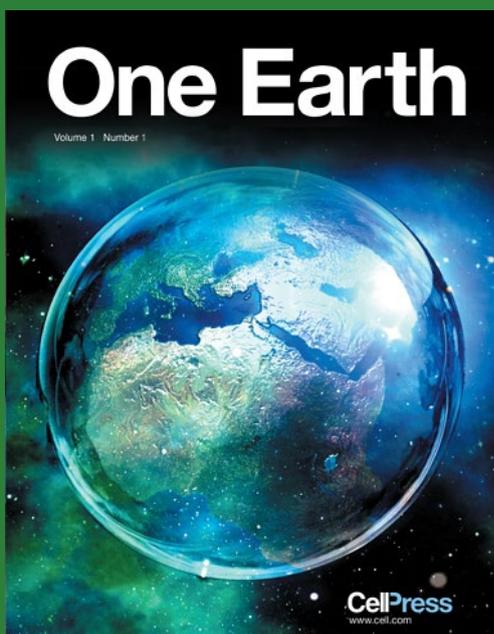
Elsevier's geospatial product, Geofacets, provides geological and geophysical data (over 2 million maps, figures and tables from scientific publications) to both academic and corporate customers that include Earth Science departments within universities and customers active in energy-related industries. Historically, the tool has been used by energy companies to locate new oil and gas exploration sites. Within the last four years, however, many of our corporate customers have used the product to research renewables and carbon capture locations. We recognize the role Geofacets can play in supporting renewable energy R&D and in 2022 we have:

- Only added new content, features and functionality that support the energy transition and other related United Nations Sustainable Development Goals such as SDG 7: Affordable and clean energy and SDG 6: Clean Water and Sanitation; and SDG 14 and 15: Life below water and Life on land.
- Focused on sustainable critical mineral mining projects essential for renewable technologies such as battery and solar cells. The remaining use cases focus on discovering efficiencies in established energy projects rather than new fossil fuel exploration.

## 5.2 Spotlight on science communication

Science-led solutions are critical for delivering a net zero future. Elsevier is actively helping this process by:

- **Curating quality content:** Each year, we provide curated lists of freely accessible journal articles and book chapters for official United Nations days on the RELX SDG resource center. In 2022, these [Special Issues](#) included COP 27, World Earth Day, World Health Day, World Water Day, and World Environmental Day.
- **Providing resources and highlight key papers:** [SSRN's Climate Action](#) hub continues to highlight early-stage research and helps present curated insights informing the ongoing climate change conversation.
- **Translation of research findings:** For many of our titles, we provide the option to translate research highlights into layperson summaries. We have also established [Elsevier Atlas Awards](#) featuring research that has significantly impacted people's lives around the world. We joined the [Climate Change Knowledge Initiative](#) sharing our top 10 climate change articles, translated for general use.
- **Giving journalists free access:** Research articles, with an increasing number focusing on sustainability subjects, are regularly distributed to over 2000 journalists helping them break stories. We provide free access to ScienceDirect for fact checking. Additionally, we provide free access to our 2,600 journals and 26,000 book titles for Wikipedia editors.
- **Establishing trust in science:** Our editors are responsible for accepting submitted articles and we require authors to declare any conflict of interest. Although conflict of interest statements are common in areas such as medicine, it has not always been the norm elsewhere. To ensure the integrity of the research published, we have introduced conflict of interest statements across our portfolios. Over the past five years, we have increased the number of author declarations in our journals from 26%, mainly in medicine, to 86% covering all disciplines. These declarations have now become an established part of the culture and workflow outside of medicine. [Read more.](#)



### One Earth takes a different approach to science communication

One Earth, our flagship Cell Press sustainability journal takes a unique approach to understanding and addressing today's environmental grand challenges. Each month, there is a specific focus on an issue of socio-environmental importance. The content is carefully curated by a team of professional in-house editors ensuring every editorial features diverse opinions and perspectives from within and beyond academia, as well as cutting-edge research and even artwork. In 2022, *One Earth* was awarded the PROSE Award for best environmental journal.

## Should we be doing more to reach policymakers?

Last year, we partnered with Science Business hosting an event discussing how to accelerate progress towards net zero. This produced a [set of recommendations](#) for the research community and policymakers advocating for greater communication and collaboration. This event also highlighted that with over 732,000 energy-related papers published between 2016-2020, it is unrealistic to expect decision-makers and science advisors to read everything. The discussion confirmed the importance of summarizing science and reports such as the IPCC's working group reports to inform policymaking. This year, we were pleased to see that in the Working Group 3 report on Mitigation of Climate Change, released in April 2022, the two flagship Cell

Press titles; *Joule* and *One Earth* received 72 and 46 references respectively. This is an example of the role of high-quality peer reviewed research in shaping the scientific consensus on climate change. Another idea explored was the possibility of creating a dedicated article type within our publications designed for policymakers. These ideas were discussed with editors, researchers and Lewis Collins, Editor in Chief of *One Earth*. Ultimately, these conversations convinced us that the most impactful way to influence science communication is to equip our authors with the skills to write their research in an accessible and engaging way. In 2022, we have piloted ways to best equip authors to provide short policymaker summaries.

## Tackling misinformation vital for climate action

The pandemic has highlighted concerns around misinformation but these concerns have existed for longer on the topic of climate change. Despite the scientific evidence, we continue to see misinformation on the topic, with the science being questioned rather than accepted for the reality it represents. This was confirmed in a landmark report 'Confidence in research: researchers in the spotlight' conducted by Economist Impact, supported by Elsevier, that investigated researchers' outlook on the global research landscape and concerns around misinformation, online abuse and widening of inequalities.

Key findings indicate a need for public engagement with science post-pandemic to close a clear gap between general interest in science and actual understanding of research. We found that 23% of researchers and research leaders felt it is their role to fight misinformation increasing from 16% pre-pandemic. The take home message here is that public engagement and the need to encourage people around the globe to share information based on science is now more important than ever before. [Read more about the collaboration and report.](#)



## 5.3 Products: Using data to progress Climate Action

Climate action is one of the 17 Sustainable Development Goals, launched in 2015 by the United Nations.

This framework represents a blueprint for an inclusive, sustainable society where progress in one area, such as gender equality, can help other goals such as climate change. Elsevier was the first to develop a set of queries to map research to the 17 sustainable development goals. We have since worked with the [Aurora Network](#), a partnership of research-intensive European universities, to crowdsource, refine and update this publication data set with the research community. This mapping is now available in Scopus, SciVal and Pure, helping our customers make informed SDG decisions that will include protecting the planet.

Progress on sustainable development also requires every sector to re-evaluate “impact” alongside traditional indicators of success. Within research and academia, Elsevier’s data science team worked with Times Higher Education (THE) to design the first Impact Rankings, helping to define a university’s success beyond research and teaching performance using the SDG framework. This work has enabled universities to understand their contribution to environmental SDGs.

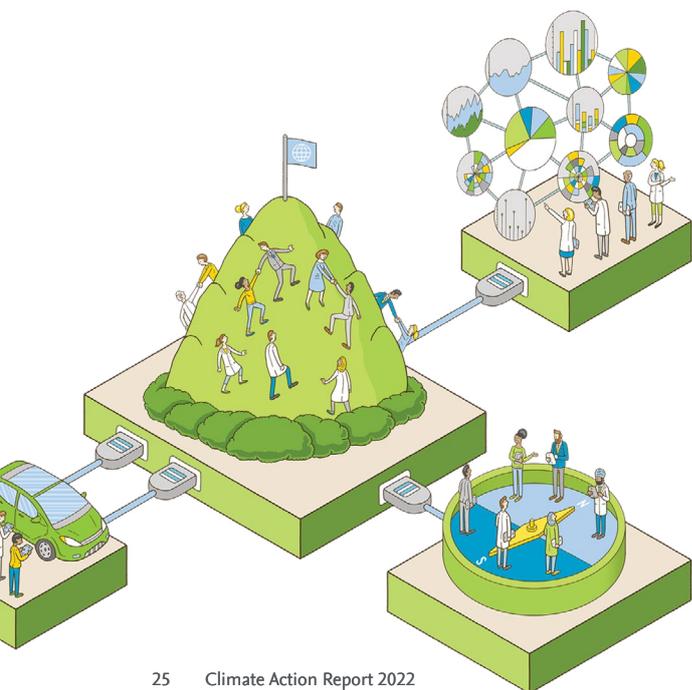
### How research can help the world hit net zero

Building on the existing SDG queries for SDG 7: Affordable and Clean Energy and SDG 13: Climate Action, our data team worked with an Advisory Board to define and develop a data set specifically related to clean energy research. In 2021, this work resulted in [Pathways to Net Zero](#), the first free report exploring clean energy research trends, with a foreword by former UN Secretary General Ban Ki-moon. The report analyzed more than 1.6 million papers from Elsevier’s Scopus database and has gathered over 72,000 unique views.

The findings from this report indicated that net zero energy research is growing rapidly, with a compound annual growth rate of 13% vs 5% of global output. The report also indicated that China publishes the most publications. However, the report also highlighted that only a small proportion of research is conducted in and for the Global South with researchers from Global South countries accounting for a fifth of publications in their field.

This triggered a follow up report, released ahead of COP 27 held in Sharm El-Sheik - [Pathways to Net Zero: Global South Research in the Transition to Clean Energy](#). Key findings included:

- Many Global South countries are seeing some of the highest rates of growth in NØEnergy re-search output, outstripping their Global North counterparts.
- By 2021, Global South researchers took approximately half of lead authorship positions on South-North collaborative publications on average, up from as little as 15% a decade ago.
- Although South-South collaborations currently amount to less than 10% of the total number of international collaborations in NØEnergy research, in terms of publications, the proportion has increased steadily over the last decade. Crucially, South-South collaborations offer distinct benefits for the researchers involved, notably in terms of fostering multidisciplinary.



# 6 Partnership for action



Michiel Kolman, Senior Vice President, Research Networks, and co-chair of the Climate Action Program

“Partnerships are crucial for complex issues such as climate change, and I am happy that we contribute to dedicated partnerships in the Global South, the world of research and across our publishing industry.”

**Michiel Kolman, Senior Vice President, Research Networks, and co-chair of the Climate Action Program.**

## Partnership for action commitments

Helping customers, the research community, policymakers, and the public make critical decisions and take evidence-based action.

### Commitments:

1. Partner with organizations and provide our data analytics and insights to help inform evidence-based action
2. Increase awareness and understanding of climate change in our interactions with stakeholders such as editors, authors and society partners



## 6.1 The Elsevier Foundation focus on SDG13: Climate Action

The Elsevier Foundation is part of Elsevier’s [corporate responsibility program](#), which centers on our contributions to sustainable development in gender, health, climate and reducing inequalities.

- In 2021, together with the [World Academy of Sciences \(TWAS\)](#), the Foundation established grants for projects led by and for women scientists from the Global South addressing tangible problems in climate change through collaboration and interdisciplinary research. The collaboration aims to empower women to lead concrete projects in climate action taking them outside the lab and deepening their scientific and soft skills such as project management and leadership. At a special session during COP27, the UNESCO TWAS-Elsevier Foundation grants for gender equity and climate action awarded eight grants to projects in Bangladesh, Nepal, Kenya, Tanzania, the Republic of Congo, Nicaragua and Guatemala.
  - [The Organization for Women in Science for the Developing World \(OWSD\)-Elsevier Foundation Awards for Early-Career Women Scientists in the Developing World](#) recognizes the achievements of researchers who have made significant contributions to the advancement of scientific knowledge.
- In 2022, the awards were refocused on SDG challenges and celebrated six talented female scientists from Rwanda, Sri Lanka, Bangladesh, Yemen, Guatemala and Nicaragua for their contributions to research that is helping to tackle climate change and advancing SDG13: Climate Action, SDG14: Life Below Water and SDG15: Life on Land.
- The [Elsevier Foundation Chemistry for Climate Action Challenge](#) supports chemistry research that plays a key role in addressing climate change in developing countries. It recognizes the pivotal role women can play in adapting to climate change and policymaking, under-scoring our commitment to intersectionality in sex and gender integration in SDG research. The 2021 winning projects received \$25,000 each. These included a solution for turning coconut waste into building materials in Ghana and an innovation to turn rice husks into biodegradable plastics in Vietnam.



Myrian Mujawamariya, Lecturer at the University of Rwanda and one of the winners of the 2022 OWSD-Elsevier Foundation Women in Science Award, explains photosynthesis measurement.

## 6.2 Key partnerships and appointments

- Elsevier is partnering with the Global Engineering Deans Council, helping it embed SDGs in engineering education to give future engineers the knowledge, skills and confidence to tackle global challenges, including climate action.
- Elsevier joined forces with the Global Alliance of Universities on Climate and 100+ institutions from 6 continents to co-initiate Global Youth Climate Week, providing global youth a platform to convene their climate actions, one week ahead of COP27.
- Rachel Martin, Global Director of Sustainability was appointed chair of the BIC Green Supply Chain Committee, as it launched their work plan to make the sector's supply chain greener and more sustainable. Rachel also represents Elsevier on the HESI SDG Publisher Compact Fellows program and STM SDG Academic Forum.
- Michiel Kolman, is the Chair of the Inclusive and Literacy Committee at the International Publishers Association (IPA) establishing a dedicated subcommittee on sustainability. From 2021-2022, Michiel also served on the board of the Federation of European Publishers and helped to launch a dedicated sustainability committee in 2022.
- Prof Carlos Henrique de Brito Cruz, Senior Vice President for Research Networks at Elsevier was appointed as 1 of 10 experts convened by UN Secretary General Antonio Guterres to accelerate progress towards the 17 Sustainable Development Goals which includes SDG13 Climate Action.



### Case study: Publishing 2030 Accelerator

The publishing sector's growing interest in sustainability and climate has accelerated against a background of rising energy prices and increasing cost of living. Addressing climate change is complex and requires collaboration across our wider publishing sector. The Publishing 2030 Accelerator, launched in 2022, is a one-year project with the ambition to drive systematic change within the publishing sector. The accelerator aims to support and test early-stage ideas that will positively contribute to the wider publishing sector's sustainability. The 17 strong group of initial signatories from around the world and from across the book chain, are additionally supported by a steering group from the International Publishers Association (IPA) and Federation of European Publishers (FEP). The first workstream of the group has been focused on the carbon label of a book and presented a prototype during Frankfurt Book Fair. Now work has started to see how we can scale up and implement such a project.

## 6.3 Climate change related events and webinars

Events and conferences give another opportunity to help us advocate for climate action.

Highlights include:

- **London Book Fair 2022:** Elsevier partnered with the London Book Fair, a RX company, and the International Publishers Association to host the first Sustainability keynote, featuring Dr Richard Horton. This address challenged the publishing industry to address climate through the content and soft power of books. There followed an afternoon of discussions focusing on sustainability in the publishing industry. Here we shared our climate action journey.
- **Cell Press continues to help lead evidence-based action** with the recent collaboration with Beijing Municipal Science and Technology Commission for the online conference, 'Net Zero & Beyond' gathering 1.25m views.
- **Between 2022-2024, Elsevier will be organizing 20 academic conferences** examining climate change and sustainability. These include the [International Conference on Global Food Security](#); the [International Conference on Agal Biomass, Biofuels and Bioproducts](#), and the [International Eco Summit](#).
- **The 7th Green & Sustainable Chemistry Conference** is being held in Dresden in 2023. One of the opening speakers will be Germany's Minister of the Environment. The conference has dedicated sessions on Hydrogen Economy and CO2 Reduction and Re-use.
- In 2022, our journals team are working with key authors and editors to **launch the Green & Sustainable Science & Engineering Academy** starting with a dedicated webinar series.
- Additionally, we are focusing on hosting webinars and workshops on key themes for customers. Geofacets is hosting four webinars examining offshore wind energy, critical minerals, carbon storage and hydrogen storage. Our books team has a forthcoming "[Becoming Net Zero](#)" webinar series featuring journal and book authors on relevant transition topics.
- **Frankfurt Book Fair:** Michiel Kolman as the Chair of the Inclusive Publishing and Literacy Committee hosted the 2nd Sustainability Summit in Frankfurt Book Fair. The session focused on updates from the SDG Publishers Compact, the new 2030 Publisher Accelerator and the UK Publishers Association carbon calculator. It was also the venue where the carbon label prototype was launched by Elsevier and featured directly on the [Copyright Clearance Center Velocity of Content podcast](#).
- **QS Asian Summit:** Elsevier moderated and participated in a dedicated net zero energy session where Elsevier launched the new follow up report: [Pathways to Net Zero: Global South Research in the Transition to Clean Energy](#).
- **ISTME Global Event:** Elsevier shared our climate action program progress in a dedicated session, together with the UK Publishers Association focused on "Sustainability and the publisher's route to implementation".
- **OA week 2022:** this year's theme was climate justice. Rachel Martin, Director of Sustainability, stressed the importance of [open access to achieve climate justice](#) in a [special video interview](#) with Cactus.
- **Science Summit at the 77 United National General Assembly:** Prof Carlos Henrique de Brito Cruz, Senior Vice President for Research Networks at Elsevier convened a session at the United Nations General Assembly Science Summit (UNGA SS), on Climate Change and Sustainable Energy Research in Brazil. The session covered Amazon rainforest research, Renewable Energy research, Energy for isolated populations in the Amazon
- **IPA Congress:** Michiel Kolman moderated a session during the International Publishers Association Congress hosted in Jakarta. The session focused on challenges around achieving net zero in the publishing industry.



## 6.4 Recognizing outstanding work

Elsevier is proud to sponsor several important awards. In 2021 we supported the following:

- **The APEC Science Prize for Innovation, Research and Education (“ASPIRE”)** is an annual award sponsored by Elsevier and Wiley recognizing young scientists who showcase impactful and meaningful research. This year, the theme focuses on advancing the integration of a Bio-Circular-Green (BCG) Economy Model among APEC members, as well as environmental, social and governance (ESG) practices and the responsible business conduct (RBC) in the private sector. The winner receives \$25,000.
- **The Renewable Transformation Challenge**, launched in 2017, in alliance with the International Solar Energy Society (ISES). This award aims to honor and showcase outstanding work that actively supports the global transformation towards renewable energy and has the potential to widen access to energy, particularly in developing countries. The challenge is open to individuals and organizations in both not-for-profit and commercial sectors worldwide. It attracted over 85 entries last year. The winner, Coldbox Store, has developed a solar-powered walk-in, commercial refrigeration solution that will cut food waste and associated emissions in Nigeria.



Dr Ren Jingzheng, an Associate Professor in the Department of Industrial and Systems Engineering at the Hong Kong Polytechnic University, accepts the 2022 Asia-Pacific Economic Cooperation (APEC) Science Prize for Innovation, Research and Education (ASPIRE).



**ELSEVIER**